



*AUTOMOTIVE
ELECTRICAL
CHAIN & RIGGING
FASTENERS
TOOLS
MISCELLANEOUS*



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AUTOMOTIVE

CHAIN & RIGGING

ELECTRICAL

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AUTOMOTIVE

Brake Lines • Metric Brake Lines

BRAKE LINES



- Standard, armored and metric
- Hydraulic brake line
- Cut to length
- Both ends double flared with UNC fittings
- Armored brake lines have .046 carbon galvanized wire wound around entire length

STANDARD

PRODUCT CODE	PART NUMBER	LENGTH	PKG QTY	BUNDLE
3/16" DIAMETER				
500-312	BL312	12"	1	10
500-320	BL320	20"	1	10
500-330	BL330	30"	1	10
500-340	BL340	40"	1	10
500-351	BL351	51"	1	10
500-360	BL360	60"	1	10
500-372	BL372	72"	1	10
1/4" DIAMETER				
500-408	BL408	8"	1	10
500-412	BL412	12"	1	10
500-420	BL420	20"	1	10
500-430	BL430	30"	1	10
500-440	BL440	40"	1	10
500-451	BL451	51"	1	10
500-460	BL460	60"	1	10
500-472	BL472	72"	1	10
5/16" DIAMETER				
500-512	BL512	12"	1	10
500-520	BL520	20"	1	10
500-530	BL350	30"	1	10
500-540	BL540	40"	1	10
500-551	BL551	51"	1	10
500-560	BL560	60"	1	10
500-572	BL572	72"	1	10
3/8" DIAMETER				
500-612	BL612	12"	1	10
500-620	BL620	20"	1	10
500-630	BL630	30"	1	10
500-640	BL640	40"	1	10
500-651	BL651	51"	1	10
500-660	BL660	60"	1	10
500-672	BL672	72"	1	10

ARMoured

PRODUCT CODE	PART NUMBER	LENGTH	PKG QTY	BUNDLE
3/16" DIAMETER				
501-312	BL312SA	12"	1	10
501-320	BL320SA	20"	1	10
501-330	BL330SA	30"	1	10
501-340	BL340SA	40"	1	10
501-351	BL351SA	51"	1	10
501-360	BL360SA	60"	1	10
501-372	BL372SA	72"	1	10
1/4" DIAMETER				
501-412	BL412SA	12"	1	10
501-420	BL420SA	20"	1	10
501-430	BL430SA	30"	1	10
501-440	BL440SA	40"	1	10
501-451	BL451SA	51"	1	10
501-460	BL460SA	60"	1	10
501-472	BL472SA	72"	1	10
5/16" DIAMETER				
501-512	BL512SA	12"	1	10
501-520	BL520SA	20"	1	10
501-530	BL530SA	30"	1	10
501-540	BL540SA	40"	1	10
501-551	BL551SA	51"	1	10
501-560	BL560SA	60"	1	10
501-572	BL572SA	72"	1	10
3/8" DIAMETER				
501-612	BL612SA	12"	1	10
501-620	BL620SA	20"	1	10
501-630	BL630SA	30"	1	10
501-640	BL640SA	40"	1	10
501-651	BL651SA	51"	1	10
501-660	BL660SA	60"	1	10
501-672	BL672SA	72"	1	10

BRAKE LINES - METRIC



- 10mm Fittings

STANDARD

PRODUCT CODE	LENGTH	PKG QTY	BUNDLE
3/16" DIAMETER			
500-313	12"	1	10
500-321	20"	1	10
500-331	30"	1	10
500-341	40"	1	10
500-352	51"	1	10
500-361	60"	1	10

AUTOMOTIVE

Metric Brake Lines • Manifold Studs • Steel Tubing • Cooper Tubing

BRAKE LINES - METRIC (CONT)

ARMOURED

PRODUCT CODE	LENGTH	PKG QTY	BUNDLE
3/16" DIAMETER			
501-313	12"	1	10
501-321	20"	1	10
501-331	30"	1	10
501-341	40"	1	10
501-352	51"	1	10
501-361	60"	1	10

MANIFOLD STUDS (C1018 COLD DRAWN STEEL)



PRODUCT CODE	PART NUMBER	DIAMETER & LENGTH (IN)	• A • THREAD	• B • THREAD	DESCRIPTION	PKG QTY
468-113	MS13	3/8" x 2"	1 1/8" USS	5/8 USS	GM Stud	12
468-114	MS14	3/8" x 2 1/4"	1 1/4 USS	5/8 USS	GM Stud	12
468-115	MS15	3/8" x 2 1/2"	1 1/4 USS	5/8 USS	GM Stud	12
468-116	MS16	3/8" x 3"	2 USS	5/8 USS	GM Stud	12
468-117	MS17	3/8" x 3 1/4"	1 5/8 USS	5/8 USS	GM Stud	12
468-118	MS18	7/16" x 2"	1 1/8 USS	5/8 USS	Ford Stud	12
468-119	MS19	7/16" x 2 1/2"	1 1/4 USS	5/8 USS	Ford Stud	12
468-120	MS20	7/16" x 3"	2 USS	5/8 USS	Ford Stud	12
468-122	MS22	8mm x 1.25	3/4	5/8	Datsun/VW Stud	12
468-124	MS24	10mm x 1.50	1/2	1	Toyota Stud	12
468-125	MS25	10mm x 1.25	1/2	1		12

FLOW THROUGH CAPS



PART NUMBER	TYPE	PKG QTY
STANDARD		
330709	Alligator V2B	50

STEEL TUBING

- Double walled annealed
- Tin Coated
- Standard wall thickness - 0.028"
- Standard length - 25'



PRODUCT CODE	PART NO	SIZE	O.D. SIZE	APPROX I.D.	ULTIMATE BURSTING STRENGTH (P.S.I.)	FT/LB	PKG QTY
503-007	BLT3	3/16" x 25'	3/16"	0.131	16,500	21.2	1
503-009	BLT4	1/4" x 25'	1/4"	0.194	12,500	15.8	1
503-010	BLT5	5/16" x 25'	5/16"	0.256	9,900	12.5	1
503-011	BLT6	3/8" x 25'	3/8"	0.319	8,200	10.0	1

COPPER TUBING

- Seamless
- Soft annealed
- Bright finish



PRODUCT CODE	SIZE O.D.	LENGTH (FT)	WALL THICKNESS	P.S.I.	PKG QTY
559-208	1/8 in (3.18mm)	25	0.030 in (0.762mm)	2780	1
559-212	3/16 in (4.76mm)	25	0.030 in (0.762mm)	1860	1
559-216	1/4 in (6.35mm)	25	0.030 in (0.762mm)	1380	1
559-220	5/16 in (7.94mm)	25	0.032 in (0.813mm)	1260	1
559-224	3/8 in (9.52mm)	25	0.032 in (0.813mm)	1060	1
559-232	1/2 in (12.70mm)	25	0.032 in (0.813mm)	800	1
559-240	5/8 in (15.88mm)	25	0.035 in (0.889mm)	700	1
559-248	3/4 in (19.05mm)	25	0.035 in (0.889mm)	580	1
559-508	1/8 in (3.18mm)	50	0.030 in (0.762mm)	2780	1
559-512	3/16 in (4.76mm)	50	0.030 in (0.762mm)	1860	1
559-516	1/4 in (6.35mm)	50	0.030 in (0.762mm)	1380	1
559-520	5/16 in (7.94mm)	50	0.032 in (0.813mm)	1260	1
559-524	3/8 in (9.52mm)	50	0.032 in (0.813mm)	1060	1
559-532	1/2 in (12.70mm)	50	0.032 in (0.813mm)	800	1
559-540	5/8 in (15.88mm)	50	0.035 in (0.889mm)	700	1
559-548	3/4 in (19.05mm)	50	0.035 in (0.889mm)	580	1

GREASE FITTINGS



STANDARD GREASE FITTINGS ASSORTMENT

- Contains 100 of the fastest selling fittings in compartmentalized box.

506-100 (GF100)

Product Code	Size	Part Number	Degrees	Qty
506-612	1/8 NPT	GF612	65°	3
506-613	1/8 NPT	GF613	90°	3
506-637	1/4 - 28	GF637	45°	15
506-641	1/4 - 28	GF641	STR	50
506-688	1/8 NPT	GF688	45°	4
506-911	1/4 - 28	GF911	90°	10
506-610	1/8 NPT	GF610	STR	15

506-101 (GFM100)

Product Code	Size	Part Number	Degrees	Qty
506-745	6mm	GF7045	45°	25
506-790	6mm	GF7090	90°	25
506-871	6mm	GF8701	STR	50

- Contains 110 metric grease fittings in compartmentalized box.

506-102 (GF102)

Product Code	Part Number	Diameter	Qty
506-871	GF8701	6mm STR	40
506-891	GF8901	8mm STR	20
506-931	GF9301	10mm STR	20
506-745	GF7045	6mm 45°	5
506-845	GF7445	8mm 45°	5
506-945	GF9345	10mm 45°	5
506-790	GF7090	6mm 90°	5
506-890	GF7490	8mm 90°	5
506-990	GF9390	10mm 90°	5

GREASE FITTINGS

- Conforms to S.A.E. specifications
- Case hardened
- White Zinc Plated



PRODUCT CODE	PART NUMBER	DIAMETER	TYPE	PKG QTY
STANDARD				
506-610	GF610	1/8" NPT	Straight long	25
506-611	GF611	1/8" NPT	30° angle	25
506-612	GF612	1/8" NPT	65° angle	25
506-613	GF613	1/8" NPT	90° angle	25
506-627	GF627	1/4" NPT	Straight short	25
506-629	GF629	1/4" NPT	65° angle (pipe thread)	25
506-636	GF636	1/4"	45° long (taper)	25
506-637	GF637	1/4"	45° short (taper)	25
506-641	GF641	1/4"	Straight very short (taper)	25
506-652	GF652	1/4"	Straight long (taper)	25
506-688	GF688	1/8" NPT	45° angle short	25
506-710	GF710	3/8"	Straight	25
506-711	GF711	5/16"	Straight	25
506-911	GF911	1/4"	90° angle short (taper)	25
METRIC				
506-745	GF7045	6 mm	45° angle	25
506-790	GF7090	6 mm	90° angle	25
506-871	GF8701	6 mm	Straight	25
506-845	GF7445	8 mm	45° angle	25
506-890	GF7490	8 mm	90° angle	25
506-891	GF8901	8 mm	Straight	25
506-931	GF9301	10 mm	Straight	25
506-945	GF9345	10 mm	45° angle	25
506-990	GF9390	10 mm	90° angle	25
DRIVE FIT				
506-991	GF1728	3/16"		25
506-992	GF1743	1/4"		25
506-993	GF1608	5/16"		25

AUTOMOTIVE

Hose Clamps

HOSE CLAMPS

HOSE CLAMP SETS (CUT TO SIZE)

- Set contains :
 - 8 Plated housing and screws
 - Stainless steel band



PRODUCT CODE	DESCRIPTION	PKG QTY
508-000	8mm x3m Hose Clamp Set	1
508-001	12.7mm x 3m Hose Clamp Set	1

MINIATURE

- 8mm band width
- Stainless steel bands with plated housing and screw



PRODUCT CODE	PART NUMBER	CLAMP DIAMETER MIN	CLAMP DIAMETER MAX	PKG QTY
508-002	M4P	13/32"	5/8"	10
508-003	M6P	1/2"	3/4"	10
508-004	M8P	5/8"	7/8"	10

STANDARD

- Precision engineered worm drive
- Rounded edges protect hose
- Stainless steel band with plated housing and screw



PRODUCT CODE	PART NUMBER	CLAMP DIAMETER MIN	CLAMP DIAMETER MAX	PKG QTY
508-006	B6H	3/8"	3/4"	10
508-008	B8H	3/8"	7/8"	10
508-010	B10H	3/4"	1 1/16"	10
508-012	B12H	5/8"	1 1/4"	10
508-016	B16H	13/16"	1 1/2"	10
508-020	B20H	3/4"	1 3/4"	10
508-024	B24H	1 1/4"	2"	10
508-028	B28H	1 1/2"	2 1/4"	10
508-032	B32H	1 9/16"	2 1/2"	10
508-036	B36H	1 13/16"	2 3/4"	10
508-040	B40H	2 1/4"	3"	10
508-044	B44H	2 5/8"	3 1/4"	10
508-048	B48H	2 9/16"	3 1/2"	10
508-052	B52H	2 13/16"	3 3/4"	10

PRODUCT CODE	PART NUMBER	CLAMP DIAMETER MIN	CLAMP DIAMETER MAX	PKG QTY
508-056	B56H	3 1/16"	4"	10
508-064	B64H	3 9/16"	4 1/2"	10
508-072	B72H	4 1/8"	5"	10
508-080	B80H	4 5/8"	5 1/2"	10
508-088	B88H	5 1/8"	6"	10
508-096	B96H	5 1/8"	6 1/2"	10
508-104	B104H	5 3/4"	7"	10
508-116	B116H	6 1/2"	7 3/4"	10

STAINLESS STEEL

- Precision engineered worm drive
- Rounded edges protect hose
- All stainless steel parts (band, screw and housing)
- 5/16" Hex Head screw, 14 mm band width
- Packed 10 clamps per box



PRODUCT CODE	PART NUMBER	CLAMP DIAMETER MIN	CLAMP DIAMETER MAX	PKG QTY
509-506	B6HS	3/8"	3/4"	10
509-508	B8HS	3/8"	7/8"	10
509-510	B10HS	3/4"	1 1/16"	10
509-512	B12HS	5/8"	1 1/4"	10
509-516	B16HS	13/16"	1 1/2"	10
509-520	B20HS	3/4"	1 3/4"	10
509-524	B24HS	1 1/4"	2"	10
509-528	B28HS	1 1/2"	2 1/4"	10
509-532	B32HS	1 9/16"	2 1/2"	10
509-536	B36HS	1 13/16"	2 3/4"	10
509-540	B40HS	2 1/4"	3"	10
509-544	B44HS	2 5/8"	3 1/4"	10
509-548	B48HS	2 9/16"	3 1/2"	10
509-552	B52HS	2 13/16"	3 3/4"	10
509-556	B56HS	3 1/16"	4"	10
509-564	B64HS	3 9/16"	4 1/2"	10
509-572	B72HS	4 1/8"	5"	10
509-580	B80HS	4 5/8"	5 1/2"	10
509-588	B88HS	5 1/8"	6"	10
509-596	B96HS	5 1/8"	6 1/2"	10
509-604	B104HS	5 3/4"	7"	10
509-616	B116HS	6 1/2"	7 3/4"	10

E-Z SEAL EXPANSION PLUGS

E-Z SEAL

- Can be used in all climates
- Specially compounded neoprene rubber resists heat oil, coolants and rust inhibitors
- Expands up to 1/8" to seal against irregularities



PRODUCT CODE	SIZE (INCHES)	PKG QTY
510-200	3/4	1
510-201	7/8	1
510-202	1	1
510-203	1 1/8	1
510-204	1 1/4	1
510-205	1 3/8	1
510-206	1 1/2	1
510-207	1 5/8	1
510-208	1 3/4	1
510-209	1 7/8	1
510-210	2	1
510-211	2 1/8	1
510-212	2 1/4	1

CONCAVE TYPE



PRODUCT CODE	PART NUMBER	NOMINAL PLUG SIZE (INCHES)	REF. DECIMAL SIZE OUTSIDE DIA. $\pm .005$	PKG QTY
510-002	P2	5/8	0.625	10
510-003	P3	3/4	0.750	10
510-006	P6	7/8	0.875	10
510-007	P7	15/16	0.963	10
510-008	P8	1	1.000	10
510-009	P9	1 1/16	1.062	10
510-010	P10	1 1/8	1.125	10
510-011	P11	1 1/4	1.250	10
510-012	P12	1 3/8	1.375	10
510-013	P13	1 1/2	1.500	10
510-014	P14	1 5/8	1.625	10
510-015	P15	1 3/4	1.750	10
510-020	P20	1 7/8	1.875	10
510-021	P21	1 3/4	1.87	10
510-022	P22	2 1/4	2.250	10
510-023	P23	1 5/16	1.312	10
510-026	P26	2	2.000	10
510-028	P28	2 1/2	2.500	10
510-037	P37	7/16	0.0437	10
510-043	P43	1 5/16	1.937	10
510-044	P44	2 1/8	2.125	10
510-045	P45	11/16	0.687	10
510-046	P46	1/2	0.500	10
510-047	P47	9/16	0.563	10
510-062	P62	2 3/4	2.750	10
510-068	P68	2 1/16	2.062	10
510-102	P102	1 3/64	1.484	10
510-103	P103	1 47/64	1.734	10
510-129	P129	2 7/64	2.105	10

CUP TYPE



PRODUCT CODE	PART NUMBER	NOMINAL PLUG SIZE (INCHES)	REF. DECIMAL SIZE OUTSIDE DIA. $\pm .005$	OVERALL HEIGHT	PKG QTY
511-016	PC16	1	1.014	0.281	10
511-017	PC17	1 7/32	1.2275	0.531	10
511-018	PC18	1 1/4	1.2575	0.437	10
511-025	PC25	1 1/8	1.1325	0.437	10
511-029	PC29	7/8	0.8875	0.312	10
511-030	PC30	1 1/2	1.522	0.375	10
511-038	PC38	3/4	0.7525	0.25	10
511-039	PC39	15/16	0.9945	0.375	10
511-040	PC40	1 15/16	1.9475	0.800	10
511-041	PC41	1 5/8	1.6375	0.593	10
511-042	PC42	1 61/64	1.9555	0.718	10
511-048	PC48	9/16	0.5725	0.250	10
511-050	PC50	1 7/8	1.8925	0.447	10
511-052	PC52	5/8	0.6325	0.250	10
511-054	PC54	19/32	0.5925	0.281	10
511-069	PC69	2 1/64	2.0175	0.590	10
511-070	PC70	1 45/64	1.7075	0.812	10
511-072	PC72	29/32	0.912	0.390	10
511-075	PC75	1 3/4	1.7625	0.363	10
511-077	PC77	59/64	0.912	0.312	10
511-080	PC80	1 3/8	1.3875	0.500	10
511-081	PC81	2 1/4	2.265	0.812	10
511-082	PC82	1 3/4	1.7625	0.593	10
511-084	PC84	2 9/64	2.1485	0.600	10
511-085	PC85	1 1/2	1.5075	0.625	10
511-086	PC86	1 1/16	1.077	0.640	10
511-087	PC87	33/64	0.5195	0.187	10
511-088	PC88	29/64	0.450	0.203	10
511-089	PC89	2 37/64	2.575	0.301	10
511-090	PC90	2 17/64	2.264	0.355	10
511-092	PC92	2 25/64	2.396	0.310	10
511-093	PC93	7/16	0.4445	0.156	10
511-094	PC94	37/64	0.572	0.203	10
511-095	PC95	1/2	0.527	0.312	10
511-097	PC97	17/32	0.5425	0.250	10
511-099	PC99	1 1/4	1.2575	0.343	10
511-101	PC101	11/32	0.3405	0.240	10
511-105	PC105	17/64	0.2725	0.200	10
511-106	PC106	1 49/64	1.7655	0.406	10
511-107	PC107	3/8	0.3905	0.240	10
511-109	PC109	31/64	0.488	0.234	10
511-111	PC111	1	1.016	0.400	10
511-112	PC112	2 1/16	2.0675	0.510	10
511-113	PC113	2	2.009	0.635	10
511-128	PC128	5/16	0.3135	0.296	10
511-131	PC131	2 3/32	2.0975	0.610	10
511-132	PC132	2 1/2	2.510	0.465	10
511-133	PC133	1 1/2	1.506	0.325	10
511-134	PC134	1 13/64	1.200	0.420	10
511-137	PC137	7/8	0.8825	0.359	10
511-140	PC140	21/32	0.658	0.265	10
511-144	PC144	11/16	0.700	0.250	10

AUTOMOTIVE

Expansion Plugs • Frost Plugs - Metric

E-Z SEAL EXPANSION PLUGS (CONT)

CUP TYPE (CONT.)

PRODUCT CODE	PART NUMBER	NOMINAL PLUG SIZE (INCHES)	REF. DECIMAL SIZE OUTSIDE DIA. $\pm .005$	OVERALL HEIGHT	PKG QTY
511-145	PC145	3/4	0.7625	0.265	10
511-146	PC146	2	2.008	0.415	10
511-147	PC147	2 3/16	2.199	0.360	10
511-149	PC149	1 41/64	1.642	0.350	10
511-151	PC151	11/16	0.701	0.193	10
511-152	PC152	1 15/16	1.9325	0.468	10
511-153	PC153	2 5/32	2.1575	0.358	10
511-156	PC156	7/8	0.878	0.375	10
511-158	PC158	45/64	0.703	0.205	10
511-163	PC163	7/8	0.870	0.312	10
511-164	PC164	51/64	0.790	0.312	10
511-166	PC166	9/16	0.555	0.201	10
511-167	PC167	1 29/32	1.902	0.600	10
511-168	PC168	7/16	0.440	0.170	10
511-169	PC169	1/2	0.510	0.258	10
511-174	PC174	1 5/64	1.072	0.280	10
511-185	PC185	51/64	0.792	0.406	10
511-249	PC149A	1 45/64	1.698	0.358	10
511-275	PC75A	1 3/4	1.791	0.380	10

SHALLOW TYPE



PRODUCT CODE	PART NUMBER	NOMINAL PLUG SIZE (INCHES)	REF. DECIMAL SIZE OUTSIDE DIA. $\pm .005$	OVERALL HEIGHT	PKG QTY
511-057	PS57	1 3/4	1.7625	0.250	10
511-058	PS58	1 31/32	1.9775	0.218	10
511-059	PS59A	2 1/16	2.0725	0.343	10
511-065	PS65	1 29/32	1.911	0.265	10
511-066	PS66	2	2.025	0.406	10
511-071	PS71	2 5/32	2.1535	0.328	10
511-074	PS74	2 3/16	2.192	0.343	10
511-076	PS76	1 45/64	1.703	0.281	10
511-078	PS78	2 7/64	2.101	0.296	10
511-083	PS83	2 1/64	2.0175	0.240	10
511-096	PS96	1 51/64	1.8025	0.250	10
511-098	PS98	35/64	0.5425	0.187	10
511-110	PS110	1 1/4	1.2625	0.312	10
511-126	PS126	1 5/8	1.6375	0.365	10
511-127	PS127	1 21/64	1.3225	0.281	10
511-135	PS135	1 3/8	1.385	0.340	10
511-150	PS150	2 3/32	2.1025	0.270	10
511-154	PS154	2 7/32	2.2205	0.305	10
511-157	PS157	2 15/64	2.230	0.280	10
511-159	PS159	2 7/64	2.109	0.296	10
511-162	PS162	5/8	0.631	0.190	10
511-165	PS165	2	2.010	0.310	10
511-170	PS170	2 9/64	2.135	0.360	10
511-171	PS171	1 9/16	1.570	0.315	10
511-172	PS172	1 59/64	1.922	0.235	10
511-173	PS173	1 53/64	1.825	0.350	10
511-175	PS175	2 1/4	2.262	0.350	10

FROST PLUGS - METRIC

- Plated
- Metric dimensions taken from points shown



CUP TYPE

PRODUCT CODE	PART NUMBER	NOMINAL O.D.	NOMINAL H.T.	PKG QTY
512-002	PCM002	20mm	6.1	10
512-004	PCM004	18mm	5.9	10
512-006	PCM006	30mm	8.1	10
512-008	PCM008	32mm	10.2	10
512-012	PCM012	40mm	11.7	10
512-014	PCM014	45mm	11.9	10
512-016	PCM016	47mm	7.4	10
512-020	PCM020	50mm	12.0	10
512-022	PCM022	45mm	13.5	10
512-024	PCM024	35mm	10.4	10
512-030	PCM030	25mm	4.8	10
512-032	PCM032	12mm	5.3	10
512-034	PCM034	14mm	5.0	10
512-040	PCM040	24mm	6.9	10
512-042	PCM042	25mm	7.0	10
512-044	PCM044	25mm	8.3	10
512-046	PCM046	27mm	8.4	10
512-048	PCM048	28mm	8.7	10
512-050	PCM050	29mm	11.4	10
512-052	PCM052	36mm	8.5	10
512-056	PCM056	38mm	7.9	10
512-058	PCM058	39mm	9.5	10
512-060	PCM060	40mm	7.2	10
512-062	PCM062	40mm	12.8	10
512-064	PCM064	41mm	11.9	10
512-066	PCM066	45mm	9.5	10
512-068	PCM068	50mm	14.8	10
512-070	PCM070	53mm	8.7	10

DISC TYPE

PRODUCT CODE	PART NUMBER	NOMINAL O.D.	NOMINAL H.T.	PKG QTY
512-013	PM013	24mm	5.0	10
512-015	PM015	40mm	6.6	10
512-017	PM017	21mm	4.5	10
512-021	PM021	45mm	6.1	10
512-023	PM023	52mm	6.8	10

MUFFLER CLAMPS & HANGERS

STANDARD

- Smooth saddle type
- 5/16" diameter U-bolts
- Full depth saddle for extra strength
- Bare



PRODUCT CODE	PART NUMBER	SIZE (INCHES)	PKG QTY
5/16" DIAMETER			
513-100	MC118	1 1/8"	1
513-101	MC114	1 1/4"	1
513-102	MC138	1 3/8"	1

HEAVY DUTY

- 3/8" diameter U-bolts
- Heavy gauge steel saddle



PRODUCT CODE	PART NUMBER	SIZE (INCHES)	PKG QTY
3/8" DIAMETER			
513-198	HD112	1 1/2"	1
513-199	HD158	1 5/8"	1
513-200	HD134	1 3/4"	1
513-201	HD178	1 7/8"	1
513-202	HD200	2"	1
513-203	HD218	2 1/8"	1
513-204	HD214	2 1/4"	1
513-205	HD212	2 1/2"	1
513-206	HD234	2 3/4"	1
513-207	HD300	3"	1
513-208	HD312	3 1/2"	1
513-209	HD400	4"	1
513-210	HD412	4 1/2"	1
513-211	HD500	5"	1
513-213	HD600	6"	1

BULK - ZINC PLATED

PRODUCT CODE	PART NUMBER	SIZE (INCHES)	PKG QTY
513-101-BK	-	1 1/4"	50
513-198-BK	-	1 1/2"	50
513-200-BK	MC6134-050	1 3/4"	50
513-204-BK	MC6214-050	2 1/4"	50
513-205-BK	MC6212-050	2 1/2"	50
513-207-BK	MC7300-050	3"	50
513-208-BK	MC7312-050	3 1/2"	50
513-209-BK	MC7400-050	4"	50

EXHAUST STACK CLAMP

- Flattened U-bolt
- Reinforced welded saddle
- 5/16" over nominal diameter to accommodate extra thick wall and flexible exhaust pipes
- Zinc chromate plated



PRODUCT CODE	PART NUMBER	SIZE (INCHES)	PKG QTY
5/16" DIAMETER			
513-400	HD400WT	4"	1
513-500	HD500WT	5"	1

UNIVERSAL TAIL PIPE HANGERS

- Swivel to any position - grips firmly
- Fits all pipes 1 1/2" to 2" O.D.
- Heavy gauge steel with fabric insert to absorb road shock
- Individually boxed with bolts, nuts and lockwashers



PRODUCT CODE	PART NUMBER	DESCRIPTION	PKG QTY
514-200	THU200	Universal	1
514-360	THU360	Universal	1

AUTOMOTIVE

O-Rings Assortments

O - RINGS ASSORTMENTS

- Made from a special nitrile compound - BUNA-N rubber
- Available standard, metric and high pressure



STANDARD O-RING ASSORTMENT (300 PCS)

- Contains 300 pieces
- 30 Popular Sizes
- Packed in metal box

519-300

PRODUCT CODE	PART NUMBER	QTY	PRODUCT CODE	PART NUMBER	QTY
519-001	R-1	10	519-016	R-16	10
519-002	R-2	10	519-017	R-17	10
519-003	R-3	10	519-018	R-18	10
519-004	R-4	10	519-019	R-19	10
519-005	R-5	10	519-020	R-20	10
519-006	R-6	10	519-021	R-21	10
519-007	R-7	10	519-022	R-22	10
519-008	R-8	10	519-023	R-23	10
519-009	R-9	10	519-024	R-24	10
519-010	R-10	10	519-025	R-25	10
519-011	R-11	10	519-026	R-26	10
519-012	R-12	10	519-027	R-27	10
519-013	R-13	10	519-028	R-28	10
519-014	R-14	10	519-029	R-29	10
519-015	R-15	10	519-030	R-30	10

STANDARD O-RING ASSORTMENT (407 PCS)

- Contains 407 pieces
- 32 Popular Sizes
- Packed in durable plastic box

519-301

PRODUCT CODE	PART NUMBER	QTY	PRODUCT CODE	PART NUMBER	QTY
519-001	R-1	20	519-016	R-16	10
519-003	R-3	20	519-017	R-17	10
519-005	R-5	20	519-018	R-18	10
519-006	R-6	20	519-019	R-19	10
519-007	R-7	20	519-020	R-20	10
519-070	R-7A	20	519-021	R-21	10
519-008	R-8	13	519-022	R-22	10
519-009	R-9	13	519-023	R-23	10
519-010	R-10	13	519-024	R-24	10
519-011	R-11	13	519-025	R-25	10
519-012	R-12	13	519-026	R-26	10
519-013	R-13	13	519-027	R-27	10
519-014	R-14	13	519-270	R-27A	10
519-140	R-14A	13	519-271	R-27B	10
519-141	R-14B	13	519-272	R-27C	10
519-015	R-15	10	519-273	R-27C	10

METRIC O-RING ASSORTMENT

- Contains 408 pieces
- 32 Popular Sizes
- Packed in durable plastic box

519-308

PRODUCT CODE	SIZE (MM)	QTY	PRODUCT CODE	SIZE (MM)	QTY
519-145	3 x 2	20	519-161	22 x 2.5	14
519-146	5 x 2	20	519-162	22 x 3.5	10
519-147	6 x 2	18	519-163	23 x 3.5	10
519-148	8 x 2	18	519-164	25 x 3.5	10
519-149	10 x 2	18	519-165	27 x 3.5	10
519-150	10 x 2.5	14	519-166	28 x 3.5	10
519-151	12 x 2.5	14	519-167	30 x 3.5	10
519-152	13 x 2	18	519-168	31 x 3.5	10
519-153	14 x 2.5	14	519-169	32 x 3.5	10
519-154	15 x 2.5	14	519-170	34 x 3.5	10
519-155	16 x 2.5	14	519-171	36 x 3.5	10
519-156	18 x 2.5	14	519-172	38 x 3.5	10
519-157	18 x 3.5	10	519-173	41 x 3.5	10
519-158	20 x 2.5	14	519-174	44 x 3.5	10
519-159	20 x 3.5	10	519-175	46 x 3.5	10
519-160	21 x 2.5	14	519-176	50 x 3.5	10

HIGH PRESSURE O-RING ASSORTMENT

- Contains 212 pieces, 20 different sizes
- 90 Durable hardness O-Rings are designed for high pressure industrial applications: pumps, motors, valves and cylinders
- Unique box is equipped with brass tool for O-ring extraction
- Meets ASTM D2000, SAEJ200, AS568 standards
- Material BUNA-N BG915

519-312

PRODUCT CODE	PART NUMBER	TUBE O.D. (REF.)	QTY	PRODUCT CODE	PART NUMBER	TUBE O.D. (REF.)	QTY
519-180	901	3/32	10	519-190	911	11/16	10
519-181	902	1/8	10	519-191	912	3/4	10
519-182	903	3/16	10	519-192	913	13/16	10
519-183	904	1/4	10	519-193	914	7/8	10
519-184	905	5/16	12	519-194	916	1	10
519-185	906	3/8	12	519-195	918	1 1/8	10
519-186	907	7/16	12	519-196	920	1 1/4	10
519-187	908	1/2	12	519-197	924	1 1/2	10
519-188	909	9/16	12	519-198	928	1 3/4	10
519-189	910	5/8	12	519-199	932	2	10

See O-Rings chart on pg. I-1 & I-2

O - RINGS

STANDARD O-RINGS

• BUNA-N Rubber



PRODUCT CODE	PART NUMBER	I.D. (IN)	NOMINAL SIZE O.D. (IN)	SECTION	PKG QTY
519-001	R-1	1/8	1/4	1/16	25
519-002	R-2	5/32	9/32	1/16	25
519-003	R-3	3/16	5/16	1/16	25
519-004	R-4	7/32	11/32	1/16	25
519-005	R-5	1/4	3/8	1/16	25
519-006	R-6	5/16	7/16	1/16	25
519-007	R-7	3/8	1/2	1/16	25
519-008	R-8	3/8	9/16	3/32	25
519-009	R-9	7/16	5/8	3/32	25
519-010	R-10	1/2	11/16	3/32	25
519-011	R-11	9/16	3/4	3/32	25
519-012	R-12	5/8	13/16	3/32	25
519-013	R-13	11/16	7/8	3/32	25
519-014	R-14	3/4	15/16	3/32	25
519-015	R-15	3/4	1	1/8	25
519-016	R-16	13/16	1 1/16	1/8	25
519-017	R-17	7/8	1 1/8	1/8	25
519-018	R-18	15/16	1 3/16	1/8	25
519-019	R-19	1	1 1/4	1/8	25
519-020	R-20	1 1/16	1 5/16	1/8	25
519-021	R-21	1 1/8	1 3/8	1/8	25
519-022	R-22	1 3/16	1 7/16	1/8	25
519-023	R-23	1 1/4	1 1/2	1/8	25
519-024	R-24	1 5/16	1 9/16	1/8	25
519-025	R-25	1 3/8	1 5/8	1/8	25
519-026	R-26	1 7/16	1 11/16	1/8	25
519-027	R-27	1 1/2	1 3/4	1/8	25
519-028	R-28	1 1/2	1 7/8	3/16	25
519-029	R-29	1 5/8	2	3/16	25
519-030	R-30	1 3/4	2 1/8	3/16	25
519-070	R-7A	1/2	5/8	1/16	25
519-140	R-14A	13/16	1	3/32	25
519-141	R-14B	7/8	1 1/16	3/32	25
519-270	R-27A	1 5/8	1 7/8	1/8	25
519-271	R-27B	1 3/4	2	1/8	25
519-272	R-27C	1 7/8	2 1/8	1/8	25
519-273	R-27D	2	2 1/4	1/8	25

METRIC O-RINGS

• BUNA-N-BG715

PRODUCT CODE	ID (MM)	NOMINAL SIZE OD (MM)	THICK	PKG QTY
519-145	3	7	2	25
519-146	5	9	2	25
519-147	6	10	2	25
519-148	8	12	2	25
519-149	10	14	2	25
519-150	10	15	2.5	25
519-151	12	17	2.5	25
519-152	13	17	2	25
519-153	14	19	2.5	25
519-154	15	20	2.5	25
519-155	16	21	2.5	25
519-156	18	23	2.5	25
519-157	18	25	3.5	25
519-158	20	25	2.5	25
519-159	20	27	3.5	25
519-160	21	26	2.5	25
519-161	22	27	2.5	25
519-162	22	29	3.5	25
519-163	23	30	3.5	25
519-164	25	32	3.5	25
519-165	27	34	3.5	25
519-166	28	35	3.5	25
519-167	30	37	3.5	25
519-168	31	38	3.5	25
519-169	32	39	3.5	25
519-170	34	41	3.5	25
519-171	36	43	3.5	25
519-172	38	45	3.5	25
519-173	41	48	3.5	25
519-174	44	51	3.5	25
519-175	46	53	3.5	25
519-176	50	57	3.5	25

HIGH PRESSURE O-RINGS

• BUNA-N-BG915

• High Pressure O-Rings meet ASTM D2000, SAE J200, AS568 Standards

PRODUCT CODE	INDUSTRY PART NUMBER	ID	NOMINAL SIZE OD	THICK	PKG QTY
519-180	901	3/32"	3/16"	.047"	25
519-181	902	1/8"	1/4"	.063"	25
519-182	903	3/16"	5/16"	.063"	25
519-183	904	1/4"	3/8"	.063"	25
519-184	905	5/16"	7/16"	.063"	25
519-185	906	3/8"	1/2"	.063"	25
519-186	907	7/16"	9/16"	.063"	25
519-187	908	1/2"	5/8"	.063"	25
519-188	909	9/16"	11/16"	.063"	25
519-189	910	5/8"	3/4"	.063"	25
519-190	911	11/16"	7/8"	.094"	25
519-191	912	3/4"	15/16"	.094"	25
519-192	913	13/16"	1"	.094"	25
519-193	914	7/8"	1 1/16"	.125"	25
519-194	916	1"	1 3/16"	.125"	25
519-195	918	1 1/8"	1 3/8"	.125"	25
519-196	920	1 1/4"	1 1/2"	.125"	25
519-197	924	1 1/2"	1 3/4"	.125"	25
519-198	928	1 3/4"	2 1/8"	.188"	25
519-199	932	2	2 5/16"	.156"	25

AUTOMOTIVE

Grommets • Fuel Line Hose • Lathe Bits

GROMMETS

- Made from SBR (Styrene Butadiene Rubber)
- Inserted within the hole of sheet metal
- Provides protection against rough edges
- RBG grommets can be used as plugs

GROMMET ASSORTMENT

- Contains over 190 pieces
- 18 popular sizes
- Packed in plastic see through box
- Sizes are listed in the Grommets table



519-500

PRODUCT CODE	PART NUMBER	QTY	PRODUCT CODE	PART NUMBER	QTY
519-501	EWG-1	20	519-544	EWG-44	5
519-506	EWG-6	15	519-545	EWG-45	3
519-513	EWG-13	10	519-601	RBG-1	30
519-521	EWG-21	5	519-602	RBG-2	25
519-526	EWG-26	10	519-603	RBG-3	15
519-527	EWG-27	10	519-604	RBG-4	10
519-531	EWG-31	5	519-605	RBG-5	7
519-534	EWG-34	5	519-606	RBG-6	5
519-536	EWG-36	8	519-607	RBG-7	4

GROMMETS

PRODUCT CODE	PART NUMBER	I.D. (IN)	O.D. (IN)	PKG QTY
519-501	EWG-1	1/8	9/32	25
519-506	EWG-6	3/16	5/16	25
519-513	EWG-13	1/4	1/2	25
519-521	EWG-21	5/16	7/32	25
519-526	EWG-26	3/8	1/2	25
519-527	EWG-27	3/8	9/16	25
519-531	EWG-31	3/8	3/4	25
519-534	EWG-34	7/16	3/4	25
519-536	EWG-36	1/2	21/32	25
519-544	EWG-44	5/8	1	10
519-545	EWG-45	3/4	15/16	10
519-601	RBG-1	-	5/16	25
519-602	RBG-2	-	3/8	25
519-603	RBG-3	-	1/2	25
519-604	RBG-4	-	5/8	25
519-605	RBG-5	-	3/4	25
519-606	RBG-6	-	7/8	10
519-607	RBG-7	-	1	10

See Grommets chart on pg. I-3

FUEL LINE HOSE

- Neoprene, one braid construction and meets S.A.E. Specifications



PRODUCT CODE	HOSE I.D. X LENGTH	WORKING PRESSURE	BURSTING PRESSURE	PKG QTY
25046	3/16" X 25'	50 p.s.i.	250 p.s.i.	1
25060	1/4" X 25'	50 p.s.i.	250 p.s.i.	1
25080	5/16" X 25'	50 p.s.i.	250 p.s.i.	1
25090	3/8" X 25'	50 p.s.i.	250 p.s.i.	1

LATHE BITS



PRODUCT CODE	DESCRIPTION	PKG QTY
563-120	Accu-Turn Bits	10
563-122	Ammco Bits	10
563-124	Accu-Ammco Bits	10
563-126	Pro-Cut Bits	10
563-128	Ammco/Hunter Sty. Pos. Bit	10
563-130	Ammco Style Coated Pos.Bit	10
563-132	FMC Style Bits	10
563-134	Kwik-Way Bits	10
563-136	Rel's/Van Norman Sm Bit	10

AUTOMOTIVE

EZ Lok Repair Kit

E-Z • LOK REPAIR KIT



PRODUCT CODE	PART NO.	DESCRIPTION
458-080	ELK - 101	45 Asst. Pieces
458-081	ELK - 103	22 Asst. Pieces
458-083	ELK - 107	29 Asst. Pieces

PRODUCT CODE	PART NO.	INTERNAL THREAD	EXTERNAL THREAD	LENGTH	TAP DRILL SIZE	MIN. FULL THREAD DEPT.	PKG QTY
METRIC THREAD 6MM TO 12MM"							
458-036	650-6	M6-1.0	3/8-16	.406	5/16	15/32	10
458-038	650-8	M8-1.25	1/2-13	.484	27/64	9/16	10
458-040	650-10	M10-1.50	9/16-12	.515	31/64	19/32	10
458-042	650-12	M12-1.75	3/4-10	.656	21/32	3/4	5
SPARK PLUG SIZES							
458-046	329-1406	M14 x 3/8" reach	3/4-16	.328	11/16	3/4-16	5
458-048	329-1408	M14 x 1/2" reach	3/4-16	.453	11/16	3/4-16	5
458-052	329-1412	M14 x 3/4" reach	3/4-16	.703	11/16	3/4-16	5
458-058	329-1808	M18 x 1/2" reach	1-12	.453	59/64	1-12	5

E-Z • LOK THREAD INSERTS

- Prevent/repair stripped threads
- No special tools required
- Install with olt and wrench



PRODUCT CODE	PART NO.	INTERNAL THREAD	EXTERNAL THREAD	LENGTH	TAP DRILL SIZE	MIN. FULL THREAD DEPT.	PKG QTY
COARSE THREAD 10 TO 7/16"							
458-003	329-3	10-24	3/8-16	.406	5/16	15/32	10
458-004	329-4	1/4-20	7/16-14	.437	23/64	1/2	10
458-005	329-5	5/16-18	1/2-13	.484	27/64	9/16	10
458-006	329-6	3/8-16	9/16-12	.515	31/64	19/32	10
458-007	329-7	7/16-14	5/8-11	.656	17/64	23/32	5
COARSE THREAD 1/2 TO 1"							
458-008	329-8	1/2-13	3/4-10	.656	21/32	3/4	5
458-010	329-10	5/8-11	7/8-9	.687	49-64	13/16	5
458-012	329-12	3/4-10	1-8	.781	7/8	7/8	5
458-016	329-16	1-8	1.3/8-12	1.250	1.9/32	1.3/8	5
FINE THREAD 10 TO 7/16"							
458-020	329-332	10-32	3/8-16	.406	5/16	15/32	10
458-022	329-428	1/4-28	7/16-14	.437	23/64	1/2	10
458-024	329-524	5/16-24	1/2-13	.484	27/64	9/16	10
458-026	329-624	3/8-24	9/16-12	.515	31/64	19/32	10
458-028	329-720	7/16-20	5/8-11	.656	17/32	23/32	5

AUTOMOTIVE

Throttle Ball Joints

THROTTLE BALL JOINTS

SPRING LOADED TYPE A

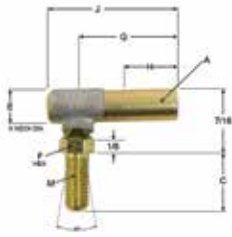


Type A Ball Joints are spring loaded S.A.E. design used widely for throttle control and other applications where zero end-play is required and tension due to spring compression is not objectionable. Fully conform with S.A.E., G.M.C and other published standards including the additional advantages of case hardened seats and ball studs for extra wear resistance, plus plating for maximum corrosion resistance.

Materials of construction - Made of C12L14 carbon steel. Seat members are made of C1008 steel. Both ball stud and seat members are Carbonitride case hardened to a depth of .005 to .008. Assemblies are plated and clear dichromate treated for extra corrosion resistance.

PART NUMBER	PRODUCT CODE	PKG QTY	G.M.C. PLAIN	G.M.C. PLATED	A	B	C	D	E	F	G	H	J	K
A1002	472-102	5	109400	192227	1/4-28	15/32	9/16	1/8	7/16	3/8	31/32	1/2	1.3/8	0.151
A1003	472-103	5	109401	426310	5/16-24	17/32	11/16	5/32	1/2	7/16	1 1/8	9/16	1 9/16	0.182

DISCONNECTING TYPE P



Type P Ball are a low cost disconnect design for throttle and governor controls where minimum weight is required. Length adjustments are simplified because of the disconnect feature. All sizes have a ball stud ball diameter of .252" and a ball stud neck diameter of .140". The hardened spring steel retaining clip accepts ball stud member at 19 pounds maximum push-in load and permits removal of ball stud with 14 pounds minimum pull-out load.

PART NUMBER	PRODUCT CODE	PKG QTY	A	C	G	H	J	M
P1002	472-107	5	1/4-28	9/16	31/32	1/2	1 3/8	0.151

DISCONNECTING TYPE SS



Type SS ball joints are high strength, quick disconnect assemblies with good wear characteristics. Patented design features "key hole" retaining sleeve which insures that the assembly can only be put together with the sleeve positively aligned with the ball cavity. When the spring is released, alignment is automatic, thereby eliminating any possibility of partial closure.

Material of Construction: Body and ball stud are of low carbon steel. Ball studs are surface hardened for wear resistance. All components except the stainless steel spring are plated and yellow dichromate treated for corrosion resistance.

Lubrication: Ball cavity is packed with high wear lubricant.

PART NUMBER	PRODUCT CODE	DESCRIPTION	PKG QTY	THREAD SIZE	B	C	D	E	F	G	H	J	K	L	TENSILE STRENGTH (POUNDS)
P1003	472-108	Quick Disconnecting Type SS Throttle Ball Joint	5	5/16-24	17/32	11/16	5/32	5/8	7/16	1.1/8	19/32	1.29/64	.221	.403	560

FLAT TOP SPG TYPE



Type SPG Ball Joints are designed for heavy duty service. This is a high-strength design with good wear resistance. An oil and ozone resistant Buna-N rubber dirt shield provides protection against abrasive dirt.

"Flat Top" alignment guide shown in drawings above is designed for standard wrench sizes. Provides a mechanical and visual aid which makes it easy to align the ball stud in its vertical position for maximum movement in all directions.

Pull out and tensile strength - A new method of assembly swages more than twice the amount of metal to retain the ball in the cavity. This results in tremendously increased pull out and wear resistance.

PART NUMBER	PRODUCT CODE	PKG QTY	A	B	C	D	E	WRENCH SIZE	F	G	H	J	K	L
SPG1000	472-110	5	10-32	7/16	7/16	1/8	3/8	5/16	5/16	7/8	15/32	1 5/32	0.177	0.301
SPG1002	472-112	5	1/4-28	15/32	9/16	1/8	7/16	3/8	3/8	31/32	17/32	1 9/16	0.208	0.347
SPG1003	472-113	5	5/16-24	17/32	11/16	5/32	1/2	7/16	7/16	1 1/8	19/32	1 9/16	0.250	0.405
SPG1004	472-114	5	3/8-24	11/16	7/8	3/16	9/16	9/16	1/2	1 3/8	13/16	1 13/16	0.289	0.493
SPG1005	472-115	5	7/16-20	7/8	1 1/8	1/4	11/16	11/16	5/8	1 15/16	1 1/8	2 1/2	0.375	0.618
SPG1006	472-116	5	1/2-20	7/8	1 1/8	1/4	11/16	11/16	5/8	1 15/16	1 1/8	2 1/2	0.375	0.618

BATTERY TERMINALS

SIDE APPLICATION

- Twin bolt solderless type terminal
- For use with side terminal batteries
- Complete with mounting stud



PRODUCT CODE	PART NUMBER	DESCRIPTION	PKG QTY
612-102	STL-2	Heavy Duty Replacement Side Terminal - 2pcs per card	1
612-109	STL-10	Heavy Duty Replacement Side Terminal - 10 pcs per card	1

TOP APPLICATION

- Twin bolt solderless type terminal
- Universal cable range 8 through 2/0



PRODUCT CODE	PART NUMBER	DESCRIPTION	PKG QTY
612-132	888-2	Heavy Duty Universal Zinc Battery Terminal - 2 pcs per card	1
612-140	CD888L	Heavy Duty Universal Zinc Battery Terminal - 10 pcs per card	1

TOP APPLICATION - HEAVY DUTY

- Antimonial reinforced Zinc terminal
- Resists acid corrosion and can survive hostile industrial environments
- Hold down plate fits cable for 1 ga. to 4/0



PRODUCT CODE	DESCRIPTION	PKG QTY
612-150	Heavy Duty Commercial Zinc Battery Terminal	1

SIDE TERMINAL CONVERSION POSTS

- Replace OEM bolts and provides a convenient, permanent means of clamping on booster cables
- Screw on Zinc posts for charging or testing batteries



PRODUCT CODE	DESCRIPTION	PKG QTY
612-190	Side Terminal Charging Post - 2 pcs per card	1

MARINE TERMINALS

- Quick disconnect
- Zinc terminal, brass wing nut
- Both positive and negative



PRODUCT CODE	DESCRIPTION	PKG QTY
612-192	Clamp Type Wing Nut Zinc Terminal - 2 pcs per card	1

AUTOMOTIVE

Battery Hold Down • Post and Terminal Cleaner • Terminal Protectors • Battery Filler

BATTERY HOLD DOWN

BATTERY HOLD DOWN BOLTS

- 1/4" - 20 thread hold down bolt
- 4 thread



PRODUCT CODE	DESCRIPTION	PKG QTY
613-113	12" "J" Style battery hold down bolts - 2 pcs per card	1
613-114	10" "L" Style battery hold down bolts - 2pcs per card	1

PLASTIC BATTERY HOLD DOWN

- 7" Non-adjustable
- Fits battery groups 22F, 24, 27, 60, 71, 72, 74, 77



PRODUCT CODE	DESCRIPTION	PKG QTY
613-116	Plastic Battery Hold Down	1

POST AND TERMINAL CLEANER

- Shaves off rust and corrosion



PRODUCT CODE	DESCRIPTION	PKG QTY
613-121	Professional 4 way battery post and terminal center	1

TERMINAL PROTECTORS

- Made from chemically treated polyester cotton



PRODUCT CODE	DESCRIPTION	PKG QTY
613-120	Universal battery terminal protectors - 2 pcs per card	1

BATTERY FILLER



PRODUCT CODE	DESCRIPTION	PKG QTY
613-137	Deluxe Battery Filler	1

BATTERY BRUSH

- Cleans battery posts and terminals
- Plastic case
- Use bottom brush for cleaning terminals
- Unscrew top and use inside brush for cleaning cables



PRODUCT CODE	DESCRIPTION	PKG QTY
613-122	Plastic Case Battery Brush	1

SIDE TERMINAL BATTERY WRENCH

- Reversible 5/16" ratcheting box wrench



PRODUCT CODE	DESCRIPTION	PKG QTY
613-123	Side Terminal Battery Wrench	1

BATTERY TRAYS

- Ideal for replacing rusted or acid corroded platforms
- Acid resistant vinyl coated steel
- To prevent battery movement use with Hold down bolts



PRODUCT CODE	DESCRIPTION	PKG QTY
613-135	Small (7 1/4" x 10 3/4")	1
613-136	Large (7 1/4" x 13 1/8")	1

REPLACEMENT SIDE TERMINAL BOLTS

- Fits positive and negative posts



PRODUCT CODE	DESCRIPTION	PKG QTY
613-126	3/8" Replacement side Terminal bolt - 2 pcs per card	1
613-127	3/8" x 1/2" Replacement side Terminal bolt - 2 pcs per card	1

BATTERY POST SHIMS



PRODUCT CODE	DESCRIPTION	PKG QTY
613-128	2 pcs per card	1

PROTECTOR CAPS

- Made of plastic
- Fit both positive and negative post



PRODUCT CODE	DESCRIPTION	PKG QTY
613-129	Terminal protector caps - 2 pcs per card	1

STEEL BATTERY CLAMPS



PRODUCT CODE	DESCRIPTION	PKG QTY
613-146	400 Amp	1
613-147	600 Amp	1
613-148	300 Amp	1

AUTOMOTIVE

Battery Carriers • Battery Bolts • Wheel Wrenches • Battery Clips • Anti-Freeze Testers

BATTERY CARRIERS

- Automatically locks the ends onto the posts for easy carrying



PRODUCT CODE	DESCRIPTION	PKG QTY
613-131	Top terminal battery carrier strap	1

BATTERY BOLTS

- Fits positive and negative posts
- Made from steel plate



PRODUCT CODE	DESCRIPTION	PKG QTY
613-133	2 pcs per card	1

WHEEL WRENCHES



PRODUCT CODE	PART NO	DESCRIPTION	SOCKET SIZES	OVERALL LENGTH	PKG QTY	CASE
643-320	320	LONG REACH MODEL - 20" overall length, well suited for clearing fender skirts on late model cars	11/16", 3/4" 13/16", 7/8"	20"	1	10
643-321	321	PICK-UP TRUCK MODEL - fits new 1/2 ton trucks	11/16", 3/4" 13/16", 7/8"	20"	1	10

BATTERY CLIPS

BATTERY CLIPS WITH VINYL BOOT



PRODUCT CODE	DESCRIPTION	PKG QTY
613-141	10 Amp	1
613-142	20 Amp	1
613-143	30 Amp	1

BATTERY CLIPS WITH VINYL HANDLES



PRODUCT CODE	DESCRIPTION	PKG QTY
613-144	10 Amp	1
613-145	15 Amp	1

ANTI-FREEZE TESTER

- Accurately tests all permanent solutions with radiator hot or cold



PRODUCT CODE	DESCRIPTION	PKG QTY
613-151	Anti-Freeze Tester	1

AIR ACCESSORIES

PRESSURE GUN DIAL INFLATER WITH CLIP-ON CHUCK

- 1/4" female NPT
- Braided polyurethane hose
- Working pressure: 90 psi
- Bursting pressure: 225 psi



PRODUCT CODE	DESCRIPTION	PKG QTY
646-240	Pressure gun dial inflator with clip-on chuck	1

AUTOMOTIVE LIGHTBULBS

BAYONET BULBS



PRODUCT CODE	DESCRIPTION	PKG QTY
1156	12V 32CP Bayonet Bulbs	10
1157	12V 32/3CP Bayonet Bulbs	10
1157NA	12V 32/3CP Bayonet Amber Bulbs	10
1895	12V 2CP G 4 1/2 Mini Bayonet Bulbs	10
2057	12V 32/2CP Bayonet Bulbs	10
67	12V 4CP (8W) Bayonet Bulbs	10
89	12V 6CP (7.5W) Bayonet Bulbs	10

WEDGE BULBS



PRODUCT CODE	DESCRIPTION	PKG QTY
194	12V 2CP T10 Wedge Bulbs	10
3057	12V 32/2CP Wedge Bulbs	10
3156	12V 32CP Wedge Bulbs	10
3157	12V 32/3CP Wedge Bulbs	10
3157NA	12V 32/3CP Wedge Amber Bulbs	10

HALOGEN BULBS



PRODUCT CODE	DESCRIPTION	PKG QTY
9004	12V 65/45W Halogen Bulb	1
9005	12V 65W Halogen Bulb	1
9006	12V 55W LM Halogen Bulb	1
9007	12V 65/55W LM Halogen Bulb	1

HEADLIGHT / WINDSHIELD CARE



PRODUCT CODE	DESCRIPTION	PKG QTY
DTR227	Detour Heavy Duty Headlight Restoration Kit	1
DTR241	One Step Headlight Restoration Spray, 3 Oz	1
DTR265	One Step Headlight Restoration Spray, 10 OZ	1
DTR272	Ceramic Windshield Coating - 10 Professional Kits Box	10
DTR289	Ceramic Windshield Coating - Single Use Pack	1



CHAIN & RIGGING

Anchor Shackles - Screw Pins.....	19
Clevis Grab Hooks - Gr. 43	21
Clevis Grab Hooks - Gr. 70.....	22
Clevis Slip Hooks	21
Cold Shuts	20
Eye Grab Hooks - Gr. 43.....	21
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Hitch Pins - Vinyl Handle (Clip Included).....	21
Lap Repair Links	20
Linch Pins.....	19
Load Binder.....	22
Mild Link	20
Quick Links.....	19

Quick Pins	19
<i>Round</i>	19
<i>Square</i>	19
Safety Lanyard Hooks.....	21
<i>Double Catch</i>	21
Safety Snap Hook	22
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S Hook.....	23
Shoulder Nut Eye Bolts	23
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TurnBuckles - Light Duty.....	23
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Wire Rope Thimbles.....	23

CHAIN & RIGGING

Anchor Shackles • Quick Pins • Linch Pins • Quick Links

ANCHOR SHACKLES - SCREW PINS

- Electro galvanized finish
- Complete with steel pin



PRODUCT CODE	TRADE SIZE (IN)	WORKING LOAD LIMIT (LBS)	PIECES PER KGS
442-004	1/4	1000	5
442-005	5/16	1500	5
442-006	3/8	2000	5
442-007	7/16	3000	5
442-008	1/2	4000	3
442-010	5/8	5000	2
442-012	3/4	6000	2

QUICK PINS

ROUND

- Zinc Plated Finish



PRODUCT CODE	SIZE	USABLE LENGTH	PKG QTY
442-050	1/4	1 3/8	5
442-051	1/4	1 3/4	5
442-052	5/16	1 3/8	5
442-053	5/16	1 3/4	5
442-054	3/8	1 3/8	5

SQUARE

- Zinc Plated Finish



PRODUCT CODE	SIZE	USABLE LENGTH	PKG QTY
442-055	1/4	2 1/2	5
442-056	5/16	2 1/2	5
442-057	3/8	2 1/4	5
442-058	3/8	2 1/2	5

LINCH PINS

- Pins made of C1010 - C1018 Steel



PRODUCT CODE	TRADE SIZE (IN)	PIN LENGTH (IN)	USABLE LENGTH (IN)	PKG QTY
442-060	3/16	1 9/16	1 1/4	10
442-061	1/4	1 9/16	1 1/4	10
442-062	5/16	1 9/16	1 1/4	10
442-063	3/8	1 3/4	1 7/16	10
442-064	7/16	1 9/16	1 11/32	10
442-065	7/16	1 3/4	1 1/2	10

QUICK LINKS

- Mild Steel Plated



PRODUCT CODE	A TRADE SIZE (IN)	B OVERALL LENGTH (IN)	C OPENING WIDTH (IN)	WORKING LOAD LIMIT (LBS)	PKG QTY
442-102	1/8	1 1/2	3/16	220	10
442-103	3/16	2	1/4	660	10
442-104	1/4	2 1/2	5/16	880	10
442-105	5/16	3	7/16	1760	5
442-106	3/8	3 1/4	7/16	2200	5
442-107	7/16	3 1/4	1/2	2800	5
442-108	1/2	4 1/4	5/8	3300	5

CHAIN & RIGGING

Lap Repair Links • Hitch Pins • Cold Shuts • Mild Link

LAP REPAIR LINKS

- Self colour
- Stamped steel



PRODUCT CODE	TRADE SIZE (IN)	WORKING LOAD LIMIT (LBS)	PIECES PER PKG
442-122	1/8 x 5/8	150	20
442-123	3/16 x 1	200	20
442-124	1/4 x 1 1/4	300	20
442-125	5/16 x 1 1/2	500	10
442-126	3/8 x 1 5/8	825	10

COLD SHUTS

- Mild steel plated



PRODUCT CODE	TRADE SIZE (IN)	WORKING LOAS LIMIT (LBS)	PKG QTY
442-143	3/16	500	10
442-144	1/4	750	10
442-145	5/16	1250	10
442-146	3/8	1900	10

MILD LINK

- Forged carbon steel
- Zinc plated
- For use with grades 28, 43 and 70 chain



PRODUCT CODE	TRADE SIZE (IN)	OVERALL LENGTH (IN)	WORKING LOAD LIMIT (LBS)	PKG QTY
442-150	1/4 - 5/16	2 1/4	4700	1
442-151	3/8	2 3/4	6600	1
442-152	7/16 - 1/2	3 1/2	11250	1

HITCH PINS - FOLD OVER HANDLE

- Tensile strength 60 to 80 kg/sq. mm
- C1144 Steel
- Zinc plated



PRODUCT CODE	TRADE SIZE (IN)	USEABLE LENGTH (IN)	PKG QTY
442-130	1/2	3 1/2	1
442-131	5/8	4 1/4	1
442-132	5/8	6 1/4	1
442-133	3/4	4 1/4	1
442-134	3/4	6 1/4	1
442-135	7/8	6 1/4	1
442-136	1	6 1/4	1
442-137	1 1/8	6 1/4	1
442-138	1 1/4	7 1/2	1

CHAIN & RIGGING

Hitch Pins • Eye Grab Hooks • Safety Winch Hook • Safety Lanyard Hooks • Clevis Grab Hooks • Clevis Slip Hooks

HITCH PINS - VINYL HANDLE (CLIP INCLUDED)

- Tensile strength 90 to 105 kg./sq.mm
- Heat treated to 29 - 34 Rockwell (HRC)



PRODUCT CODE	SIZE	USABLE LENGTH	PKG QTY
442-160	1/2	3 5/8	1
442-161	5/8	4	1
442-162	5/8	5 1/2	1
442-163	3/4	4	1
442-164	3/4	6 1/2	1
442-165	7/8	4 1/2	1
442-166	7/8	6 1/2	1
442-167	1	4 1/2	1
442-168	1	7 1/2	1
442-169	1 1/8	8 1/2	1
442-170	1 1/4	8 1/2	1
442-171	1 1/2	8 1/2	1

EYE GRAB HOOKS - GR. 43

- Self colour
- Drop forged, heat treated



PRODUCT CODE	TRADE SIZE	WORKING LOAD LIMIT	PKG QTY
442-204	1/4	2600	5
442-205	5/16	3900	5

SAFETY WINCH HOOK

- Forged carbon steel - zinc plated
- I.D. Eye - 11/16
- Throat opening 3/4
- Overall length - 4



PRODUCT CODE	WORKING LOAD LIMIT	MINIMUM BREAKING STRENGTH	PKG QTY
442-212	750 lbs	3000 lbs	1

SAFETY LANYARD HOOKS

- Forged carbon steel
- zinc plated
- I.D. Eye - 1.1/16"
- Throat opening 11/16"
- Overall length - 5.3/16"



PRODUCT CODE	WORKING LOAD LIMIT	MINIMUM BREAKING STRENGTH	PKG QTY
442-214		5000 lbs	1

DOUBLE CATCH

- Forged carbon steel - zinc plated
- I.D. Eye - 1.1/16"
- Throat opening - 3/4"
- Overall length - 5.5/16"



PRODUCT CODE	WORKING LOAD LIMIT	MINIMUM BREAKING STRENGTH	PKG QTY
442-216	2500 lbs	5000 lbs	1

CLEVIS GRAB HOOKS - GR. 43

- Self colour
- Drop forged, heat treated



PRODUCT CODE	TRADE SIZE (IN)	WORKING LOAD LIMIT (LBS)	PKG QTY
442-224	1/4	2600	5
442-225	5/16	3900	5
442-226	3/8	5400	3
442-227	7/16	7200	3
442-228	1/2	9200	2

CLEVIS SLIP HOOKS

- For chain grades 28, 30 and 43
- Drop forged, heat treated
- Self colour



PRODUCT CODE	TRADE SIZE (IN)	WORKING LOAD LIMIT (LBS)	PKG QTY
442-244	1/4	2600	5
442-245	5/16	3900	3
442-246	3/8	5400	2
442-248	1/2	9200	2

CHAIN & RIGGING

Clevis Grab Hooks • Snap Links • Safety Snap Hook • Load Binders • Wire Rope Clips

CLEVIS GRAB HOOKS - GR. 70

- For grade 70 transport chain
- Drop forged
- Heat treated
- Alloy steel



PRODUCT CODE	TRADE SIZE (IN)	WORKING LOAD LIMIT	PKG QTY
442-304	1/4	4700	5
442-305	5/16	4700	3
442-306	3/8	6600	3
442-308	1/2	11300	2

SNAP LINKS

- Mild steel plated



PRODUCT CODE	A TRADE SIZE (IN)	B OVERALL LENGTH (IN)	PKG QTY
442-405	3/16	2	10
442-406	1/4	2 3/8	10
442-407	9/32	2 7/8	10
442-408	5/16	3 1/4	10
442-409	11/32	3 1/2	10
442-410	3/8	3 7/8	5
442-411	7/16	4 3/4	5
442-412	13/32	5 1/2	5
442-413	1/2	6 1/4	5

SAFETY SNAP HOOK

- Mild steel plated
- I.D. Eye - 11/16"
- Throat opening - 5/8"
- Overall length - 4"



PRODUCT CODE	SIZE (IN)	MINIMUM BREAKING STRENGTH	PKG QTY
442-432	3/4	5000 lbs	10

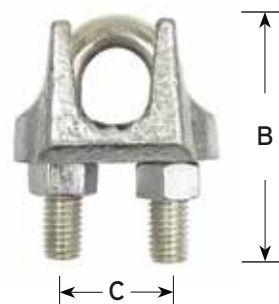
LOAD BINDER

- Forged steel, quenched and tempered
- Hooks are quenched and tempered alloy steel
- Red in Colour



PRODUCT CODE	CHAIN SIZE	BINDER TYPE	HANDLE LENGTH	TAKE UP INCHES	WT PER UNIT	WORKING LOAD LIMIT LBS	PROOF LOAD LBS	MIN. BREAKING STRENGTH LBS	PKG QTY
442-490	3/8"	Lever	16	4 1/2	7	5400	10200	19000	1
442-491	5/16" - 3/8"	Ratchet	13.42	8	10.5	5400	10800	19000	1
442-492	3/8" - 1/2"	Ratchet	13.92	8	12.9	9200	18400	33000	1
442-493	1/2" - 5/8"	Ratchet	13.92	8	14.38	13000	26000	46000	1

WIRE ROPE CLIPS - MALLEABLE



PRODUCT CODE	TRADE SIZE (IN)	FOR CABLE SIZE	B OVERALL LENGTH (IN)	C POST TO POST (IN)	PIECE PER PKG
442-502	1/8	3/32, 1/8	1	7/16	25
442-503	3/16	3/16	1 1/4	9/16	25
442-504	1/4	1/4	1 1/2	5/8	10
442-505	5/16	5/16	1 1/2	11/16	10
442-506	3/8	3/8	2	13/16	10
442-507	7/16	7/16	2	7/8	10
442-508	1/2	1/2	2 1/4	1	5
442-510	5/8	5/8	2 3/4	1 3/16	5
442-512	3/4	3/4	3	1 1/4	5

CHAIN & RIGGING

Wire Rope Thimbles • TurnBuckles • Shoulder Nut Eye Bolts • S Hook

WIRE ROPE THIMBLES

- Electro galvanized



PRODUCT CODE	TRADE SIZE (IN)	FOR CABLE SIZE	B OVERALL LENGTH (IN)	PKG QTY
442-522	1/8	3/32, 1/8	1 3/4	25
442-523	3/16	3/16	1 3/4	25
442-524	1/4	1/4	1 3/4	10
442-525	5/16	5/16	2 1/8	10
442-526	3/8	3/8	2 1/4	10
442-528	1/2	1/2	2 3/4	10
442-530	5/8	5/8	3 1/2	5
442-532	3/4	3/4	3 3/4	5

TURNBUCKLES - LIGHT DUTY

- Hook & Eye - Mild Steel
- Body - Cast



PRODUCT CODE	DIAMETER	TAKE UP INCHES	BODY LENGTH	PKG QTY
442-550	5 mm	1 1/8	50 mm	10
442-555	5 mm	2	70 mm	10
442-560	6 mm	1 1/2	60 mm	10
442-565	6 mm	2 3/4	100 mm	10
442-575	8 mm	3	110 mm	5
442-580	10 mm	2	80 mm	5

SHOULDER NUT EYE BOLTS

- Drop forged
- Hot dip galvanized with nut



PRODUCT CODE	DIAMETER INCHES	SHANK LENGTH (IN)	I.D. EYE (IN)	O.D. EYE (IN)	LENGTH OF THREAD (IN)	WORKING LOAD LIMIT (LBS)	PCS PER PKG
442-602	1/4	2	9/16	7/8	1.1/2	500	5
442-605	1/4	4	9/16	7/8	2.3/8	500	5
442-608	5/16	2.1/4	5/8	1.1/8	1.1/2	800	5
442-611	5/16	4.1/4	5/8	1.1/8	2.1/2	800	5
442-614	3/8	2.1/2	3/4	1.3/8	1.1/2	1200	5
442-617	3/8	4.1/2	3/4	1.1/4	2.1/2	1200	5
442-620	1/2	3.1/4	1	1.3/4	1.1/2	2200	3
442-623	1/2	6	1	1.3/4	3	2200	3
442-626	5/8	4	1.1/4	2.1/4	2	3500	3
442-629	5/8	6	1.1/4	2.1/4	3	3500	3
442-632	3/4	4.1/2	1.7/16	2.3/4	2	5100	2
442-635	3/4	6	1.7/16	2.3/4	2.3/4	5100	2

S HOOK

- Mild steel plated



PRODUCT CODE	TRADE SIZE (IN)	MATERIAL SIZE DECIMAL	APPROX. INSIDE LENGTH (IN)	PIECE PER PKG
442-702	1/8	0.125	1 1/4	25
442-703	5/32	0.156	1 1/2	25
442-704	3/16	0.188	1 7/8	25
442-705	7/32	0.203	2	25
442-706	1/4	0.250	2	25
442-707	1/4	0.250	2 3/4	10
442-708	5/16	0.313	3 1/4	10
442-709	3/8	0.375	3 1/4	10
442-710	3/8	0.375	3 3/4	10



ELECTRICAL

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SWITCHES

TOGGLE AND ROCKER SWITCHES



PRODUCT CODE	DESCRIPTION	EQUIVALENT TO COLE HERSEE#	PKG QTY
660-000	Off-On • SPST • 25A at 12V DC • 2 Screws	5582	1
660-001	Off-On • SPST • 25A at 12V DC • Mounting Stem	5582-10	1
660-002	On-On • SPDT • 25A at 12V DC • 3 Screws	5584	1
660-003	Off-On • SPST • 25A at 12V DC • 2 Screws	5520	1
660-006	On-Off-On • SPDT • 25A at 12V DC • 3 Screws	5586	1
660-008	Off-On • DPDT • 25A at 12V DC • 4 Screws	5588	1
660-010	On-Off-On • DPDT • 25A at 12V DC • 6 Screws	5592	1
660-020	On-Off • SPDT • 225A at 12V DC • 2 Blades	55014	1
660-024	Mom. On-Off-Mom. On • SPDT • 25A at 12V DC • 3 Screws	55021	1
660-030	Mom. On-Off-Mom. On • DPDT • 25A at 12V DC • 6 Screws	55054	1
660-040	On-Off • SPDT • 50A at 12V DC or 6A at 24V DC • 2 Screws		1
660-045	Toggle Boot Black	81264-01	1
660-060	Rocker Switch	58328-04	1
660-065	Rocker Plug switch-Std. Size	98628	1

IGNITION SWITCH



PRODUCT CODE	DESCRIPTION	EQUIVALENT TO COLE HERSEE#	PKG QTY
660-170	4 Position Ignition & Lock Switch • Acc.-Off-Ign/Acc-Ign. Start • Rated at 12V DC • Acc. 10A, Ign. 10A, Start 5A	9579	1

PUSH/PULL BUTTON SWITCH



PRODUCT CODE	DESCRIPTION	EQUIVALENT TO COLE HERSEE#	PKG QTY
660-125	Norm. Off • SPST • 10A at 12V DC • 2 Screws • Plastic Knob	5007	1
660-127	Norm. Off • SPST • 10A at 12V DC • 2 Screws • Chrm Pltd Knob	5011	1
660-135	On-Off • SPST • 75A at 6-28V • 2 Screws		1

MASTER DISCONNECT SWITCH



PRODUCT CODE	DESCRIPTION	EQUIVALENT TO COLE HERSEE#	PKG QTY
660-190	Single Pole • 2 Position: Off-On • Disconnects Battery Circuit Only	2484	1
660-191	Double Pole • 2 Position: Off-On • Disconnects Battery Circuit Only	75903	1
660-192	Master Disconnect switch 2 pos, PLS	75920	1

PUSH BUTTON SWITCH



PRODUCT CODE	DESCRIPTION	EQUIVALENT TO COLE HERSEE#	PKG QTY
660-100	Norm. Off-Mom. On • 25A at 12V DC • 2 Screws	9095	1
660-105	Norm. Off-Mom. On • 25A at 12V DC • Snap on Rubber Cap • 2 Screws	9245	1
660-110	Norm. Off-Mom. On • 25A at 12V DC • Screw on Rubber Cap • 2 Screws	90030	1
660-180	Momentary Switch	M-608	1

ELECTRICAL

Switches • Connectors • Breakers

SWITCHES (CONT)

STARTER SOLENOID



PRODUCT CODE	DESCRIPTION	EQUIVALENT TO COLE HERSEE#	PKG QTY
660-200	SPST • Continuous Duty • 1 Circuit: Off-On • 12V • 85A • Insulated	24059	1
660-201	SPST • Intermittent Duty • 1 Circuit: Off-On • 12V • 750A make 100A break • 10 Secs On-20 min Off • Grounded	24037	1
660-202	SPST • Continuous Duty • Circuit: Off-On • 24V • 85A • Insulated	24063	1
660-204	SPST • Continuous Duty • Circuit: Off-On • 12V • 85A • Grounded	24106	1
660-210	Reversing Motor Solenoid	24450	1

7 WAY CONNECTORS

- Unique interior design eliminates shorting out
- Non-corroding shock-resistant interiors with unique terminal reinforce dams that eliminate short circuiting by preventing contact from spreading
- Center pin will take up to 8 gauge wire for batter charge systems



PRODUCT CODE	DESCRIPTION	PKG QTY
660-360	Trailer Plug Male (Plug)	1
660-370	Trailer Plug Female (Socket)	1

TRAILER CONNECTORS



PRODUCT CODE	DESCRIPTION	EQUIVALENT TO COLE HERSEE #	PKG QTY
660-500	Six Pole Socket	1235	1
660-515	Six Pole Plug With Spring	1254	1
660-530	Universal Trailer Connectors 4 Pole	11134	1
660-540	Universal Trailer Connectors 3 Pole	11173	1

BREAKERS

BREAKER WITH FLAT BRACKET - STUD TERMINAL WITH PLATED STEEL CASE

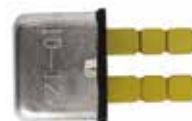


PRODUCT CODE	DESCRIPTION	EQUIVALENT TO COLE HERSEE#	PKG QTY
660-303	10A	30055-10	1
660-304	15A	30055-15	1
660-305	20A	30055-20	1
660-306	25A	30055-25	1
660-307	30A	30055-30	1
660-308	40A	30055-40	1
660-309	50A	30055-50	1

BREAKERS WITHOUT BRACKET

PRODUCT CODE	DESCRIPTION	EQUIVALENT TO COLE HERSEE#	PKG QTY
650-314	15A	30056-15	1
650-316	25A	30056-25	1
650-317	30A	30056-30	1
650-318	40A	30056-40	1

BREAKERS - PLUG-IN



PRODUCT CODE	DESCRIPTION	EQUIVALENT TO COLE HERSEE#	PKG QTY
660-320	10A	30409-10	1
660-321	15A	30409-15	1
660-322	20A	30409-20	1
660-323	25A	30409-25	1
660-324	30A	30409-30	1

BREAKERS - FUSE CLIP MOUNTING



PRODUCT CODE	DESCRIPTION	EQUIVALENT TO COLE HERSEE#	PKG QTY
660-327	20A	30410-20	1
660-328	25A	30410-25	1
660-329	30A	30410-30	1

FUSES

GLASS/CERAMIC FUSES



PRODUCT CODE	PART NUMBER	PKG QTY
AGA FUSES		
OAGA01.5V	AGA-1 1/2	5
OAGA002.V	AGA-2	5
OAGA02.5V	AGA-2 1/5	5
OAGA003.V	AGA-3	5
OAGA005.V	AGA-5	5
OAGA006.V	AGA-6	5
OAGA07.5V	AGA-7 1/2	5
OAGA010.V	AGA-10	5
OAGA015.V	AGA-15	5
OAGA020.V	AGA-20	5
OAGA025.V	AGA-25	5
OAGA030.V	AGA-30	5
AGC FUSES		
OAGC001.V	AGC-1	5
OAGC01.5V	AGC-1 1/2	5
OAGC002.V	AGC-2	5
OAGC02.5V	AGC-2 1/2	5
OAGC003.V	AGC-3	5
OAGC004.V	AGC-4	5
OAGC005.V	AGC-5	5
OAGC006.V	AGC-6	5
OAGC07.5V	AGC-7 1/2	5
OAGC008.V	AGC-8	5
OAGC010.V	AGC-10	5
OAGC015.V	AGC-15	5
OAGC020.V	AGC-20	5
OAGC025.V	AGC-25	5
OAGC030.V	AGC-30	5
OAGC035.V	AGC-35	5
AGU FUSES		
OAGU010.T	AGU-10	10
OAGU015.T	AGU-15	10
OAGU020.T	AGU-20	10
OAGU025.T	AGU-25	10
OAGU030.T	AGU-30	10
OAGU035.T	AGU-35	10
OAGU040.T	AGU-40	10
OAGU050.T	AGU-50	10
OAGU060.T	AGU-60	10

PRODUCT CODE	PART NUMBER	PKG QTY
AGW FUSES		
OAGW001.V	AGW-1	5
OAGW01.5V	AGW-1 1/2	5
OAGW02.5V	AGW-2 1/2	5
OAGW003.V	AGW-3	5
OAGW004.V	AGW-4	5
OAGW005.V	AGW-5	5
OAGW006.V	AGW-6	5
OAGW015.V	AGW-15	5
OAGW020.V	AGW-20	5
OAGW030.V	AGW-30	5
AGX FUSES		
OAGX0002ZP	AGX-2	5
OAGX020.VP	AGX-20	5
OAGX025.VP	AGX-25	5
OAGX030.VP	AGX-30	5
SFE FUSES		
OSFE0001ZP	SFE-01	5
OSFE0002ZP	SFE-02	5
OSFE004.V	SFE-04	5
OSFE006.V	SFE-06	5
OSFE07.5V	SFE-7.5	5
OSFE008.V	SFE-08	5
OSFE009.V	SFE-09	5
OSFE014.V	SFE-14	5
OSFE020.V	SFE-20	5
OSFE030.V	SFE-30	5
GBC FUSES		
OGBC005.V	GBC-5	5
OGBC008.V	GBC-8	5
OGBC016.V	GBC-16	5
OGBC025.V	GBC-25	5

ELECTRICAL

Fuses

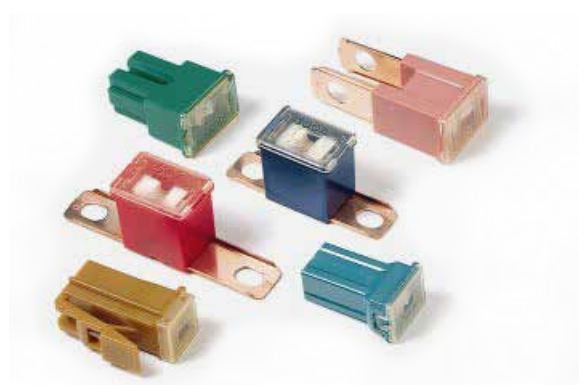
FUSES (CONT)

BLADE FUSES



PRODUCT CODE	PART NUMBER	PKG QTY
ATO FUSES (PREMIUM)		
0AT0001.V	ATO-1	5
0AT0002.V	ATO-2	5
0AT0003.V	ATO-3	5
0AT0004.V	ATO-4	5
0AT0005.V	ATO-5	5
0AT007.5V	ATO-7.5	5
0AT0010.V	ATO-10	5
0AT0015.V	ATO-15	5
0AT0020.V	ATO-20	5
0AT0025.V	ATO-25	5
0AT0030.V	ATO-30	5
0AT0040.V	ATO-40	5
MINI® FUSES		
OMIN002.V	MIN-2	5
OMIN003.V	MIN-3	5
OMIN004.V	MIN-4	5
OMIN005.V	MIN-5	5
OMIN07.5V	MIN-7.5	5
OMIN010.V	MIN-10	5
OMIN015.V	MIN-15	5
OMIN020.V	MIN-20	5
OMIN025.V	MIN-25	5
OMIN030.V	MIN-30	5
LOW PROFILE MINI® BLADE BOX FUSES		
LMIN002.V	LMIN-2	5
LMIN005.V	LMIN-5	5
LMIN07.5V	LMIN-7.5	5
LMIN010.V	LMIN-10	5
LMIN015.V	LMIN-15	5
LMIN020.V	LMIN-20	5
LMIN025.V	LMIN-25	5
LMIN030.V	LMIN-30	5
MAXI™ FUSES		
OMAX020.X	MAX-20	1
OMAX030.X	MAX-30	1
OMAX040.X	MAX-40	1
OMAX050.X	MAX-50	1
OMAX060.X	MAX-60	1
OMAX070.X	MAX-70	1
OMAX080.X	MAX-80	1

PAL™ FUSES



PART NUMBER	PRODUCT CODE	PKG QTY
FEMALE TERM		
OPAL020.X	PAL 020	1
OPAL030.X	PAL 030	1
OPAL040.X	PAL 040	1
OPAL050.X	PAL 050	1
OPAL060.X	PAL 060	1
STRAIGHT MALE TERM		
OPAL130.X	PAL 130	1
OPAL160.X	PAL 160	1
OPAL180.X	PAL 180	1
OPAL1100X	PAL 1100	1
OPAL1120X	PAL 1120	1
13/16" MALE TERM		
OPAL230.X	PAL 230	1
OPAL240.X	PAL 240	1
OPAL250.X	PAL 250	1
OPAL260.X	PAL 260	1
OPAL270.X	PAL 270	1
OPAL280.X	PAL 280	1
OPAL2100X	PAL 2100	1
OPAL2120X	PAL 2120	1
OPAL2140X	PAL 2140	1
MINI FEMALE TERM		
OPAL330.X	PAL 330	1
OPAL340.X	PAL 340	1
9/16" BENT MALE TERM		
OPAL430.X	PAL 430	1
OPAL440.X	PAL 440	1
OPAL450.X	PAL 450	1
OPAL480.X	PAL 480	1
OPAL4100.X	PAL 4100	1
LOCKING FEMALE TERM		
OPAL525.X	PAL 525	1
OPAL530.X	PAL 530	1

ELECTRICAL

Fuses • Fuse Boxes • Automotive Fuses

FUSES (CONT)

MEGA® FUSE SERIES



PART NUMBER	DESCRIPTION	PKG QTY
OMEG080.X	Fuse - Mega 32V, 80A, 1 pc blister	10
OMEG100.X	Fuse - Mega 32V, 100A, 1 pc blister	10
OMEG125.X	Fuse - Mega 32V, 125A, 1 pc blister	10
OMEG150.X	Fuse - Mega 32V, 150A, 1 pc blister	10
OMEG175.X	Fuse - Mega 32V, 175A, 1 pc blister	10
OMEG200.X	Fuse - Mega 32V, 200A, 1 pc blister	10
OMEG225.X	Fuse - Mega 32V, 225A, 1 pc blister	10
OMEG250.X	Fuse - Mega 32V, 250A, 1 pc blister	10
OMEG300.X	Fuse - Mega 32V, 300A, 1 pc blister	10
OMEG350.X	Fuse - Mega 32V, 350A, 1 pc blister	10
OMEG400.X	Fuse - Mega 32V, 400A, 1 pc blister	10
OMEG450.X	Fuse - Mega 32V, 450A, 1 pc blister	10
OMEG500.X	Fuse - Mega 32V, 500A, 1 pc blister	10

JCASE® SERIES



PART NUMBER	DESCRIPTION	PKG QTY
JCAS020.X	Fuse - JCase 32V 20A 1-pc box	1
JCAS025.X	Fuse - JCase 32V 25A 1-pc box	1
JCAS030.X	Fuse - JCase 32V 30A 1-pc box	1
JCAS040.X	Fuse - JCase 32V 40A 1-pc box	1
JCAS050.X	Fuse - JCase 32V 50A 1-pc box	1
JCAS060.X	Fuse - JCase 32V 60A 1-pc box	1

AUTOMOTIVE FUSES

17 PIECE AUTOMOTIVE FUSES



- When fuses blowout they light up
- Set contains:
 - 2 pcs. 5 amp fuses - amber
 - 3 pcs. 15 amp fuses - blue
 - 3 pcs. 25 amp fuses - clear
 - 1 fuse puller
 - 2 pcs. 10 amp fuses - red
 - 4 pcs. 20 amp fuses - yellow
 - 2 pcs. 30 amp fuses - green

PRODUCT CODE	PKG QTY
521-758	1

FUSE BOX

- For ATC or ATO fuse or plug in circuit breakers
- Recessed fuse contacts, no cover required
- 25A max per circuit at 12V DC
- 150A total for block at 12V DC
- For 6-28V systems



PRODUCT CODE	DESCRIPTION	EQUIVALENT TO COLE HERSEE #	PKG QTY
660-350	6 Position	46377-6	1
660-351	8 Position	46377-8	1
660-352	10 Position	46377-10	1

ELECTRICAL

Circuit Testers • Automotive Electrical Repair Kit

CIRCUIT TESTERS

CIRCUIT TESTER

- Trouble shoot 12 volt & 24 volts circuits
- Heavy duty probe & ground clip
- Extra long 48" lead



PRODUCT CODE	DESCRIPTION	PKG QTY	CASE
637-100	Circuit tester	1	12

VOLTAGE TESTER

- Test 6, 12 and 24 volt system
- 60° heavy duty rubber lead wire
- Replacement bulb No. 1893



PRODUCT CODE	DESCRIPTION	PKG QTY	CASE
637-200	Voltage tester	1	12

285 PC AUTOMOTIVE ELECTRICAL REPAIR KIT



- Great for use on automotive, marine, industrial and agricultural applications
- 2-part plastic case folds open 180° for easy access to both sides
- Folds shut for carrying case
- Set contains:

- | | |
|-------------------------------|------------------------------------|
| 1 - Wire crimping tool | 3 - 1/4" Wire clamps |
| 1 - 6-12V tester | 10 - Heat shrink tubes |
| 1 - Slotted screwdriver | 30 - Small cable ties |
| 1 - Phillips screwdriver | 10 - Medium cable ties |
| 1 - Roll of electrical tape | 10 - Large cable ties |
| 2 - Test leads, 32" | 6 - Rubber grommets |
| 5 - Glass style fuses | 26 - Assorted wire nuts |
| 1 - Fuse puller | 160 - Assorted insulated terminals |
| 1 - Roll of primary wire, 60" | |
| 10 - 1/8" Wire clamps | 1 - Plastic organizer case |

PRODUCT CODE	PKG QTY
571-520	1

WORK LIGHTS

LED & HALOGEN TRI-POD WORK LIGHTS

- Heavy duty outdoor construction
- Easily adjustable telescopic tripod
- Twist-lock grip for height adjustment
- Individually rotating lamps
- Rust-resistant, painted finish with a highly reflective interior structure
- Sturdy adjustable light fixtures
- Two adjustable light fixtures
- Glass lens covers
- Metal lens shield (halogen only)
- 10 ft. grounded power cord (18 awg)
- bulbs included

SAFETY FIRST FOR HALOGEN

- This product is UL listed for OUTDOOR USE ONLY and NOT intended for interior use
- This light fixture is NOT a vapour-proof lighting device and should NOT be used around ANY FLAMMABLE LIQUIDS or in FLAMMABLE ATMOSPHERE, such as gasoline, paint, paint thinner, etc
- DO NOT use this product if the glass lens is cracked or broken
- DO NOT HANDLE the lamp with your hand while the power is on
- ALWAYS UNPLUG and ALLOW THE FIXTURE TO COOL before storing



PRODUCT CODE	DESCRIPTION	PKG QTY	CASE
606-552	2x500 Watt Halogen Work Light	1	2
606-566	2x10,000 Lumen 2x100W LED Tripod Work Light	1	1

LED & HALOGEN WORK LIGHTS

- Provides over 9,000 square feet of bright light for after dark activities. Excellent for construction, do-it-yourself projects, auto repairs and recreation
- Switch allows lights to be turned off without unplugging
- 90° adjustable aim gives more precise coverage
- Solid steel protective grille
- Easy-to-grip handle for convenient carrying



PRODUCT CODE	DESCRIPTION	PKG QTY	CASE
606-550	500 Watt Halogen Work Light	1	8
606-560	10 Watt 800 Lumen LED Work Light	1	10
606-564	10,000 Lumen 100W LED Work Light	1	2

REPLACEMENT HALOGEN BULB



PRODUCT CODE	DESCRIPTION	PKG QTY
606-553	150 Watt Halogen Bulb	1
606-554	250 Watt Halogen Bulb	1
606-555	500 Watt Halogen Bulb	1

ELECTRICAL

Wire Crimping Tool • Wire Stripper • Block Heater Parts • Electrical Fans

ELECTRICAL FANS

- 2 Speeds



PRODUCT CODE	PART NUMBER	DESCRIPTION
840-103	FP-103	Premium 12 V
840-106	FP-106	Premium 24 V
841-203	SIG103	Economy 12 V
841-206	SIG106	Economy 24 V

BLOCK HEATER PARTS



PRODUCT CODE	PART NUMBER	DESCRIPTION	PKG QTY
607-045	G45DF	3 prong "U" ground plug. Dead front	10
607-047	G47	3 wire cord connector with adjustable clamp. "U" ground	10

UNIVERSAL FAN ASSEMBLIES

- Reversible blades for pusher or puller applications
- Coverage for a wide variety of applications
- Complete kits with mounting hardware
- O.E. Replacement, supplemental or add-on cooling needs



PRODUCT CODE	PART NUMBER	DESCRIPTION
842-209	RF-0901H	9" Electric Fan 12V
842-210	RF-1001H	10" Electric Fan 12V
842-212	RF-1101H	12" Electric Fan 12V
842-214	RF-1401H	14" Electric Fan 12V
842-216	RF-1601H	16" Electric Fan 12V
842-224	RF-1402H	14" Electric Fan 24V
842-226	RF-1602H	16" Electric Fan 24V



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FASTENERS

Hex Head Cap Screws

HEX HEAD CAP SCREWS DIMENSIONS

Screw Diameter	1/4"	5/16"	3/8"	7/16"	1/2"	9/16"	5/8"	3/4"	7/8"	1"	1 1/8"	1 1/4"	1 1/2"
Threads per inch U.N.C./U.S.S	20	18	16	14	13	12	11	10	9	8	7	7	6
U.N.F./S.A.E.	28	24	24	20	20	18	18	16	14	14	12	12	12
Head Width	7/16"	1/2"	9/16"	5/8"	3/4"	13/16"	15/16"	1 1/8"	1 5/16"	1 1/2"	1 7/8"	1 7/8"	2 1/4"
Across Flats Head Height	5/32"	13/64"	15/64"	9/32"	5/16"	23/64"	25/64"	15/32"	35/64"	39/64"	11/16"	25/32"	15/16"
Length	Under Head to Extreme Point												

HEX HEAD CAP SCREWS

GRADE 5



- Zinc Plated
- Diameter's larger than 1" available on request

UNC COARSE THREAD U.S.S. PRODUCT CODE	UNF FINE THREAD S.A.E. PRODUCT CODE	SIZE	PKG QTY
1/4" DIAMETER			
103-016P	104-016P	1/2	100
103-018P	104-018P	3/4	100
103-020P	104-020P	1	100
103-021P	104-021P	1 1/4	100
103-022P	104-022P	1 1/2	100
103-023P	104-023P	1 3/4	100
103-024P	104-024P	2	100
103-025P	104-025P	2 1/4	100
103-026P	104-026P	2 1/2	100
103-027P	104-027P	2 3/4	100
103-028P	104-028P	3	100
103-030P	104-030P	3 1/2	100
103-032P	104-032P	4	100
103-033P	104-033P	4 1/2	50
103-034P	104-034P	5	50
103-035P	104-035P	5 1/2	50
103-036P	104-036P	6	50
5/16" DIAMETER			
103-043P	104-043P	1/2	100
103-045P	104-045P	3/4	100
103-047P	104-047P	1	100
103-048P	104-048P	1 1/4	100
103-049P	104-049P	1 1/2	100
103-050P	104-050P	1 3/4	100
103-051P	104-051P	2	100
103-052P	104-052P	2 1/4	100
103-053P	104-053P	2 1/2	100
103-054P	104-054P	2 3/4	100
103-055P	104-055P	3	100
103-057P	104-057P	3 1/2	100
103-059P	104-059P	4	100
103-060P	104-060P	4 1/2	50
103-061P	104-061P	5	50
103-062P	104-062P	5 1/2	50
103-063P	104-063P	6	50

UNC COARSE THREAD U.S.S. PRODUCT CODE	UNF FINE THREAD S.A.E. PRODUCT CODE	SIZE	PKG QTY
3/8" DIAMETER			
103-076P	104-076P	1/2	100
103-078P	104-078P	3/4	100
103-080P	104-080P	1	100
103-081P	104-081P	1 1/4	100
103-082P	104-082P	1 1/2	100
103-083P	104-083P	1 3/4	100
103-084P	104-084P	2	100
103-085P	104-085P	2 1/4	100
103-086P	104-086P	2 1/2	100
103-087P	104-087P	2 3/4	100
103-088P	104-088P	3	100
103-090P	104-090P	3 1/2	100
103-092P	104-092P	4	50
103-093P	104-093P	4 1/2	50
103-094P	104-094P	5	50
103-095P	104-095P	5 1/2	50
103-096P	104-096P	6	50
7/16" DIAMETER			
103-111P	104-111P	3/4	100
103-113P	104-113P	1	50
103-114P	104-114P	1 1/4	50
103-115P	104-115P	1 1/2	50
103-116P	104-116P	1 3/4	50
103-117P	104-117P	2	50
103-118P	104-118P	2 1/4	50
103-119P	104-119P	2 1/2	50
103-120P	104-120P	2 3/4	50
103-121P	104-121P	3	50
103-123P	104-123P	3 1/2	25
103-125P	104-125P	4	25
103-126P	104-126P	4 1/2	25
103-127P	104-127P	5	25
103-128P	104-128P	5 1/2	25
103-129P	104-129P	6	25

HEX HEAD CAP SCREWS (CONT)

GRADE 5 (CONT)

UNC COARSE THREAD U.S.S. PRODUCT CODE	UNF FINE THREAD S.A.E. PRODUCT CODE	SIZE	PKG QTY
1/2" DIAMETER			
103-148P	104-148P	3/4	50
103-150P	104-150P	1	50
103-151P	104-151P	1 1/4	50
103-152P	104-152P	1 1/2	50
103-153P	104-153P	1 3/4	50
103-154P	104-154P	2	50
103-155P	104-155P	2 1/4	50
103-156P	104-156P	2 1/2	50
103-157P	104-157P	2 3/4	50
103-158P	104-158P	3	50
103-160P	104-160P	3 1/2	25
103-162P	104-162P	4	25
103-163P	104-163P	4 1/2	25
103-164P	104-164P	5	25
103-165P	104-165P	5 1/2	25
103-166P	104-166P	6	25
9/16" DIAMETER			
103-186P	104-186P	1	25
103-187P	104-187P	1 1/4	25
103-188P	104-188P	1 1/2	25
103-189P	104-189P	1 3/4	25
103-190P	104-190P	2	25
103-191P	104-191P	2 1/4	25
103-192P	104-192P	2 1/2	25
103-193P	104-193P	2 3/4	25
103-194P	104-194P	3	25
103-196P	104-196P	3 1/2	25
103-198P	104-198P	4	25
103-199P	104-199P	4 1/2	25
103-200P	104-200P	5	25
103-201P	104-201P	5 1/2	25
103-202P	104-202P	6	25
5/8" DIAMETER			
103-210P	104-210P	1	25
103-211P	104-211P	1 1/4	25
103-212P	104-212P	1 1/2	25
103-213P	104-213P	1 3/4	25
103-214P	104-214P	2	25
103-215P	104-215P	2 1/4	25
103-216P	104-216P	2 1/2	25
103-217P	104-217P	2 3/4	25
103-218P	104-218P	3	25
103-220P	104-220P	3 1/2	25
103-222P	104-222P	4	25
103-223P	104-223P	4 1/2	25
103-224P	104-224P	5	25
103-225P	104-225P	5 1/2	25
103-226P	104-226P	6	25

UNC COARSE THREAD U.S.S. PRODUCT CODE	UNF FINE THREAD S.A.E. PRODUCT CODE	SIZE	PKG QTY
3/4" DIAMETER			
103-243P	104-243P	1	20
103-244P	104-244P	1 1/4	20
103-245P	104-245P	1 1/2	20
103-246P	104-246P	1 3/4	20
103-247P	104-247P	2	20
103-248P	104-248P	2 1/4	20
103-249P	104-249P	2 1/2	20
103-250P	104-250P	2 3/4	20
103-251P	104-251P	3	20
103-253P	104-253P	3 1/2	20
103-255P	104-255P	4	20
103-256P	104-256P	4 1/2	20
103-257P	104-257P	5	20
103-258P	104-258P	5 1/2	20
103-259P	104-259P	6	20
7/8" DIAMETER			
103-279P	104-279P	1 1/2	15
103-280P	104-280P	1 3/4	15
103-281P	104-281P	2	15
103-282P	104-282P	2 1/4	15
103-283P	104-283P	2 1/2	15
103-284P	104-284P	2 3/4	15
103-285P	104-285P	3	15
103-287P	104-287P	3 1/2	15
103-289P	104-289P	4	15
103-290P	104-290P	4 1/2	15
103-291P	104-291P	5	15
103-292P	104-292P	5 1/2	15
103-293P	104-293P	6	15
1" DIAMETER			
103-313P	104-313P	2	10
103-314P	104-314P	2 1/4	10
103-315P	104-315P	2 1/2	10
103-316P	104-316P	2 3/4	10
103-317P	104-317P	3	10
103-319P	104-319P	3 1/2	10
103-321P	104-321P	4	10
103-322P	104-322P	4 1/2	10
103-323P	104-323P	5	10
103-324P	104-324P	5 1/2	10
103-325P	104-325P	6	10

FASTENERS

Hex Head Cap Screws

HEX HEAD CAP SCREWS (CONT)

GRADE 8

- Yellow Zinc Plated
- Diameter's larger than 1" available on request



UNC COARSE THREAD U.S.S. PRODUCT CODE	UNF FINE THREAD S.A.E. PRODUCT CODE	SIZE	PKG QTY
1/4" DIAMETER			
105-016P	106-016P	1/2	100
105-018P	106-018P	3/4	100
105-020P	106-020P	1	100
105-021P	106-021P	1 1/4	100
105-022P	106-022P	1 1/2	100
105-023P	106-023P	1 3/4	100
105-024P	106-024P	2	100
105-025P	106-025P	2 1/4	100
105-026P	106-026P	2 1/2	100
105-027P	106-027P	2 3/4	100
105-028P	106-028P	3	100
105-030P	106-030P	3 1/2	50
105-032P	106-032P	4	50
105-033P	106-033P	4 1/2	50
105-034P	106-034P	5	50
105-035P	106-035P	5 1/2	50
105-036P	106-036P	6	50
5/16" DIAMETER			
105-043P	106-043P	1/2	100
105-045P	106-045P	3/4	100
105-047P	106-047P	1	100
105-048P	106-048P	1 1/4	100
105-049P	106-049P	1 1/2	100
105-050P	106-050P	1 3/4	100
105-051P	106-051P	2	100
105-052P	106-052P	2 1/4	100
105-053P	106-053P	2 1/2	100
105-054P	106-054P	2 3/4	100
105-055P	106-055P	3	100
105-057P	106-057P	3 1/2	50
105-059P	106-059P	4	50
105-060P	106-060P	4 1/2	50
105-061P	106-061P	5	50
105-062P	106-062P	5 1/2	50
105-063P	106-063P	6	50
3/8" DIAMETER			
105-076P	106-076P	1/2	100
105-078P	106-078P	3/4	100
105-080P	106-080P	1	100
105-081P	106-081P	1 1/4	100
105-082P	106-082P	1 1/2	100
105-083P	106-083P	1 3/4	100
105-084P	106-084P	2	100
105-085P	106-085P	2 1/4	100
105-086P	106-086P	2 1/2	100
105-087P	106-087P	2 3/4	100
105-088P	106-088P	3	100

UNC COARSE THREAD U.S.S. PRODUCT CODE	UNF FINE THREAD S.A.E. PRODUCT CODE	SIZE	PKG QTY
3/8" DIAMETER (CONT)			
105-090P	106-090P	3 1/2	50
105-092P	106-092P	4	50
105-093P	106-093P	4 1/2	50
105-094P	106-094P	5	50
105-095P	106-095P	5 1/2	50
105-096P	106-096P	6	50
7/16" DIAMETER			
105-113P	106-113P	1	50
105-114P	106-114P	1 1/4	50
105-115P	106-115P	1 1/2	50
105-116P	106-116P	1 3/4	50
105-117P	106-117P	2	50
105-118P	106-118P	2 1/4	50
105-119P	106-119P	2 1/2	50
105-120P	106-120P	2 3/4	50
105-121P	106-121P	3	50
105-123P	106-123P	3 1/2	25
105-125P	106-125P	4	25
105-126P	106-126P	4 1/2	25
105-127P	106-127P	5	25
105-128P	106-128P	5 1/2	25
105-129P	106-129P	6	25
1/2" DIAMETER			
105-148P	106-148P	3/4	50
105-150P	106-150P	1	50
105-151P	106-151P	1 1/4	50
105-152P	106-152P	1 1/2	50
105-153P	106-153P	1 3/4	50
105-154P	106-154P	2	50
105-155P	106-155P	2 1/4	50
105-156P	106-156P	2 1/2	50
105-157P	106-157P	2 3/4	50
105-158P	106-158P	3	50
105-160P	106-160P	3 1/2	25
105-162P	106-162P	4	25
105-163P	106-163P	4 1/2	25
105-164P	106-164P	5	25
105-165P	106-165P	5 1/2	25
105-166P	106-166P	6	25
105-168P	106-168P	7	20
105-170P	106-170P	8	20
9/16" DIAMETER			
105-186P	106-186P	1	25
105-187P	106-187P	1 1/4	25
105-188P	106-188P	1 1/2	25
105-189P	106-189P	1 3/4	25
105-190P	106-190P	2	25
105-191P	106-191P	2 1/4	25
105-192P	106-192P	2 1/2	25
105-193P	106-193P	2 3/4	25
105-194P	106-194P	3	25
105-196P	106-196P	3 1/2	25
105-198P	106-198P	4	25

HEX HEAD CAP SCREWS (CONT)

GRADE 8 (CONT)

UNC COARSE THREAD U.S.S. PRODUCT CODE	UNF FINE THREAD S.A.E. PRODUCT CODE	SIZE	PKG QTY
9/16" DIAMETER (CONT)			
105-199P	106-199P	4 1/2	25
105-200P	106-200P	5	25
105-201P	106-201P	5 1/2	25
105-202P	106-202P	6	25
5/8" DIAMETER			
105-210P	106-210P	1	25
105-211P	106-211P	1 1/4	25
105-212P	106-212P	1 1/2	25
105-213P	106-213P	1 3/4	25
105-214P	106-214P	2	25
105-215P	106-215P	2 1/4	25
105-216P	106-216P	2 1/2	25
105-217P	106-217P	2 3/4	25
105-218P	106-218P	3	25
105-220P	106-220P	3 1/2	25
105-222P	106-222P	4	25
105-223P	106-223P	4 1/2	25
105-224P	106-224P	5	25
105-225P	106-225P	5 1/2	25
105-226P	106-226P	6	25
105-228P	106-228P	7	10
105-230P	106-230P	8	10
3/4" DIAMETER			
105-243P	106-243P	1	20
105-244P	106-244P	1 1/4	20
105-245P	106-245P	1 1/2	20
105-246P	106-246P	1 3/4	20
105-247P	106-247P	2	20
105-248P	106-248P	2 1/4	20
105-249P	106-249P	2 1/2	20
105-250P	106-250P	2 3/4	20
105-251P	106-251P	3	20
105-253P	106-253P	3 1/2	20
105-255P	106-255P	4	20
105-256P	106-256P	4 1/2	20
105-257P	106-257P	5	20
105-258P	106-258P	5 1/2	20
105-259P	106-259P	6	20
7/8" DIAMETER			
105-279P	106-279P	1 1/2	15
105-280P	106-280P	1 3/4	15
105-281P	106-281P	2	15
105-282P	106-282P	2 1/4	15
105-283P	106-283P	2 1/2	15
105-284P	106-284P	2 3/4	15
105-285P	106-285P	3	15

UNC COARSE THREAD U.S.S. PRODUCT CODE	UNF FINE THREAD S.A.E. PRODUCT CODE	SIZE	PKG QTY
7/8" DIAMETER (CONT)			
105-287P	106-287P	3 1/2	15
105-289P	106-289P	4	15
105-290P	106-290P	4 1/2	15
105-291P	106-291P	5	15
105-292P	106-292P	5 1/2	15
105-293P	106-293P	6	15
105-295P	106-295P	7	10
105-297P	106-297P	8	10
1" DIAMETER			
105-313P	106-313P	2	10
105-314P	106-314P	2 1/4	10
105-315P	106-315P	2 1/2	10
105-316P	106-316P	2 3/4	10
105-317P	106-317P	3	10
105-319P	106-319P	3 1/2	10
105-321P	106-321P	4	10
105-322P	106-322P	4 1/2	10
105-323P	106-323P	5	10
105-324P	106-324P	5 1/2	10
105-325P	106-325P	6	10
105-327P	106-327P	7	10
105-329P	106-329P	8	10

FASTENERS

Hex Head Cap Screws

HEX HEAD CAP SCREWS (CONT)

18-8 STAINLESS STEEL

STAINLESS STEEL FASTENERS MECHANICAL PROPERTIES 18-8 (304 TYPE 1)						
Conditions Size	Full Size Tests			Machined Specimen Tests		
	Tensile Strength MIN ksi	Yield Strength MIN ksi	Rockwell Hardness	Tensile Strength MIN ksi	Yield Strength MIN ksi	Elongation MIN %
1/4" to 5/8"	100	65	B95 to C32	95	60	20

CHEMICAL PROPERTIES Composition, % maximum								
Type	C	Mn	Package	S	Si	Cr	Ni	Mo
*18-8	0.08	2.00	0.045	0.030	1.00	18.0 to 12.0	8.0 to 12.0	

* 18-8 is Type 1 304 Type 1 of cold worked (CW) condition. Headed and rolled from annealed stock thus requiring a degree of cold work. Size .75 in. and larger may be hot worked.

C = Carbon P = Phosphorus Si = Silicone Ni = Nickel
Mn = Manganese P = Sulphur Cr = Chromium Mo = Molybdenum



PRODUCT CODE	SIZE	WEIGHT PER 100 PCS	PKG QTY
530-016S	1/4 x 1/2	1.19	100
530-018S	1/4 x 3/4	1.46	100
530-020S	1/4 x 1	1.76	100
530-021S	1/4 x 1 1/4	2.10	50
530-022S	1/4 x 1 1/2	2.46	50
530-023S	1/4 x 1 3/4	2.80	50
530-024S	1/4 x 2	3.15	50
530-025S	1/4 x 2 1/4	3.50	50
530-026S	1/4 x 2 1/2	3.85	25
530-027S	1/4 x 2 3/4	4.20	25
530-028S	1/4 x 3	4.55	25
530-043S	5/16 x 1/2	2.01	50
530-045S	5/16 x 3/4	2.44	50
530-047S	5/16 x 1	2.86	50
530-048S	5/16 x 1 1/4	3.41	50
530-049S	5/16 x 1 1/2	3.95	50
530-050S	5/16 x 1 3/4	4.50	50
530-051S	5/16 x 2	5.05	50
530-052S	5/16 x 2 1/4	5.58	25
530-053S	5/16 x 2 1/2	6.13	25
530-054S	5/16 x 2 3/4	6.67	25
530-055S	5/16 x 3	7.22	25
530-057S	5/16 x 3 1/2	.30	10
530-059S	5/16 x 4	9.39	10

PRODUCT CODE	SIZE	WEIGHT PER 100 PCS	PKG QTY
530-078S	3/8 x 3/4	3.59	50
530-080S	3/8 x 1	4.22	50
530-081S	3/8 x 1 1/4	4.91	50
530-082S	3/8 x 1 1/2	5.70	25
530-083S	3/8 x 1 3/4	6.49	25
530-084S	3/8 x 2	7.27	25
530-085S	3/8 x 2 1/4	8.06	25
530-086S	3/8 x 2 1/2	8.84	25
530-087S	3/8 x 2 3/4	9.62	25
530-088S	3/8 x 3	10.41	10
530-090S	3/8 x 3 1/2	11.98	10
530-092S	3/8 x 4	13.55	10
530-113S	7/16 x 1	5.99	25
530-115S	7/16 x 1 1/2	7.91	25
530-117S	7/16 x 2	10.05	25
530-119S	7/16 x 2 1/2	12.19	25
530-121S	7/16 x 3	14.34	10
530-123S	7/16 x 3 1/2	16.48	10
530-125S	7/16 x 4	18.61	10
530-150S	1/2 x 1	9.32	25
530-151S	1/2 x 1 1/4	10.45	25
530-152S	1/2 x 1 1/2	11.72	25
530-153S	1/2 x 1 3/4	13.11	25
530-154S	1/2 x 2	14.51	20
530-155S	1/2 x 2 1/4	15.90	20
530-156S	1/2 x 2 1/2	17.30	20
530-157S	1/2 x 2 3/4	18.69	20
530-158S	1/2 x 3	20.09	10
530-160S	1/2 x 3 1/2	22.88	10
530-162S	1/2 x 4	25.67	10
530-164S	1/2 x 4 1/2	28.46	10
530-166S	1/2 x 5	31.25	10
530-210S	5/8 x 1	15.33	25
530-211S	5/8 x 1 1/4	17.12	25
530-212S	5/8 x 1 1/2	18.91	20
530-214S	5/8 x 2	23.07	20
530-215S	5/8 x 2 1/4	25.24	20
530-216S	5/8 x 2 1/2	27.43	20
530-217S	5/8 x 2 3/4	29.60	20
530-218S	5/8 x 3	31.79	10
530-220S	5/8 x 3 1/2	36.14	10
530-222S	5/8 x 4	40.50	10
530-224S	5/8 x 5	49.22	10
530-245S	3/4 x 1 1/2	29.99	20
530-247S	3/4 x 2	35.51	20
530-249S	3/4 x 2 1/2	41.79	20
530-251S	3/4 x 3	48.08	10
530-253S	3/4 x 3 1/2	54.37	10
530-255S	3/4 x 4	60.66	10
530-257S	3/4 x 4 1/2	66.95	10
530-259S	3/4 x 5	73.24	10

WASHERS

FLAT WASHERS - U.S.S.

- Zinc Plated
- U.S.S. Wrought Washers



PRODUCT CODE	BOLT SIZE	APPROX. PIECE PER LB
133-013R	1/4	132
133-015R	5/16	96
133-017R	3/8	75
133-019R	7/16	38
133-020R	1/2	27
133-021R	9/16	23
133-022R	5/8	13
133-024R	3/4	9
133-026R	7/8	7
133-028R	1	6

FLAT WASHERS - S.A.E.

- Zinc Plated
- Smooth surface



PRODUCT CODE	BOLT SIZE	APPROX. PIECE PER LB
134-013R	1/4	225
134-015R	5/16	200
134-017R	3/8	140
134-019R	7/16	105
134-020R	1/2	55
134-021R	9/16	45
134-022R	5/8	36
134-024R	3/4	22
134-026R	7/8	16
134-028R	1	12

FLAT WASHERS - 18-8 STAINLESS STEEL



PRODUCT CODE	SIZE	WEIGHT PER 100 PIECES	O.D.	I.D.	THICKNESS	PKG QTY
540-007S	#8 (5/32)	0.08	3/8	11/64	1/32	250
540-009S	#10 (3/16)	0.12	3/8	13/64	3/64	250
540-011S	#12 (7/32)	0.18	1/2	15/64	3/64	250
540-013S	1/4	0.44	5/8	9/32	3/64	100
540-015S	5/16	0.88	3/4	11/32	3/64	100
540-017S	3/8	1.15	7/8	25/64	3/64	100
540-019S	7/16	1.75	1 1/8	1/2	1/16	50
540-020S	1/2	2.12	1 1/4	17/32	5/64	50
540-022S	5/8	3.00	1 1/2	11/16	5/64	25
540-024S	3/4	6.76	1 3/4	13/16	7/64	25

FLAT WASHERS - F436 GRADE 8

- Yellow Zinc Plated



PRODUCT CODE (PACKAGE)	PRODUCT CODE (BULK)	SIZE	PKG QTY	BULK QTY
137-004P	137-004K	1/4	100	9000
137-005P	137-005K	5/16	100	6000
137-006P	137-006K	3/8	100	5000
137-007P	137-007K	7/16	50	3000
137-008P	137-008K	1/2	50	1900
137-009P	137-009K	9/16	25	1700
137-010P	137-010K	5/8	25	1000
137-011P	137-011K	3/4	20	700
137-012P	137-012K	7/8	20	500
137-013P	137-013K	1	20	400
137-014P	137-014K	1 1/8	20	330
137-015P	137-015K	1 1/4	20	275
137-016P	137-016K	1 1/2	20	140

FLAT FENDER WASHERS

- Used primarily for body and fender work
- Zinc plated



PRODUCT CODE	BOLT SIZE	O.D. (IN)	I.D. (IN)	THICKNESS	QTY
BOXED					
452-009	3/16	3/4	13/64	3/64	Pkg 100
452-011	3/16	1	13/64	3/64	Pkg 100
452-013	1/4	1 1/4	9/32	1/16	Pkg 100
452-014	5/16A	1	11/32	1/16	Pkg 100
452-015	5/16B	1 1/4	11/32	1/16	Pkg 100
452-016	5/16C	1 1/2	11/32	1/16	Pkg 100
452-017	3/8	1 1/2	13/32	1/16	Pkg 100
452-019	1/2	2	17/32	1/16	Pkg 100
BULK (40LBS BOX)					
452-009K	3/16	3/4	13/64	3/64	Approx 7462
452-011K	3/16	1	13/64	3/64	Approx 4080
452-013K	1/4	1 1/4	9/32	1/16	Approx 1943
452-014K	5/16A	1	11/32	1/16	Approx 3282
452-015K	5/16B	1 1/4	11/32	1/16	Approx 2128
452-016K	5/16C	1 1/2	11/32	1/16	Approx 1482
452-017K	3/8	1 1/2	13/32	1/16	Approx 1652
452-019K	1/2	2	17/32	1/16	Approx 682

FASTENERS

Washers • Nuts

WASHERS (CONT)

LOCK WASHERS - REGULAR

- Zinc Plated
- High Carbon Steel



PRODUCT CODE	SIZE	PKG QTY
136-013Q	1/4	100
136-015Q	5/16	100
136-017Q	3/8	100
136-019Q	7/16	100
136-020Q	1/2	50
136-021Q	9/16	50
136-022Q	5/8	50
136-024Q	3/4	25
136-026Q	7/8	25
136-028Q	1	25

LOCK WASHERS - GRADE 8

- Yellow Zinc Plated



PRODUCT CODE (PACKAGE)	PRODUCT CODE (BULK)	SIZE	PKG QTY	CASE QTY
138-004P	138-004K	1/4	100	15000
138-005P	138-005K	5/16	100	10000
138-006P	138-006K	3/8	100	6000
138-007P	138-007K	7/16	50	4000
138-008P	138-008K	1/2	50	3000
138-009P	138-009K	9/16	25	2000
138-010P	138-010K	5/8	25	1500
138-011P	138-011K	3/4	20	1000
138-012P	138-012K	7/8	20	600
138-013P	138-013K	1	20	400
138-014P	138-014K	1 1/8	20	300
138-015P	138-015K	1 1/4	20	250
138-016P	138-016K	1 1/2	20	100

LOCK WASHERS - 18-8 STAINLESS STEEL



PRODUCT CODE	SIZE	WEIGHT PER 100 PCS	PKG QTY
541-005S	#8 (5/32)	0.08	250
541-009S	#10 (3/16)	0.12	250
541-011S	#12 (7/32)	0.18	250
541-013S	1/4	0.44	100
541-015S	5/16	0.88	100
541-017S	3/8	1.15	100
541-019S	7/16	1.75	50
541-020S	1/2	2.12	50
541-022S	5/8	3.00	25
541-024S	3/4	6.76	25

NUTS

FINISHED HEX NUTS - GRADE 5

- Zinc Plated



UNC COARSE THREAD U.S.S. PRODUCT CODE	UNF FINE THREAD S.A.E. PRODUCT CODE	SIZE	PKG QTY
177-016P	177-116P	1/4	100
177-020P	177-120P	5/16	100
177-024P	177-124P	3/8	100
177-028P	177-128P	7/16	50
177-030P	177-130P	1/2	50
177-036P	177-136P	9/16	25
177-040P	177-140P	5/8	25
177-048P	177-148P	3/4	20
177-056P	177-156P	7/8	20
177-064P	177-164P	1	20

FINISHED HEX NUTS - GRADE 8

- Yellow Zinc Plated



UNC COARSE THREAD U.S.S. PRODUCT CODE	UNF FINE THREAD S.A.E. PRODUCT CODE	SIZE	PKG QTY
178-009P	179-009P	1/4	100
178-010P	179-010P	5/16	100
178-011P	179-011P	3/8	100
178-012P	179-012P	7/16	50
178-013P	179-013P	1/2	50
178-014P	179-014P	9/16	25
178-015P	179-015P	5/8	25
178-016P	179-016P	3/4	20
178-017P	179-017P	7/8	20
178-018P	179-018P	1	20

FINISHED HEX NUTS - 18-8 STAINLESS STEEL



UNC COARSE THREAD U.S.S. PRODUCT CODE	SIZE	PKG QTY
534-009S	1/4	100
534-010S	5/16	100
534-011S	3/8	50
534-012S	7/16	50
534-013S	1/2	25
534-015S	5/8	10
534-016S	3/4	10

NUTS (CONT)

NYLON INSERT LOCK NUTS - GRADE 2

- Zinc Plated
- Coarse and Fine Thread



U.N.C. Coarse Thread U.S.S.

PRODUCT CODE (PACKAGE)	PRODUCT CODE (BULK)	SIZE	PKG QTY	BULK QTY
205-005P	205-005K	6-32	100	14000
205-006P	205-006K	8-32	100	8500
205-007P	205-007K	10-24	100	7000
205-009P	205-009K	1/4-20	100	3400
205-010P	205-010K	5/16-18	100	2300
205-011P	205-011K	3/8-16	100	1250
205-012P	205-012K	7/16-14	50	950
205-013P	205-013K	1/2-13	50	600
205-014P	205-014K	9/16-12	25	475
205-015P	205-015K	5/8-11	25	325
205-016P	205-016K	3/4-10	20	200
205-017P	205-017K	7/8-9	20	130
205-018P	205-018K	1-8	20	90

U.N.F. Fine Thread S.A.E.

PRODUCT CODE (PACKAGE)	PRODUCT CODE (BULK)	SIZE	PKG QTY	BULK QTY
206-007P	206-007K	10-32	100	7000
206-009P	206-009K	1/4-28	100	3400
206-010P	206-010K	5/16-24	100	2300
206-011P	206-011K	3/8-24	100	1250
206-012P	206-012K	7/16-20	50	950
206-013P	206-013K	1/2-20	50	600
206-014P	206-014K	9/16-18	25	475
206-015P	206-015K	5/8-18	25	325
206-016P	206-016K	3/4-16	20	200
206-017P	206-017K	7/8-14	20	130
206-018P	206-018K	1-14	20	90

NYLON INSERT LOCK NUTS - GRADE 8

- Yellow Zinc Plated
- Coarse and Fine Thread



U.N.C. Coarse Thread U.S.S.

PRODUCT CODE (PACKAGE)	PRODUCT CODE (BULK)	SIZE	PKG QTY	BULK QTY
207-009P	207-009K	1/4-20	100	3400
207-010P	207-010K	5/16-18	100	2300
207-011P	207-011K	3/8-16	100	1250
207-012P	207-012K	7/16-14	50	950
207-013P	207-013K	1/2-13	50	600
207-014P	207-014K	9/16-12	25	475
207-015P	207-015K	5/8-11	25	325
207-016P	207-016K	3/4-10	20	200
207-017P	207-017K	7/8-9	20	130
207-018P	207-018K	1-8	20	90

U.N.F. Fine Thread S.A.E.

PRODUCT CODE (PACKAGE)	PRODUCT CODE (BULK)	SIZE	PKG QTY	BULK QTY
208-009P	208-009K	1/4-28	100	3400
208-010P	208-010K	5/16-24	100	2300
208-011P	208-011K	3/8-24	100	1250
208-012P	208-012K	7/16-20	50	950
208-013P	208-013K	1/2-20	50	600
208-014P	208-014K	9/16-18	25	475
208-015P	208-015K	5/8-18	25	325
208-016P	208-016K	3/4-16	20	200
208-017P	208-017K	7/8-14	20	130
208-018P	208-018K	1-14	20	90

NYLON INSERT LOCK NUTS 18-8 STAINLESS STEEL

U.N.C. Coarse Thread U.S.S.



PRODUCT CODE	SIZE	WEIGHT PER PACKAGE	PKG QTY
549-008S	1/4	4 lbs	100
549-013S	5/16	5 lbs	100
549-018S	3/8	5 lbs	50
549-028S	1/2	6 lbs	25
549-033S	5/8	3 lbs	10

STOVER® AUTOMATION LOCK NUTS

GRADE - C

- Zinc yellow plated with wax
- Proof stress 150,000 psi
- For use with grades 5 and 8 bolts



UNC *PRODUCT CODE	UNF *PRODUCT CODE	SIZE	WEIGHT PER 100	PKG QTY	BULK QTY
290-109	291-109	1/4	0.67	100	6000
290-110	291-110	5/16	0.98	100	4000
290-111	291-111	3/8	1.34	100	2800
290-112	291-112	7/16	2.50	50	1600
290-113	291-113	1/2	3.25	50	1200
290-114	291-114	9/16	5.37	25	800
290-115	291-115	5/8	6.70	25	600
290-116	291-116	3/4	11.50	20	340
290-117	291-117	7/8	17.30	20	225
290-118	291-118	1	25.00	20	160

* When ordering, please state (K) for Bulk and (P) for Package at the end of the Product Code

See STOVER® Locknut Specifications next page

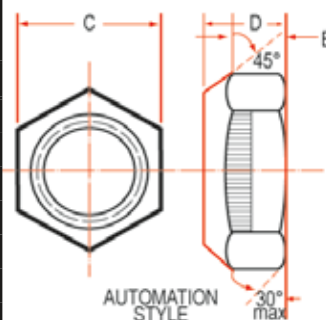
FASTENERS

Stover® Automation Lock Nut Specifications

STOVER® AUTOMATION LOCK NUT SPECIFICATIONS

AUTOMATION GRADE C

NOM. SIZE IN INCHES	C WIDTH ACROSS FLATS			F FLANGE DIAM. (MAX.)	D OVERALL THICKNESS		B HEX HEIGHT (MIN.)	K FLANGE THICK. (MIN.)	BASIC PART NUMBER	
	NOM.	MAX.	MIN.		MAX.	MIN.			COARSE	FINE
1/4	7/16	0.4385	0.428	–	0.226	0.212	0.145	–	NT8303	NT8353
5/16	1/2	0.5020	0.489	–	0.273	0.258	0.166	–	NT8305	NT8355
3/8	9/16	0.5645	0.551	–	0.337	0.320	0.198	–	NT8307	NT8357
7/16	11/16	0.6895	0.675	–	0.385	0.365	0.223	–	NT8309	NT8359
1/2	3/4	0.7520	0.736	–	0.448	0.427	0.262	–	NT8313	NT8363
9/16	7/8	0.8770	0.861	–	0.496	0.473	0.286	–	NT8315	NT8365
5/8	15/16	0.9395	0.922	–	0.559	0.535	0.329	–	NT8317	NT8367
3/4	1 1/8	1.1270	1.088	–	0.665	0.617	0.382	–	NT8319	NT8369



GRADE C HEX LOCK NUTS - FOR USE WITH GRADE 8 BOLTS

NOM. SIZE AND THREADS PER INCH	IF 100 & 107							IFI 101		TORQUE-TENSION GUIDE FOR STOVER® LOCKNUT- ASSEMBLY (FOR GR5 ONLY)
	PROOF LOAD	CLAMP LOAD	PREVAILING TORQUE					TORQUE-TENSION TEST REQUIREMENT: TIGHTENING TORQUE		
			FIRST INSTALLATION	FIRST REMOVAL		FIFTH REMOVAL				
LBS.	LBS.	LB. IN. (FT.*) MAX.	LBS. IN.		LBS. IN.		LB. FT. MAX	LB. FT. MIN	LB. FT. AVERAGE	
			HIGHEST	LOWEST	HIGHEST	LOWEST				
1/4-20	4,700	2,850	40	6.0	3.0	4.5	2.0	10.4	7.1	7.9
1/4-28	5,450	3,250	40	6.0	3.0	4.5	2.0	10.4	7.1	7.9
5/16-18	7,850	4,700	80	10.5	5.0	7.5	3.0	15.8	10.8	13.0
5/16-24	8,700	5,200	80	10.5	5.0	7.5	3.0	16.7	11.7	13.0
3/8-16	11,600	6,950	110	16.0	7.5	11.5	5.0	28.0	20.0	24.0
3/8-24	13,200	7,900	110	16.0	7.5	11.5	5.0	29.0	21.0	25.0
7/16-14	15,900	9,600	135	23.0	10.0	16.0	7.5	43.0	31.0	35.0
7/16-20	17,800	10,700	135	23.0	10.0	16.0	7.5	43.0	31.0	35.0
1/2-13	21,300	12,800	17*	30.0	15.0	20.0	10.0	62.5	45.0	55.0
1/2-20	24,000	14,400	17*	30.0	15.0	20.0	10.0	70.0	50.0	55.0
9/16-12	27,300	16,400	25*	40.0	20.0	28.0	12.5	95.0	70.0	82.0
9-16-18	30,400	18,300	25*	40.0	20.0	28.0	12.5	95.0	70.0	85.0
5/8-11	33,900	20,300	35*	52.0	25.0	36.0	15.0	122.5	90.0	100.0
5/8-18	38,400	23,000	35*	52.0	25.0	36.0	15.0	125.0	90.0	113.0
3/4-10	50,100	30,100	45*	78.0	35.0	54.0	25.0	210.0	155.0	165.0
3/4-16	56,000	33,600	45*	78.0	35.0	54.0	25.0	210.0	155.0	175.0
7/8-9	69,300	41,600	70*	117.0	50.0	82.0	40.0	312.5	225.0	274.0
7/8-14	76,400	45,800	70*	117.0	50.0	82.0	40.0	312.5	225.0	280.0
1-8	90,900	54,600	90*	160.0	80.0	112.0	50.0	462.5	350.0	409.0
1-14	101,900	61,100	90*	160.0	80.0	112.0	50.0	500.0	362.5	428.0

METRIC CAP SCREW DIMENSIONS

Size	Across Flats • A •		Head Height • H •		Threads per inch
	mm	inch	mm	inch	
6	10	.394	4.5	.177	25
8	13	.512	5.5	.217	20
10	17	.669	7	.276	17
12	19	.748	8	.315	14 ½
14	22	.866	9	.359	12 ½
16	24	.945	10.5	.413	12 ½
18	27	1.063	12	.472	10
20	30	1.181	13	.512	10

METRIC HEXAGON HEAD CAP SCREWS

- DIN Metric Specification
- 114,000 P.S.I. (Similar to S.A.E. Grade 5)
- High Tensile Steel - Code 8.8
- Colour Dichromate Plated for easy metric identification
- Coarse Thread



	PRODUCT CODE	SIZE	PKG QTY
+	227-074R	6 x 16	100
+	227-076R	6 x 20	100
+	227-078R	6 x 25	100
+	227-079R	6 x 30	100
+	227-081R	6 x 40	100
+	227-083R	6 x 50	100
+	227-115R	8 x 12	100
+	227-120R	8 x 20	100
+	227-122R	8 x 25	100
+	227-123R	8 x 30	100
+	227-124R	8 x 35	100
+	227-125R	8 x 40	100
+	227-126R	8 x 45	100
+	227-127R	8 x 50	100
+	227-129R	8 x 60	100
+	227-147R	10 x 16	100
+	227-149R	10 x 20	100
+	227-151R	10 x 25	100
+	227-152R	10 x 30	100
+	227-153R	10 x 35	100
++	227-155R	10 x 45	100
++	227-159R	10 x 65	100
++	227-160R	10 x 70	100
++	227-161R	10 x 75	50
+	227-186R	12 x 20	50
+	227-188R	12 x 25	50
+	227-189R	12 x 30	50
+	227-190R	12 x 35	50
+	227-191R	12 x 40	50
++	227-192R	12 x 45	50
++	227-193R	12 x 50	50
++	227-195R	12 x 60	50
++	227-196R	12 x 65	50

	PRODUCT CODE	SIZE	PKG QTY
++	227-198R	12 x 75	50
++	227-199R	12 x 80	50
+	227-256R	16 x 30	25
+	227-258R	16 x 40	25
+	227-259R	16 x 45	25
+	227-260R	16 x 50	25
++	227-262R	16 x 60	25
++	227-265R	16 x 75	25
++	227-266R	16 x 80	25
+	227-314R	20 x 40	25
+	227-315R	20 x 45	25
+	227-316R	20 x 50	25
+	227-318R	20 x 60	25
++	227-320R	20 x 70	25
++	227-321R	20 x 75	25
++	227-322R	20 x 80	25
++	227-324R	20 x 90	25

+ DIN 933 Fully Threaded

++ DIN 931 Partly Threaded

METRIC SOCKET HEAD CAP SCREWS

- DIN 912
- ISO Metric Coarse Thread
- Black Oxide



	PRODUCT CODE	SIZE	PKG QTY
	228-071B	6 x 12	100
	228-074B	6 x 16	100
	228-076B	6 x 20	100
	228-078B	6 x 25	100
	228-079B	6 x 30	100
	228-081B	6 x 40	100
	228-083B	6 x 50	100

FASTENERS

Metric Socket Head Cap Screws • Metric Socket Screw Keys • Metric Hexagon Nuts • Metric Washers

METRIC SOCKET HEAD CAP SCREWS(CONT)

PRODUCT CODE	SIZE	PKG QTY
228-084B	6 x 55	100
228-119B	8 x 18	100
228-120B	8 x 20	100
228-122B	8 x 25	100
228-123B	8 x 30	100
228-124B	8 x 35	100
228-125B	8 x 40	100
228-126B	8 x 45	100
228-127B	8 x 50	100
228-129B	8 x 60	100
228-147B	10 x 16	100
228-149B	10 x 20	100
228-151B	10 x 25	100
228-152B	10 x 30	100
228-153B	10 x 35	100
228-155B	10 x 45	50
228-159B	10 x 65	50
228-160B	10 x 70	50
228-161B	10 x 75	50
228-186B	12 x 20	50
228-188B	12 x 25	50
228-189B	12 x 30	50
228-191B	12 x 40	50
228-192B	12 x 45	50
228-193B	12 x 50	50
228-195B	12 x 60	25
228-196B	12 x 65	25
228-198B	12 x 75	25
228-199B	12 x 80	25
228-256B	16 x 30	25
228-257B	16 x 35	25
228-258B	16 x 40	25
228-259B	16 x 45	25
228-260B	16 x 50	25
228-262B	16 x 60	25
228-263B	16 x 65	25
228-264B	16 x 70	25
228-265B	16 x 75	25
228-266B	16 x 80	25
228-314B	20 x 40	25
228-315B	20 x 45	25
228-316B	20 x 50	25
228-317B	20 x 55	25
228-318B	20 x 60	25
228-320B	20 x 70	25
228-321B	20 x 75	25
228-322B	20 x 80	25
228-324B	20 x 90	25
228-325B	20 x 100	25
228-425B	30 x 100	1

METRIC SOCKET SCREW KEYS

- Bare Metal
- Alloy Steel
- Short Arm



PRODUCT CODE	SIZE W	LENGTH C (IN)	PKG QTY
234-015B	M1.5	4.5 cm	100
234-020B	M2	5 cm	100
234-025B	M2.5	5.5 cm	100
234-030B	M3	6.25 cm	100
234-040B	M4	6.75 cm	100
234-050B	M5	7.5 cm	50
234-060B	M6	7.5 cm	50
234-080B	M8	9.5 cm	25
234-100B	M10	11 cm	10
234-120B	M12	12 cm	10
234-140B	M14	13.5 cm	10
234-170B	M17	15.5 cm	10

Note: Size equals radius of bend "R"

METRIC HEXAGON NUTS

- Coarse Thread
- Dichromate Plated - DIN 934



PRODUCT CODE	SIZE	WIDTH ACROSS FLATS A		HEIGHT H		DIAMETER D		PKG QTY
		MM	INCHES	MM	INCHES	MM	INCHES	
230-060R	M6	10	.394	5	.197	6	.236	100
230-080R	M8	13	.512	6.5	.256	8	.315	100
230-100R	M10	17	.669	8	.315	10	.394	100
230-120R	M12	19	.748	9.5	.374	12	.472	50
230-140R	M14	22	.866	11	.433	14	.551	25
230-160R	M16	24	.945	13	.512	16	.630	25
230-180R	M18	27	1.063	15	.591	18	.709	25
230-200R	M20	30	1.181	16	.630	20	.787	25

METRIC WASHERS

METRIC FLAT WASHERS

- DIN 125
- Colour Dichromate Plated



PRODUCT CODE	SIZE	PKG QTY
231-060R	M6	100
231-080R	M8	100
231-100R	M10	100
231-120R	M12	50
231-140R	M14	25
231-160R	M16	25
231-180R	M18	25
231-200R	M20	25

FASTENERS

Metric Washers • Socket Head Cap Screws

METRIC WASHERS (CONT)

METRIC LOCK WASHERS

- DIN 127
- Colour Dichromate Plated



PRODUCT CODE	SIZE	PKG QTY
232-060R	M6	100
232-080R	M8	100
232-100R	M10	100
232-120R	M12	50
232-140R	M14	25
232-160R	M16	25
232-180R	M18	25
232-200R	M20	25

SOCKET HEAD CAP SCREWS TENSILE REQUIREMENTS PER ASTM A574-83

SCREW DIAMETER INCHES	THREADS INCHES		TENSILE LOAD MIN		TENSILE STRENGTH P.S.I./ MIN	RECOMMENDED UNC TORQUE IN LBS.	
	UNC	UNF	UNC	UNF		UNRC	UNRF
0.060	-	80	-	324	180,000	-	2
0.073	64	72	473	500	180,000	4	4
0.086	56	64	666	709	180,000	6	7
0.099	48	56	877	941	180,000	10	11
0.112	40	48	1,090	1,190	180,000	15	16
0.125	40	44	1,430	1,490	180,000	20	21
0.138	32	40	1,640	1,830	180,000	28	30
0.184	32	36	2,520	2,650	180,000	49	50
0.190	24	32	3,150	3,600	180,000	64	76
1/4	20	28	5,730	6,500	180,000	150	170
5/16	18	24	9,440	10,400	180,000	305	325
3/8	16	24	13,900	15,800	180,000	545	570
7/16	14	20	19,100	21,400	180,000	840	900
1/2	13	20	25,500	28,800	180,000	1,300	1,370
5/8	11	18	38,400	43,500	170,000	1,850	1,970
3/4	10	16	56,800	63,400	170,000	2,630	2,660
7/8	9	14	78,500	86,500	170,000	4,400	4,800
1"	8	12	103,000	113,000	170,000	7,000	7,600
1 1/8"	7	12	129,000	146,000	170,000	10,400	11,000
1 1/4"	7	12	165,000	182,000	170,000	14,900	15,600
1 3/8"	6	12	196,000	224,000	170,000	21,000	22,600
1 1/2"	6	12	239,000	269,000	170,000	27,800	29,300

SOCKET HEAD CAP SCREWS

- ASTM A574, AISI 4037
- Specifications ANSI/ASME B18.3
- Alloy Steel - Heat Treated



UNC COARSE THREAD U.S.S PRODUCT CODE	UNF FINE THREAD S.A.E PRODUCT CODE	SIZE	PKG QTY
235-017B	-	2 - 56 x 3/8	100
235-019B	-	2 - 56 x 1/2	100
235-030B	-	4 - 40 x 1/4	100
235-045B	-	5 - 40 x 3/4	100
235-050B	236-050B	6 x 1/4	100
235-052B	236-052B	6 x 3/8	100
235-054B	236-054B	6 x 1/2	100
235-055B	236-055B	6 x 5/8	100
235-056B	236-056B	6 x 3/4	100
235-057B	-	6 x 7/8	100
235-058B	-	6 x 1	100
235-062B	-	8 x 1/4	100
235-064B	236-064B	8 x 3/8	100
235-066B	236-066B	8 x 1/2	100
235-067B	-	8 x 5/8	100
235-068B	236-068B	8 x 3/4	100
235-069B	-	8 x 7/8	100
235-070B	-	8 x 1	100
235-071B	-	8 x 1 1/4	100
235-072B	-	8 x 1 1/2	100
235-076B	236-076B	10 x 3/8	100
235-078B	236-078B	10 x 1/2	100
235-079B	236-079B	10 x 5/8	100
235-080B	236-080B	10 x 3/4	100
235-081B	236-081B	10 x 7/8	100
235-082B	236-082B	10 x 1	100
235-083B	236-083B	10 x 1 1/4	100
235-084B	236-084B	10 x 1 1/2	100
235-085B	236-085B	10 x 1 3/4	100
235-086B	236-086B	10 x 2	100
235-090B	236-090B	1/4 x 3/8	100
235-092B	236-092B	1/4 x 1/2	100
235-093B	236-093B	1/4 x 5/8	100
235-094B	236-094B	1/4 x 3/4	100
235-095B	236-095B	1/4 x 7/8	100
235-096B	236-096B	1/4 x 1	100
235-097B	236-097B	1/4 x 1 1/4	100
235-098B	236-098B	1/4 x 1 1/2	100
235-099B	236-099B	1/4 x 1 3/4	100
235-100B	236-100B	1/4 x 2	100
235-101B	-	1/4 x 2 1/4	100
235-102B	-	1/4 x 2 1/2	100
235-103B	-	1/4 x 2 3/4	100
235-104B	-	1/4 x 3	100
235-107B	-	5/16 x 3/8	100
235-109B	236-109B	5/16 x 1/2	100
235-110B	236-110B	5/16 x 5/8	100
235-111B	236-111B	5/16 x 3/4	100
235-112B	-	5/16 x 7/8	100

FASTENERS

Socket Head Cap Screws

SOCKET HEAD CAP SCREWS (CONT)

UNC COARSE THREAD U.S.S PRODUCT CODE	UNF FINE THREAD S.A.E PRODUCT CODE	SIZE	PKG QTY
235-113B	236-113B	5/16 x 1	100
235-114B	236-114B	5/16 x 1 1/4	100
235-115B	236-115B	5/16 x 1 1/2	100
235-116B	236-116B	5/16 x 1 3/4	100
235-117B	236-117B	5/16 x 2	100
235-118B	236-118B	5/16 x 2 1/4	100
235-119B	236-119B	5/16 x 2 1/2	100
235-120B	-	5/16 x 2 3/4	100
235-121B	-	5/16 x 3	100
235-123B	-	5/16 x 3 1/2	100
235-125B	-	5/16 x 4	100
235-128B	-	3/8 x 1/2	100
235-129B	-	3/8 x 5/8	100
235-130B	236-130B	3/8 x 3/4	100
235-131B	236-131B	3/8 x 7/8	100
235-132B	236-132B	3/8 x 1	100
235-133B	236-133B	3/8 x 1 1/4	100
235-134B	236-134B	3/8 x 1 1/2	100
235-135B	236-135B	3/8 x 1 3/4	100
235-136B	236-136B	3/8 x 2	100
235-137B	236-137B	3/8 x 2 1/4	100
235-138B	236-138B	3/8 x 2 1/2	50
235-139B	-	3/8 x 2 3/4	50
235-140B	236-140B	3/8 x 3	50
235-141B	-	3/8 x 3 1/4	50
235-142B	-	3/8 x 3 1/2	50
235-143B	-	3/8 x 4	50
235-144B	-	3/8 x 4 1/2	50
235-145B	-	3/8 x 5	50
235-150B	-	7/16 x 3/4	50
235-152B	236-152B	7/16 x 1	50
235-153B	236-153B	7/16 x 1 1/4	50
235-154B	-	7/16 x 1 1/2	50
235-155B	-	7/16 x 1 3/4	50
235-156B	236-156B	7/16 x 2	50
235-157B	-	7/16 x 2 1/4	50
235-158B	-	7/16 x 2 1/2	50
235-160B	-	7/16 x 3	50
235-161B	-	7/16 x 3 1/4	50
235-162B	-	7/16 x 3 1/2	50
235-163B	-	7/16 x 4	50
235-167B	-	1/2 x 5/8	50
235-168B	-	1/2 x 3/4	50
235-169B	-	1/2 x 7/8	50
235-170B	236-170B	1/2 x 1	50
235-171B	236-171B	1/2 x 1 1/4	50
235-172B	236-172B	1/2 x 1 1/2	50
235-173B	236-173B	1/2 x 1 3/4	50
235-174B	236-174B	1/2 x 2	50
235-175B	236-175B	1/2 x 2 1/4	50
235-176B	236-176B	1/2 x 2 1/2	50
235-177B	-	1/2 x 2 3/4	50
235-178B	236-178B	1/2 x 3	50
235-179B	-	1/2 x 3 1/4	25
235-180B	-	1/2 x 3 1/2	25
235-181B	-	1/2 x 4	25
235-182B	-	1/2 x 4 1/2	25
235-183B	-	1/2 x 5	25
235-184B	-	1/2 x 5 1/2	25

UNC COARSE THREAD U.S.S PRODUCT CODE	UNF FINE THREAD S.A.E PRODUCT CODE	SIZE	PKG QTY
235-185B	-	1/2 x 6	25
235-186B	-	1/2 x 6 1/2	10
235-187B	-	1/2 x 7	25
235-188B	-	1/2 x 8	25
235-193B	236-193B	5/8 x 1	50
235-194B	236-194B	5/8 x 1 1/4	50
235-195B	236-195B	5/8 x 1 1/2	50
235-196B	236-196B	5/8 x 1 3/4	50
235-197B	236-197B	5/8 x 2	50
235-198B	-	5/8 x 2 1/4	25
235-199B	236-199B	5/8 x 2 1/2	25
235-200B	-	5/8 x 2 3/4	25
235-201B	-	5/8 x 3	25
235-202B	-	5/8 x 3 1/4	25
235-203B	-	5/8 x 3 1/2	25
235-204B	-	5/8 x 4	25
235-205B	-	5/8 x 4 1/2	25
235-206B	-	5/8 x 5	25
235-207B	-	5/8 x 5 1/2	10
235-208B	-	5/8 x 6	10
235-210B	-	5/8 x 7	10
235-211B	-	5/8 x 8	10
235-216B	-	3/4 x 1 1/4	25
235-217B	-	3/4 x 1 1/2	25
235-218B	-	3/4 x 1 3/4	25
235-219B	-	3/4 x 2	25
235-220B	-	3/4 x 2 1/4	25
235-221B	-	3/4 x 2 1/2	25
235-222B	-	3/4 x 2 3/4	25
235-223B	-	3/4 x 3	25
235-224B	-	3/4 x 3 1/4	25
235-225B	-	3/4 x 3 1/2	25
235-226B	-	3/4 x 4	25
235-227B	-	3/4 x 4 1/2	25
235-228B	-	3/4 x 5	25
235-229B	-	3/4 x 5 1/2	10
235-230B	-	3/4 x 6	10
235-231B	-	3/4 x 6 1/2	10
235-232B	-	3/4 x 7	10
235-233B	-	3/4 x 8	10
235-240B	-	7/8 x 2	10
235-241B	-	7/8 x 2 1/4	10
235-242B	-	7/8 x 2 1/2	10
235-243B	-	7/8 x 2 3/4	10
235-244B	-	7/8 x 3	10
235-246B	-	7/8 x 3 1/2	10
235-247B	-	7/8 x 4	10
235-248B	-	7/8 x 4 1/2	10
235-249B	-	7/8 x 5	10
235-250B	-	7/8 x 5 1/2	10
235-251B	-	7/8 x 6	10
235-253B	-	7/8 x 7	10
235-254B	-	7/8 x 8	10
235-262B	-	1 x 2	10
235-264B	-	1 x 2 1/2	10
235-265B	-	1 x 2 3/4	10
235-266B	-	1 x 3	10

SOCKET HEAD CAP SCREWS (CONT)

UNC COARSE THREAD U.S.S PRODUCT CODE	UNF FINE THREAD S.A.E PRODUCT CODE	SIZE	PKG QTY
235-267B	-	1 x 3 1/4	10
235-268B	-	1 x 3 1/2	10
235-269B	-	1 x 4	10
235-270B	-	1 x 4 1/2	10
235-271B	-	1 x 5	10
235-272B	-	1 x 5 1/2	10
235-273B	-	1 x 6	10
235-274B	-	1 x 6 1/2	10
235-275B	-	1 x 7	10
235-276B	-	1 x 8	10
235-280B	-	1 1/4 x 2 1/2	1
235-282B	-	1 1/4 x 3	1
235-284B	-	1 1/4 x 3 1/2	1
235-286B	-	1 1/4 x 4	1
235-288B	-	1 1/4 x 4 1/2	1
235-290B	-	1 1/4 x 5	1
235-292B	-	1 1/4 x 5 1/2	1
235-294B	-	1 1/4 x 6	1
235-296B	-	1 1/4 x 6 1/2	1
235-298B	-	1 1/4 x 7	1
235-302B	-	1 1/4 x 8	1
235-310B	-	1 1/2 x 3	1
235-312B	-	1 1/2 x 3 1/2	1
235-314B	-	1 1/2 x 4	1
235-316B	-	1 1/2 x 4 1/2	1
235-318B	-	1 1/2 x 5	1
235-320B	-	1 1/2 x 5 1/2	1
235-322B	-	1 1/2 x 6	1
235-324B	-	1 1/2 x 6 1/2	1
235-326B	-	1 1/2 x 7	1
235-330B	-	1 1/2 x 8	1

FLAT HEAD SOCKET CAP SCREWS

- ASTM A574, AISI 4037
- Specifications ANSI/ASME B18.3
- Alloy Steel - Heat Treated



UNC COARSE THREAD U.S.S PRODUCT CODE	UNF FINE THREAD S.A.E PRODUCT CODE	SIZE	PKG QTY
237-043B	-	5-40 x 1/2	100
237-052B	-	6 x 3/8	100
237-054B	-	6 x 1/2	100
237-055B	-	6 x 5/8	100
237-056B	-	6 x 3/4	100
237-066B	-	8 x 1/2	100
237-067B	-	8 x 5/8	100
237-068B	-	8 x 3/4	100
237-070B	-	8 x 1	100
237-076B	238-076B	10 x 3/8	100
237-078B	238-078B	10 x 1/2	100

UNC COARSE THREAD U.S.S PRODUCT CODE	UNF FINE THREAD S.A.E PRODUCT CODE	SIZE	PKG QTY
237-079B	238-079B	10 x 5/8	100
237-080B	238-080B	10 x 3/4	100
237-082B	238-082B	10 x 1	100
237-083B	238-083B	10 x 1 1/4	100
237-084B	238-084B	10 x 1 1/2	100
237-091B	-	1/4 x 3/8	100
237-092B	238-092B	1/4 x 1/2	100
237-093B	238-093B	1/4 x 5/8	100
237-094B	238-094B	1/4 x 3/4	100
237-096B	238-096B	1/4 x 1	100
237-097B	238-097B	1/4 x 1 1/4	100
237-098B	238-098B	1/4 x 1 1/2	100
237-099B	-	1/4 x 1 3/4	100
237-100B	-	1/4 x 2	100
237-109B	238-109B	5/16 x 1/2	100
237-110B	238-110B	5/16 x 5/8	100
237-111B	238-111B	5/16 x 3/4	100
237-113B	238-113B	5/16 x 1	100
237-114B	238-114B	5/16 x 1 1/4	100
237-115B	238-115B	5/16 x 1 1/2	100
237-116B	-	5/16 x 1 3/4	100
237-117B	-	5/16 x 2	100
237-118B	-	5/16 x 2 1/4	100
237-119B	-	5/16 x 2 1/2	100
237-128B	-	3/8 x 1/2	100
237-129B	238-129B	3/8 x 5/8	100
237-130B	238-130B	3/8 x 3/4	100
237-132B	238-132B	3/8 x 1	100
237-133B	238-133B	3/8 x 1 1/4	100
237-134B	238-134B	3/8 x 1 1/2	100
237-135B	-	3/8 x 1 3/4	100
237-136B	-	3/8 x 2	100
237-137B	-	3/8 x 2 1/4	100
237-138B	-	3/8 x 2 1/2	50
237-140B	-	3/8 x 3	50
237-152B	-	7/16 x 1	100
237-153B	-	7/16 x 1 1/4	100
237-154B	-	7/16 x 1 1/2	100
237-155B	-	7/16 x 1 3/4	100
237-156B	-	7/16 x 2	50
237-168B	238-168B	1/2 x 3/4	100
237-170B	238-170B	1/2 x 1	100
237-171B	238-171B	1/2 x 1 1/4	100
237-172B	238-172B	1/2 x 1 1/2	100
237-173B	238-173B	1/2 x 1 3/4	50
237-174B	238-174B	1/2 x 2	50
237-175B	-	1/2 x 2 1/4	50
237-176B	-	1/2 x 2 1/2	50
237-178B	-	1/2 x 3	50
237-194B	-	5/8 x 1 1/4	50
237-195B	-	5/8 x 1 1/2	50
237-196B	-	5/8 x 1 3/4	50
237-197B	-	5/8 x 2	50
237-198B	-	5/8 x 2 1/4	25
237-199B	-	5/8 x 2 1/2	25
237-201B	-	5/8 x 3	25
237-216B	-	3/4 x 1 1/4	25
237-217B	-	3/4 x 1 1/2	25
237-218B	-	3/4 x 1 3/4	25
237-219B	-	3/4 x 2	25
237-220B	-	3/4 x 2 1/4	25
237-221B	-	3/4 x 2 1/2	25
237-223B	-	3/4 x 3	25

FASTENERS

Socket Set Screws

SOCKET SET SCREWS

Alloy Steel - Heat Treated Standard Cup Point

- Alloy Steel
- Heat Treated
- Cup Point



U.N.C. COARSE THREAD U.S.S. PRODUCT CODE	U.N.F. FINE THREAD S.A.E PRODUCT CODE	SIZE	PKG QTY
242-013B	-	2-56 x 1/8	100
242-028B	243-028B	4 x 1/8	100
242-029B	243-029B	4 x 3/16	100
242-030B	-	4 x 1/4	100
242-031B	-	4 x 5/16	100
242-032B	243-032B	4 x 3/8	100
242-033B	-	4 x 1/2	100
242-034B	-	4 x 5/8	100
242-037B	243-037B	5 x 1/8	100
242-038B	243-038B	5 x 3/16	100
242-039B	243-039B	5 x 1/4	100
242-040B	-	5 x 5/16	100
242-041B	-	5 x 3/8	100
242-043B	-	5 x 1/2	100
242-044B	-	5 x 5/8	100
242-048B	243-048B	6 x 1/8	100
242-049B	243-049B	6 x 3/16	100
242-050B	243-050B	6 x 1/4	100
242-051B	243-051B	6 x 5/16	100
242-052B	243-052B	6 x 3/8	100
242-053B	-	6 x 7/16	100
242-054B	-	6 x 1/2	100
242-055B	-	6 x 5/8	100
242-056B	-	6 x 3/4	100
242-057B	-	6 x 7/8	100
242-058B	-	6 x 1	100
242-060B	243-060B	8 x 1/8	100
242-061B	243-061B	8 x 3/16	100
242-062B	243-062B	8 x 1/4	100
242-063B	243-063B	8 x 5/16	100
242-064B	243-064B	8 x 3/8	100
242-065B	-	8 x 7/16	100
242-066B	243-066B	8 x 1/2	100
242-067B	-	8 x 5/8	100
242-068B	-	8 x 3/4	100
242-069B	-	8 x 7/8	100
242-070B	-	8 x 1	100
242-073B	243-073B	10 x 3/16	100
242-074B	243-074B	10 x 1/4	100
242-075B	243-075B	10 x 5/16	100
242-076B	243-076B	10 x 3/8	100
242-077B	243-077B	10 x 7/16	100
242-078B	243-078B	10 x 1/2	100
242-079B	243-079B	10 x 5/8	100
242-080B	243-080B	10 x 3/4	100
242-081B	-	10 x 7/8	100
242-082B	243-082B	10 x 1	100
242-083B	243-083B	10 x 1 1/4	100
242-087B	243-087B	1/4 x 3/16	100
242-088B	243-088B	1/4 x 1/4	100
242-089B	243-089B	1/4 x 5/16	100

U.N.C. COARSE THREAD U.S.S. PRODUCT CODE	U.N.F. FINE THREAD S.A.E PRODUCT CODE	SIZE	PKG QTY
242-090B	243-090B	1/4 x 3/8	100
242-091B	243-091B	1/4 x 7/16	100
242-092B	243-092B	1/4 x 1/2	100
242-093B	243-093B	1/4 x 5/8	100
242-094B	243-094B	1/4 x 3/4	100
242-095B	-	1/4 x 7/8	100
242-096B	243-096B	1/4 x 1	100
242-097B	243-097B	1/4 x 1 1/4	100
242-098B	-	1/4 x 1 1/2	100
242-100B	-	1/4 x 1 3/4	100
242-105B	243-105B	5/16 x 1/4	100
242-106B	243-106B	5/16 x 5/16	100
242-107B	243-107B	5/16 x 3/8	100
242-108B	243-108B	5/16 x 7/16	100
242-109B	243-109B	5/16 x 1/2	100
242-110B	243-110B	5/16 x 5/8	100
242-111B	243-111B	5/16 x 3/4	100
242-112B	-	5/16 x 7/8	100
242-113B	243-113B	5/16 x 1	100
242-114B	243-114B	5/16 x 1 1/4	100
242-115B	-	5/16 x 1 1/2	100
242-117B	-	5/16 x 1 3/4	100
242-118B	-	5/16 x 2	100
242-124B	243-124B	3/8 x 1/4	100
242-125B	243-125B	3/8 x 5/16	100
242-126B	243-126B	3/8 x 3/8	100
242-127B	243-127B	3/8 x 7/16	100
242-128B	243-128B	3/8 x 1/2	100
242-129B	243-129B	3/8 x 5/8	100
242-130B	243-130B	3/8 x 3/4	100
242-132B	243-132B	3/8 x 1	100
242-133B	243-133B	3/8 x 1 1/4	100
242-134B	243-134B	3/8 x 1 1/2	100
242-136B	-	3/8 x 1 3/4	50
242-137B	-	3/8 x 2	50
242-139B	-	3/8 x 2 1/2	50
242-146B	243-146B	7/16 x 3/8	100
242-147B	243-147B	7/16 x 7/16	100
242-148B	243-148B	7/16 x 1/2	100
242-149B	-	7/16 x 5/8	100
242-150B	-	7/16 x 3/4	100
242-151B	-	7/16 x 7/8	100
242-152B	-	7/16 x 1	100
242-153B	-	7/16 x 1 1/4	100
242-154B	-	7/16 x 1 1/2	100
242-156B	-	7/16 x 2	50
242-164B	-	1/2 x 3/8	100
242-166B	243-166B	1/2 x 1/2	100
242-167B	243-167B	1/2 x 5/8	100
242-168B	243-168B	1/2 x 3/4	100
242-169B	-	1/2 x 7/8	100
242-170B	243-170B	1/2 x 1	100
242-171B	-	1/2 x 1 1/4	100
242-172B	-	1/2 x 1 1/2	100
242-173B	-	1/2 x 1 3/4	50
242-174B	-	1/2 x 2	50

FASTENERS

Socket Head Cap Screws • Socket Screw Keys • Socket Pipe Plug

SOCKET SET SCREWS (CONT)

U.N.C. COARSE THREAD U.S.S. PRODUCT CODE	U.N.F. FINE THREAD S.A.E PRODUCT CODE	SIZE	PKG QTY
242-176B	-	1/2 x 2 1/2	50
242-178B	-	1/2 x 3	50
242-189B	-	5/8 x 1/2	50
242-190B	243-190B	5/8 x 5/8	50
242-191B	-	5/8 x 3/4	50
242-192B	-	5/8 x 7/8	50
242-193B	243-193B	5/8 x 1	50
242-194B	-	5/8 x 1 1/4	50
242-195B	-	5/8 x 1 1/2	50
242-196B	-	5/8 x 1 3/4	50
242-197B	-	5/8 x 2	50
242-199B	-	5/8 x 2 1/2	50
242-201B	-	5/8 x 3	50
242-212B	-	3/4 x 5/8	50
242-213B	-	3/4 x 3/4	50
242-215B	-	3/4 x 1	50
242-216B	-	3/4 x 1 1/4	50
242-217B	-	3/4 x 1 1/2	50
242-218B	-	3/4 x 1 3/4	25
242-219B	-	3/4 x 2	25
242-221B	-	3/4 x 2 1/2	25
242-223B	-	3/4 x 3	25
242-230B	-	7/8 x 7/8	25
242-232B	-	7/8 x 1	25
242-234B	-	7/8 x 1 1/2	25
242-236B	-	7/8 x 2	25
242-238B	-	7/8 x 2 1/2	25
242-240B	-	7/8 x 3	25
242-250B	-	1 x 1	25
242-251B	-	1 x 1 1/2	25
242-255B	-	1 x 2 1/2	25
242-257B	-	1 x 3	25

SOCKET SCREW KEYS

- Bare Metal
- Alloy Steel
- Fractional



SHORT ARM

PRODUCT CODE	SIZE W	LENGTH C (IN)	PKG QTY
244-001B	.028	1 11/32	100
244-002B	.035	1 1/8	100
244-003B	.050	1 5/8	100
244-004B	1/16	1 27/32	100
244-005B	5/64	1 31/32	100
244-006B	3/32	2 3/32	100
244-007B	7/64	2	100
244-008B	1/8	2 11/32	100
244-009B	9/64	2 5/16	100
244-010B	5/32	2 19/32	100
244-011B	3/16	2 29/32	100

SHORT ARM (CONT)

PRODUCT CODE	SIZE W	LENGTH C (IN)	PKG QTY
244-012B	7/32	3 3/32	50
244-013B	1/4	3 11/32	50
244-014B	5/16	3 27/32	50
244-015B	3/8	4 11/32	25
244-016B	7/16	4 3/4	10
244-017B	1/2	5 11/32	10
244-018B	9/16	5 27/32	10
244-019B	5/8	6 11/32	10
244-020B	3/4	7 11/32	10
244-021B	7/8	8	1
244-022B	1	9 11/32	1

LONG ARM

PRODUCT CODE	SIZE W	LENGTH C (IN)	PKG QTY
245-004B	1/16	3	100
245-005B	5/64	3 6/32	100
245-006B	3/32	3	100
245-007B	7/64	3 11/32	100
245-008B	1/8	3 27/32	100
245-009B	9/64	3 31/32	100
245-010B	5/32	4 7/32	100
245-011B	3/16	4 19/32	100
245-012B	7/32	4 31/32	50
245-013B	1/4	5 11/32	50
245-014B	5/16	6 3/32	50
245-015B	3/8	6 27/32	25
245-016B	7/16	7 1/4	10
245-017B	1/2	8 11/32	10
245-018B	9/16	9 3/32	10
245-019B	5/8	9 27/32	10
245-020B	3/4	11 11/32	10
245-021B	7/8	12	1
245-022B	1	14 11/32	1

SOCKET PIPE PLUG



PRODUCT CODE	SIZE	USE SOCKET SCREW KEY	PKG QTY
247-002B	1/8-27	3/16	25
247-003B	1/4-18	1/4	25
247-004B	3/8-18	5/16	10
247-005B	1/2-14	3/8	10

FASTENERS

Machine Screw Nut • Machine Screws • Stove Bolt with Nuts

MACHINE SCREW NUT

- Hex Head
- ANSI/ASME B18.6.3 1972
- Zinc Chromate Plated



PRODUCT CODE	SIZE	WEIGHT PER 100	PKG QTY	CASE QTY
249-003P	4-40	0.11	100	2000
249-004P	5-40	0.22	100	2000
249-005P	6-32	0.21	100	2000
249-006P	8-32	0.28	100	2000
249-007P	10-24	0.33	100	2000
250-007P	10-32	0.33	100	2000
249-008P	12-24	0.58	100	2000
249-009P	1/4-20	0.61	100	2000
249-010P	5/16-18	1.21	100	2000
249-011P	3/8-16	1.58	100	2000

MACHINE SCREWS

- Zinc Chromate Plated
- ANSI/ASME B18.6.3 1972



ROUND COMBINATION PRODUCT CODE	FLAT SOCKET PRODUCT CODE	SIZE	PKG QTY	CASE QTY
255-030P	-	4-40 x 1/4	100	2000
255-031P	-	4-40 x 3/8	100	2000
255-032P	-	4-40 x 1/2	100	2000
255-033P	-	4-40 x 3/4	100	2000
255-034P	-	4-40 x 1	100	2000
255-047P	-	6-32 x 1/4	100	2000
255-049P	259-049P	6-32 x 3/8	100	2000
255-051P	259-051P	6-32 x 1/2	100	2000
255-052P	259-052P	6-32 x 5/8	100	2000
255-053P	259-053P	6-32 x 3/4	100	2000
255-055P	259-055P	6-32 x 1	100	2000
255-057P	259-057P	6-32 x 1 1/4	100	2000
255-058P	259-058P	6-32 x 1 1/2	100	2000
255-060P	-	6-32 x 2	100	2000
255-066P	-	8-32 x 1/4	100	2000
255-067P	-	8-32 x 5/16	100	2000
255-068P	259-068P	8-32 x 3/8	100	2000
255-070P	259-070P	8-32 x 1/2	100	2000
255-071P	259-071P	8-32 x 5/8	100	2000
255-072P	259-072P	8-32 x 3/4	100	2000
255-074P	259-074P	8-32 x 1	100	2000
255-076P	259-076P	8-32 x 1 1/4	100	2000
255-077P	259-077P	8-32 x 1 1/2	100	2000
255-078P	259-078P	8-32 x 1 3/4	100	2000
255-079P	259-079P	8-32 x 2	100	2000
255-085P	-	10-24 x 1/4	100	2000
255-087P	259-087P	10-24 x 3/8	100	2000
255-089P	259-089P	10-24 x 1/2	100	2000
255-090P	259-090P	10-24 x 5/8	100	2000
255-091P	259-091P	10-24 x 3/4	100	2000
255-093P	259-093P	10-24 x 1	100	2000

ROUND COMBINATION PRODUCT CODE	FLAT SOCKET PRODUCT CODE	SIZE	PKG QTY	CASE QTY
255-095P	259-095P	10-24 x 1 1/4	100	2000
255-096P	259-096P	10-24 x 1 1/2	100	2000
255-097P	259-097P	10-24 x 1 3/4	100	2000
255-098P	259-098P	10-24 x 2	100	2000
255-099P	259-100P	10-24 x 2 1/2	100	1000
255-100P	-	10-24 x 3	100	1000
255-104P	-	3/16 x 4	100	800
255-106P	-	3/16 x 5	100	800
255-108P	-	3/16 x 6	100	800
256-085P	-	10-32 x 1/4	100	2000
256-087P	260-087P	10-32 x 3/8	100	2000
256-089P	260-089P	10-32 x 1/2	100	2000
256-090P	260-090P	10-32 x 5/8	100	2000
256-091P	260-091P	10-32 x 3/4	100	2000
256-093P	260-093P	10-32 x 1	100	2000
256-095P	260-095P	10-32 x 1 1/4	100	2000
256-096P	260-096P	10-32 x 1 1/2	100	2000
256-098P	260-098P	10-32 x 2	100	2000
255-127P	-	1/4-20 x 3/8	100	2000
255-129P	259-129P	1/4-20 x 1/2	100	2000
255-130P	259-130P	1/4-20 x 5/8	100	2000
255-131P	259-131P	1/4-20 x 3/4	100	2000
255-133P	259-133P	1/4-20 x 1	100	2000
255-135P	259-135P	1/4-20 x 1 1/4	100	2000
255-136P	259-136P	1/4-20 x 1 1/2	100	2000
255-137P	259-137P	1/4-20 x 1 3/4	100	2000
255-138P	259-138P	1/4-20 x 2	100	2000
255-139P	259-139P	1/4-20 x 2 1/2	100	1000
255-140P	259-140P	1/4-20 x 3	100	1000
255-144P	-	1/4 x 4	100	800
255-146P	-	1/4 x 5	100	600

STOVE BOLT WITH NUTS

- Zinc Chromate Plated
- Not assembled



ROUND COMBINATION PRODUCT CODE	FLAT SOCKET PRODUCT CODE	SIZE	PKG QTY	CASE QTY
267-089P	268-089P	3/16 x 1/2	100	2000
267-091P	268-091P	3/16 x 3/4	100	2000
267-093P	268-093P	3/16 x 1	100	2000
267-095P	268-095P	3/16 x 1 1/4	100	2000
267-096P	268-096P	3/16 x 1 1/2	100	2000
267-097P	-	3/16 x 1 3/4	100	2000
267-098P	268-098P	3/16 x 2	100	2000
267-100P	268-100P	3/16 x 2 1/2	100	1000
267-102P	268-102P	3/16 x 3	100	1000
267-104P	-	3/16 x 4	100	1000
267-129P	268-129P	1/4 x 1/2	100	2000

FASTENERS

Stove Bolt with Nuts • Sheet Metal Screws

STOVE BOLT WITH NUTS (CONT)

ROUND COMBINATION PRODUCT CODE	FLAT SOCKET PRODUCT CODE	SIZE	PKG QTY	CASE QTY
267-131P	268-131P	1/4 x 3/4	100	2000
267-133P	268-133P	1/4 x 1	100	2000
267-135P	268-135P	1/4 x 1 1/4	100	2000
267-136P	268-136P	1/4 x 1 1/2	100	2000
267-137P	268-137P	1/4 x 1 3/4	100	2000
267-138P	268-138P	1/4 x 2	100	2000
267-139P	-	1/4 x 2 1/4	100	2000
267-140P	268-140P	1/4 x 2 1/2	100	1000
267-142P	268-142P	1/4 x 3	100	1000
267-143P	-	1/4 x 3 1/2	100	1000
267-144P	-	1/4 x 4	100	1000
267-146P	-	1/4 x 5	100	1000

SHEET METAL SCREWS [TAPPING]

- Socket Head - Type "A"
- ANSI/ASME B18.6.4 1981
- Zinc Chromate Plated



PAN PRODUCT CODE	FLAT PRODUCT CODE	SIZE	PKG QTY	CASE QTY
274-005P	-	4 x 1/4	100	2000
274-006P	-	4 x 3/8	100	2000
274-007P	-	4 x 1/2	100	2000
274-009P	-	4 x 3/4	100	2000
274-012P	-	6 x 1/4	100	2000
274-013P	-	6 x 3/8	100	2000
274-014P	277-014P	6 x 1/2	100	2000
274-015P	-	6 x 5/8	100	2000
274-016P	277-016P	6 x 3/4	100	2000
274-017P	-	6 x 1 1/4	100	2000
274-018P	277-018P	6 x 1	100	2000
274-019P	-	6 x 1 1/2	100	2000
274-031P	-	8 x 3/8	100	2000
274-032P	277-032P	8 x 1/2	100	2000
274-033P	-	8 x 5/8	100	2000
274-034P	277-034P	8 x 3/4	100	2000
274-036P	277-036P	8 x 1	100	2000
274-037P	277-037P	8 x 1 1/4	100	2000
274-038P	277-038P	8 x 1 1/2	100	2000
274-039P	-	8 x 1 3/4	100	2000
274-040P	277-040P	8 x 2	100	2000
274-041P	-	10 x 3/8	100	2000
274-042P	-	10 x 1/2	100	2000
274-043P	-	10 x 5/8	100	2000
274-044P	277-044P	10 x 3/4	100	2000
274-046P	277-046P	10 x 1	100	2000
274-047P	277-047P	10 x 1 1/4	100	2000
274-048P	277-048P	10 x 1 1/2	100	2000
274-049P	-	10 x 1 3/4	100	2000
274-050P	277-050P	10 x 2	100	2000
274-053P	-	12 x 1/2	100	2000
274-055P	-	12 x 3/4	100	2000
274-057P	-	12 x 1	100	2000
274-058P	-	12 x 1 1/4	100	2000
274-059P	-	12 x 1 1/2	100	2000

PAN PRODUCT CODE	FLAT PRODUCT CODE	SIZE	PKG QTY	CASE QTY
274-062P	-	12 x 2	100	2000
274-065P	-	14 x 5/8	100	2000
274-066P	-	14 x 3/4	100	2000
274-068P	-	14 x 1	100	2000
274-069P	-	14 x 1 1/4	100	2000
274-070P	-	14 x 1 1/2	100	2000
274-072P	-	14 x 2	100	2000

TRUSS HEAD

- Zinc Chromate Plated



PRODUCT CODE	SIZE	PKG QTY	CASE QTY
283-013P	6 x 3/8	100	2000
283-014P	6 x 1/2	100	2000
283-016P	6 x 3/4	100	2000
283-017P	6 x 1	100	2000
283-033P	8 x 1/2	100	2000
283-034P	8 x 5/8	100	2000
283-035P	8 x 3/4	100	2000
283-036P	8 x 1	100	2000
283-038P	8 x 1 1/2	100	2000
283-043P	10 x 1/2	100	2000
283-045P	10 x 3/4	100	2000
283-046P	10 x 1	100	2000
283-047P	10 x 1 1/4	100	2000
283-048P	10 x 1 1/2	100	2000

INDENTED HEX HEAD



PRODUCT CODE	SIZE	PKG QTY	CASE QTY
284-032P	8 x 1/2	100	2000
284-034P	8 x 3/4	100	2000
284-036P	8 x 1	100	2000
284-042P	10 x 1/2	100	2000
284-044P	10 x 3/4	100	2000
284-046P	10 x 1	100	2000
284-047P	10 x 1 1/4	100	2000
284-048P	10 x 1 1/2	100	2000
284-055P	12 x 3/4	100	2000
284-057P	12 x 1	100	2000
284-058P	12 x 1 1/4	100	2000
284-059P	12 x 1 1/2	100	2000
284-066P	14 x 3/4	100	2000
284-068P	14 x 1	100	2000
284-069P	14 x 1 1/4	100	2000
284-070P	14 x 1 1/2	100	2000
284-075P	5/16 x 3/4	100	2000
284-076P	5/16 x 1	100	2000
284-077P	5/16 x 1 1/4	100	2000

FASTENERS

Wood Screws

WOOD SCREWS

- Socket Head
- ANSI/ASME B18.6.1 1981
- Zinc Chromate Plated



ROUND PRODUCT CODE	FLAT PRODUCT CODE	SIZE	PKG QTY	CASE QTY
-	288-013P	4 x 3/8	100	2000
-	288-014P	4 x 1/2	100	2000
-	288-015P	4 x 5/8	100	2000
-	288-016P	4 x 3/4	100	2000
-	288-018P	4 x 1	100	2000
-	288-019P	4 x 1 1/4	100	2000
286-024P	-	5 x 3/4	100	2000
286-026P	-	5 x 1	100	2000
286-029P	288-029P	6 x 1/2	100	2000
286-030P	288-030P	6 x 5/8	100	2000
286-031P	288-031P	6 x 3/4	100	2000
-	288-032P	6 x 7/8	100	2000
286-033P	288-033P	6 x 1	100	2000
286-034P	288-034P	6 x 1 1/4	100	2000
286-035P	288-035P	6 x 1 1/2	100	2000
-	288-036P	6 x 1 3/4	100	2000
-	288-040P	7 x 5/8	100	2000
-	288-041P	7 x 3/4	100	2000
-	288-043P	7 x 1	100	2000
286-048P	288-048P	8 x 1/2	100	2000
286-049P	288-049P	8 x 5/8	100	2000
286-050P	288-050P	8 x 3/4	100	2000
-	288-051P	8 x 7/8	100	2000
286-052P	288-052P	8 x 1	100	2000
286-053P	288-053P	8 x 1 1/4	100	2000
286-054P	288-054P	8 x 1 1/2	100	2000
286-055P	288-055P	8 x 1 3/4	100	2000
286-056P	288-056P	8 x 2	100	2000
-	288-057P	8 x 2 1/4	100	2000
286-058P	288-058P	8 x 2 1/2	100	1000
286-059P	288-059P	8 x 3	100	1000
-	288-060P	8 x 3 1/2	100	500
-	288-061P	8 x 4	100	500
-	288-062P	9 x 3/4	100	2000
-	288-064P	9 x 1	100	2000
-	288-065P	9 x 1 1/4	100	2000
-	288-066P	9 x 1 1/2	100	2000
-	288-068P	9 x 2	100	2000
286-071P	288-071P	10 x 1/2	100	2000

ROUND PRODUCT CODE	FLAT PRODUCT CODE	SIZE	PKG QTY	CASE QTY
-	288-072P	10 x 5/8	100	2000
286-073P	288-073P	10 x 3/4	100	2000
286-075P	288-075P	10 x 1	100	2000
286-076P	288-076P	10 x 1 1/4	100	2000
286-077P	288-077P	10 x 1 1/2	100	2000
286-078P	288-078P	10 x 1 3/4	100	2000
286-079P	288-079P	10 x 2	100	2000
-	288-080P	10 x 2 1/4	100	2000
286-081P	288-081P	10 x 2 1/2	100	2000
286-082P	288-082P	10 x 3	100	2000
286-083P	288-083P	10 x 3 1/2	100	2000
286-084P	288-084P	12 x 3/4	100	2000
286-086P	288-086P	12 x 1	100	2000
286-087P	288-087P	12 x 1 1/4	100	2000
286-088P	288-088P	12 x 1 1/2	100	2000
286-089P	-	12 x 1 3/4	100	2000
286-090P	288-090P	12 x 2	100	2000
286-092P	288-092P	12 x 2 1/2	100	1000
286-093P	288-093P	12 x 3	100	1000
286-094P	288-094P	12 x 3 1/2	100	500
-	288-095P	12 x 4	100	500
286-098P	288-098P	14 x 1 1/2	100	2000
-	288-099P	14 x 1 3/4	100	2000
286-100P	288-100P	14 x 2	100	2000
-	288-101P	14 x 2 1/4	100	2000
286-102P	288-102P	14 x 2 1/2	100	1000

COTTER PINS

- Carbon Steel
- Zinc Plated



PRODUCT CODE	SIZE	PKG QTY
298-006S	1/16 x 1/2	100
298-007S	1/16 x 3/4	100
298-008S	1/16 x 1	100
298-009S	1/16 x 1 1/4	100
298-010S	1/16 x 1 1/2	100
298-011S	1/16 x 1 3/4	100
298-012S	1/16 x 2	100
298-014S	3/32 x 1/2	100
298-016S	3/32 x 3/4	100
298-017S	3/32 x 1	100
298-018S	3/32 x 1 1/4	100
298-019S	3/32 x 1 1/2	100
298-020S	3/32 x 1 3/4	100
298-021S	3/32 x 2	100
298-022S	3/32 x 2 1/2	100
298-025S	1/8 x 1/2	100
298-026S	1/8 x 3/4	100
298-028S	1/8 x 1	100
298-029S	1/8 x 1 1/4	100
298-030S	1/8 x 1 1/2	100
298-032S	1/8 x 1 3/4	100
298-033S	1/8 x 2	100
298-034S	1/8 x 2 1/2	100
298-035S	1/8 x 3	100
298-037S	5/32 x 1	100
298-038S	5/32 x 1 1/4	100
298-039S	5/32 x 1 1/2	100
298-040S	5/32 x 1 3/4	100
298-041S	5/32 x 2	100
298-042S	5/32 x 2 1/4	100
298-043S	5/32 x 2 1/2	100
298-045S	5/32 x 3	100
298-046S	3/16 x 3/4	100
298-047S	3/16 x 1	100
298-048S	3/16 x 1 1/4	100
298-049S	3/16 x 1 1/2	100
298-050S	3/16 x 1 3/4	100
298-051S	3/16 x 2	100
298-052S	3/16 x 2 1/4	100

PRODUCT CODE	SIZE	PKG QTY
298-053S	3/16 x 2 1/2	100
298-054S	3/16 x 3	100
298-055S	3/16 x 3 1/2	100
298-056S	3/16 x 4	100
298-058S	1/4 x 1	100
298-059S	1/4 x 1 1/4	100
298-060S	1/4 x 1 1/2	100
298-061S	1/4 x 1 3/4	100
298-062S	1/4 x 2	100
298-064S	1/4 x 2 1/2	100
298-065S	1/4 x 3	100
298-066S	1/4 x 3 1/2	100
298-067S	1/4 x 4	100
298-070S	5/16 x 1	100
298-071S	5/16 x 1 1/4	100
298-072S	5/16 x 1 1/2	100
298-074S	5/16 x 2	100
298-075S	5/16 x 2 1/4	100
298-076S	5/16 x 2 1/2	100
298-077S	5/16 x 3	50
298-078S	5/16 x 3 1/2	50
298-079S	5/16 x 4	50
298-080S	5/16 x 5	50
298-081S	3/8 x 1 1/2	50
298-083S	3/8 x 2	50
298-084S	3/8 x 2 1/2	50
298-085S	3/8 x 3	50
298-086S	3/8 x 3 1/2	50
298-087S	3/8 x 4	50
298-088S	3/8 x 5	50
298-089S	3/8 x 6	50
298-090S	1/2 x 2	25
298-091S	1/2 x 2 1/2	25
298-092S	1/2 x 3	25
298-093S	1/2 x 3 1/2	25
298-094S	1/2 x 4	25
298-096S	1/2 x 5	25
298-098S	1/2 x 6	25

FASTENERS

Cotter Pins • Threaded Rod • Alloy Bar

THREADED ROD



BARE MILD STEEL

* PRODUCT CODE	DESCRIPTION	PKG QTY	BUNDLE
306-008	1/4 - 20 x 36" UNC Threaded Rod	1	25
306-013	5/16 - 18 x 36" UNC Threaded Rod	1	20
306-018	3/8 - 16 x 36" UNC Threaded Rod	1	15
306-023	7/16 - 14 x 36" UNC Threaded Rod	1	10
306-028	1/2 - 13 x 36" UNC Threaded Rod	1	10
306-033	5/8 - 11 x 36" UNC Threaded Rod	1	5
306-038	3/4 - 10 x 36" UNC Threaded Rod	1	5
306-043	7/8 - 9 x 36" UNC Threaded Rod	1	3
306-048	1 - 8 x 36" UNC Threaded Rod	1	3
306-053	1 1/8 - 7 x 36" UNC Threaded Rod	1	1
306-058	1 1/4 - 7 x 36" UNC Threaded Rod	1	1
306-068	1 1/2 - 6 x 36" UNC Threaded Rod	1	1

* When ordering, please state (B) for Bare and (P) for Plated at the end of the Product Code

THREADED ROD EMPTY DISPLAY RACK

- Heavy Duty all steel construction
- Sizes 21-1/2" W x 13-1/2" D x 24"



PRODUCT CODE	PART NUMBER	CONTENTS
484-110	DRR-E	Empty Display Rack

ALLOY BAR

- Alloy steel continuous threaded rod
- Yellow Zinc plated
- 36" lengths
- Tensile strengths = 125,000
- Manufactured in accordance with ASTM A193-94 B7

THREADED ROD - 18-8 STAINLESS STEEL

- 36" lengths



U.N.C. Coarse Thread U.S.S.

PRODUCT CODE	SIZE	PKG QTY
544-008S	1/4	1
544-013S	5/16	1
544-018S	3/8	1
544-023S	7/16	1
544-028S	1/2	1
544-033S	5/8	1
544-038S	3/4	1



U.N.C. COARSE THREAD U.S.S. PRODUCT CODE	U.N.F. FINE THREAD S.A.E. PRODUCT CODE	SIZE (IN.)	WEIGHT PER PIECE	BUNDLE
308-008	309-008	1/4	0.4 lb.	25
308-013	309-013	5/16	0.6 lb.	20
308-018	309-018	3/8	0.9 lb.	15
308-023	309-023	7/16	1.2 lb.	10
308-028	309-028	1/2	1.6 lb.	10
308-099	-	9/16		
308-033	309-033	5/8	2.5 lb.	5
308-038	309-038	3/4	3.7 lb.	5
308-043	309-043	7/8	5.1 lb.	3
308-048	309-048	1	6.7 lb.	3
308-053	309-053	1 1/8	8.0 lb.	1
308-058	309-058	1 1/4	10.0 lb.	1
308-068	309-068	1 1/2	15.0 lb.	1

TAPER PINS

- Low carbon steel - C1018
- Standard taper 1/4" per foot or .0208 per inch
- Diameter measured at large end



PRODUCT CODE	SIZE	PKG QTY
344-010B	6/0 x 1	25
344-205B	6/0 x 1 1/4	25
344-013B	5/0 x 1/2	25
344-014B	5/0 x 3/4	25
344-015B	5/0 x 1	25
344-016B	5/0 x 1 1/4	25
344-017B	5/0 x 1 1/2	25
344-019B	5/0 x 3	25
344-020B	4/0 x 1/2	25
344-021B	4/0 x 3/4	25
344-022B	4/0 x 1	25
344-023B	4/0 x 1 1/4	25
344-024B	4/0 x 1 1/2	25
344-027B	3/0 x 1/2	25
344-028B	3/0 x 3/4	25
344-029B	3/0 x 1	25
344-030B	3/0 x 1 1/4	25
344-031B	3/0 x 1 1/2	25
344-034B	2/0 x 1/2	25
344-035B	2/0 x 3/4	25
344-036B	2/0 x 1	25
344-037B	2/0 x 1 1/4	25
344-038B	2/0 x 1 1/2	25
344-039B	2/0 x 1 3/4	25
344-040B	2/0 x 2	25
344-043B	0 x 1/2	25
344-044B	0 x 3/4	25
344-045B	0 x 1	25
344-046B	0 x 1 1/4	25
344-047B	0 x 1 1/2	25
344-048B	0 x 1 3/4	25
344-049B	0 x 2	25
344-050B	0 x 2 1/2	25
344-051B	0 x 3	25
344-052B	1 x 3/4	25
344-053B	1 x 1	25
344-054B	1 x 1 1/4	25
344-055B	1 x 1 1/2	25
344-056B	1 x 1 3/4	25
344-057B	1 x 2	25
344-058B	1 x 2 1/4	25
344-059B	1 x 2 1/2	25
344-060B	1 x 3	25
344-061B	2 x 3/4	25
344-062B	2 x 1	25
344-063B	2 x 1 1/4	25
344-064B	2 x 1 1/2	25
344-065B	2 x 1 3/4	25
344-066B	2 x 2	25
344-067B	2 x 2 1/4	25
344-068B	2 x 2 1/2	25
344-069B	2 x 2 3/4	25
344-070B	2 x 3	25
344-071B	2 x 3 1/2	10
344-073B	3 x 3/4	25
344-074B	3 x 1	25

PRODUCT CODE	SIZE	PKG QTY
344-075B	3 x 1 1/4	25
344-076B	3 x 1 1/2	25
344-077B	3 x 1 3/4	25
344-078B	3 x 2	25
344-079B	3 x 2 1/4	25
344-080B	3 x 2 1/2	25
344-081B	3 x 2 3/4	25
344-082B	3 x 3	25
344-083B	3 x 3 1/2	10
344-084B	3 x 4	10
344-085B	4 x 3/4	25
344-086B	4 x 1	25
344-088B	4 x 1 1/2	25
344-089B	4 x 1 3/4	25
344-090B	4 x 2	25
344-091B	4 x 2 1/4	25
344-092B	4 x 2 1/2	25
344-093B	4 x 2 3/4	25
344-094B	4 x 3	25
344-095B	4 x 3 1/2	10
344-096B	4 x 4	10
344-098B	5 x 3/4	25
344-099B	5 x 1	25
344-100B	5 x 1 1/4	25
344-101B	5 x 1 1/2	25
344-102B	5 x 1 3/4	25
344-103B	5 x 2	25
344-104B	5 x 2 1/4	25
344-105B	5 x 2 1/2	25
344-106B	5 x 2 3/4	25
344-107B	5 x 3	25
344-108B	5 x 3 1/4	10
344-109B	5 x 3 1/2	10
344-110B	5 x 3 3/4	10
344-111B	5 x 4	10
344-113B	5 x 5	10
344-115B	6 x 3/4	25
344-116B	6 x 1	25
344-117B	6 x 1 1/4	25
344-118B	6 x 1 1/2	25
344-119B	6 x 1 3/4	25
344-120B	6 x 2	25
344-121B	6 x 2 1/4	25
344-122B	6 x 2 1/2	25
344-123B	6 x 2 3/4	25
344-124B	6 x 3	25
344-125B	6 x 3 1/4	10
344-126B	6 x 3 1/2	10
344-127B	6 x 3 3/4	10
344-128B	6 x 4	10
344-129B	6 x 4 1/2	10
344-130B	6 x 5	10
344-131B	6 x 5 1/2	10
344-132B	6 x 6	10
344-133B	7 x 1 1/4	25
344-134B	7 x 1 1/2	25
344-135B	7 x 1 3/4	25
344-136B	7 x 2	25
344-137B	7 x 2 1/4	25
344-138B	7 x 2 1/2	25

FASTENERS

Taper Pins • Steel Woodruff Keys

TAPER PINS (CONT)

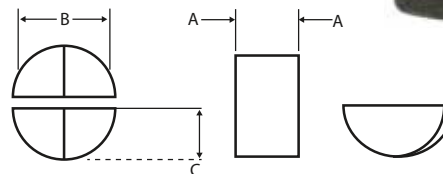
PRODUCT CODE	SIZE	PKG QTY
344-139B	7 x 2 3/4	25
344-140B	7 x 3	25
344-141B	7 x 3 1/4	10
344-142B	7 x 3 1/2	10
344-143B	7 x 3 3/4	10
344-144B	7 x 4	10
344-145B	7 x 4 1/2	10
344-146B	7 x 5	10
344-147B	7 x 5 1/2	10
344-148B	7 x 6	10
344-149B	8 x 1 1/4	10
344-150B	8 x 1 1/2	10
344-151B	8 x 1 3/4	10
344-152B	8 x 2	10
344-153B	8 x 2 1/4	10
344-154B	8 x 2 1/2	10
344-155B	8 x 2 3/4	10
344-156B	8 x 3	10
344-157B	8 x 3 1/4	10
344-158B	8 x 3 1/2	10
344-159B	8 x 3 3/4	10
344-160B	8 x 4	10
344-161B	8 x 4 1/2	10
344-162B	8 x 5	10
344-163B	8 x 5 1/2	10
344-164B	8 x 6	10
344-165B	9 x 1 1/2	10
344-166B	9 x 2	10
344-167B	9 x 2 1/4	10
344-168B	9 x 2 1/2	10
344-169B	9 x 3	10
344-170B	9 x 3 1/2	10
344-171B	9 x 4	10
344-172B	9 x 4 1/2	10
344-173B	9 x 5	10
344-174B	9 x 5 1/2	10
344-175B	9 x 6	10
344-176B	10 x 1 1/2	10
344-177B	10 x 2	10
344-178B	10 x 2 1/2	10
344-179B	10 x 3	10
344-180B	10 x 3 1/4	10
344-181B	10 x 3 1/2	10
344-182B	10 x 4	10
344-183B	10 x 4 1/4	10
344-235B	10 x 4 1/2	10
344-184B	10 x 5	10
344-185B	10 x 5 1/2	10
344-186B	10 x 6	10

APPROXIMATE DIAMETER AT LARGE END:

Size	Decimal	Fraction	Size	Decimal	Fraction
5/0	0.094	3/32	4	0.250	1/4
4/0	0.109	4/64	5	0.289	19/64
3/0	0.125	1/8	6	0.341	11/32
2/0	0.141	9/64	7	0.409	13/32
0	0.156	5/32	8	0.492	1/2
1	0.172	11/64	9	0.591	19/32
2	0.193	3/16	10	0.706	23/32
3	0.219	7/32			

STEEL WOODRUFF KEYS

- S.A.E. 1035 carbon steel
- Tensile strength of 165,000 p.s.i.
- Package Quantity = 25



PRODUCT CODE	PART NUMBER	DIMENSIONS		
		A	B	C
346-001	1	1/16 x 1/2	0.491	0.194
346-002	2	3/32 x 1/2	0.491	0.194
346-003	3	1/8 x 1/2	0.491	0.194
346-004	4	3/32 x 5/8	0.612	0.240
346-005	5	1/8 x 5/8	0.612	0.240
346-006	6	5/32 x 5/8	0.612	0.240
346-007	7	1/8 x 3/4	0.740	0.303
346-008	8	5/32 x 3/4	0.740	0.303
346-009	9	3/16 x 3/4	0.740	0.303
346-010	10	5/32 x 7/8	0.866	0.365
346-011	11	3/16 x 7/8	0.866	0.365
346-012	12	7/32 x 7/8	0.866	0.365
346-013	13	3/16 x 1	0.992	0.428
346-014	14	7/32 x 1	0.992	0.428
346-015	15	1/4 x 1	0.992	0.428
346-016	16	3/16 x 1 1/8	1.114	0.475
346-017	17	7/32 x 1 1/8	1.114	0.475
346-018	18	1/4 x 1 1/8	1.114	0.475
346-019	19	3/16 x 1 1/4	1.240	0.537
346-020	20	7/32 x 1 1/4	1.240	0.537
346-021	21	1/4 x 1 1/4	1.240	0.537
346-022	22	1/4 x 1 3/8	1.362	0.584
346-023	23	5/16 x 1 3/8	1.362	0.584
346-024	24	1/4 x 1 1/2	1.484	0.631
346-025	25	5/16 x 1 1/2	1.484	0.631
346-026	26	3/16 x 2 1/8	1.723	0.521
346-027	27	1/4 x 2 1/8	1.723	0.521
346-028	28	5/16 x 2 1/8	1.723	0.521
346-029	29	3/8 x 2 1/8	0.526	0.521
346-030	30	3/8 x 3 1/4	2.880	0.927
346-031	31	7/16 x 3 1/2	2.880	0.927
346-032	32	1/2 x 3 1/2	2.880	0.927
346-033	33	9/16 x 3 1/2	2.880	0.927
346-034	34	5/8 x 3 1/2	2.880	0.927
346-035	35	11/16 x 3 1/2	2.880	0.927
346-036	36	3/4 x 3 1/2	2.880	0.927
346-061	61	3/16 x 5/8	0.612	0.240
346-091	91	1/4 x 3/4	0.740	0.303
346-126	126	3/16 x 2 1/8	1.380	0.396
346-127	127	1/4 x 2 1/8	1.380	0.396
346-128	128	5/16 x 2 1/8	1.380	0.396
346-129	129	3/8 x 2 1/8	1.380	0.396
346-152	152	3/8 x 1	0.992	0.482
346-201	201	1/16 x 1/4	0.248	0.117
346-206	206	1/16 x 5/16	0.311	0.1440
346-207	207	3/32 x 5/16	0.311	0.140
346-211	211	1/16 x 3/8	0.374	0.172
346-212	212	3/32 x 3/8	0.374	0.172
346-213	213	1/8 x 3/8	0.374	0.172

FASTENERS

Steel Woodruff Keys • Fastener Assortment Drawers • Bolt Bins • Bin Boxes

STEEL WOODRUFF KEYS (CONT)

PRODUCT CODE	PART NUMBER	DIMENSIONS		
		A	B	C
346-901	A	1/4 x 7/8	0.866	0.365
346-902	B	5/16 x 1	0.992	0.428
346-903	C	5/16 x 1 1/8	1.114	0.475
346-904	D	5/16 x 1 1/4	1.240	0.537
346-905	E	3/8 x 1 1/4	1.240	0.537
346-906	F	3/8 x 3/8	1.362	0.584
346-907	G	3/8 x 1 1/2	1.484	0.631
346-913	RX	1/4 x 2 3/4	2.000	0.584
346-909	S	5/16 x 2 3/4	2.317	0.740
346-914	SX	5/16 x 2 3/4	2.000	0.584
346-910	T	3/8 x 2 3/4	2.317	0.740
346-915	TX	3/8 x 2 3/4	2.000	0.584
346-911	U	7/16 x 2 3/4	2.317	0.740
346-916	UX	7/16 x 2 3/4	2.000	0.584
346-912	V	1/2 x 2 3/4	2.317	0.740
346-917	VX	1/2 x 2 3/4	2.000	0.584

ASSORTMENT DRAWERS (EMPTY)



PRODUCT CODE	DESCRIPTION	PKG QTY
SMALL DRAWER COMPONENTS		
427-056	Small Empty Metal Shell Drawer (13 3/8 W x 9 1/4 D x 2H)	1
427-057	Small Shell Drawer Insert - 20 Compartment	1
427-058	Small Shell Drawer Insert - Variable Compartment	1
427-059	Variable Component Dividers	1
427-060	Small Plastic Box - 18 Compartment	1
427-061	Small Shell Drawer Insert - 12 Compartment	1
427-062	Small Shell Drawer Insert - 21 Compartment	1
427-063	Small Shell Drawer Insert - 24 Compartment	1
427-079	Small Shell Drawer Insert - 16 Compartment	1
SLIDE RACKS		
427-064	Easy Slide Rack - Holds 4 Small Boxes	1
427-065	Easy Slide Rack - Holds 6 Small Boxes	1
427-066	Easy Slide Rack - Holds 4 Large Boxes	1
427-067	Base for Easy Slide Rack - Large Boxes	1
427-068	Base for Easy Slide Rack - Small Boxes	1
LARGE DRAWER COMPONENTS		
427-069	Large Empty Metal Shell Drawer (18W x 12D x 3H)	1
427-070	Large Shell Drawer Insert - 12 Compartment	1
427-071	Large Shell Drawer Insert - 16 Compartment	1
427-072	Large Shell Drawer Insert - 20 Compartment	1
427-073	Large Shell Drawer Insert - 6 Vertical Compartment	1
427-074	Large Shell Drawer Insert - 6 Horizontal Compartment	1
427-075	Large Shell Drawer Insert - 24 Compartment	1
427-076	Large Shell Drawer Insert - 32 Compartment	1
427-077	Large Shell Drawer Insert - Adjustable Vertical	1
SMALL DRAWER KIT		
427-085	Small Drawer - 12 Compartment	1
427-086	Small Drawer - 20 Compartment	1
427-087	Small Drawer - 21 Compartment	1
427-088	Small Drawer - 24 Compartment	1
427-089	Small Drawer - Adjustable Compartment	1
427-098	Small Drawer - 16 Compartment	1

Product Code	Description	Pkg Qty
LARGE DRAWER KIT		
427-090	Large Drawer - 12 Compartment	1
427-091	Large Drawer - 16 Compartment	1
427-092	Large Drawer - 20 Compartment	1
427-093	Large Drawer - 6 Vertical Compartment	1
427-094	Large Drawer - 6 Horizontal Compartment	1
427-095	Large Drawer - 24 Compartment	1
427-096	Large Drawer - 32 Compartment	1
427-097	Large Drawer - Vertical Adjustment	1

BOLT BINS (EMPTY)

- Extremely rigid construction as a result of a combination of interlocking and welded construction
- Will not warp, twist or sag out of alignment
- Fully hemmed lips on each bin
- Blue baked enamel finish
- Individually packed in shipping carton
- 35 1/4" W x 42" H x 12" D



PRODUCT CODE	PART NO.	BIN SIZE (IN.)	NO. OF BINS	WEIGHT	PKG QTY
429-040	40B	4 1/4 x 5 x 12	40	62 lbs	1
429-042	42B	5 3/8 x 5 7/16 x 12	42	71lbs	1
429-056	56B	4 13/16 x 5 1/16 x 12	56	75 lbs	1
429-072	72B	4 x 4 1/2 x 12	72	80 lbs	1 Pallet 6
429-072B		Base for 72 Bin			1

LABELS

PRODUCT CODE	DESCRIPTION	PKG QTY
429-172	Printed label set	1
429-173	Metric label set (white)	1

CORRUGATED BIN BOXES (EMPTY)

- Complete with dividers
- Minimum order quantity 50 pieces

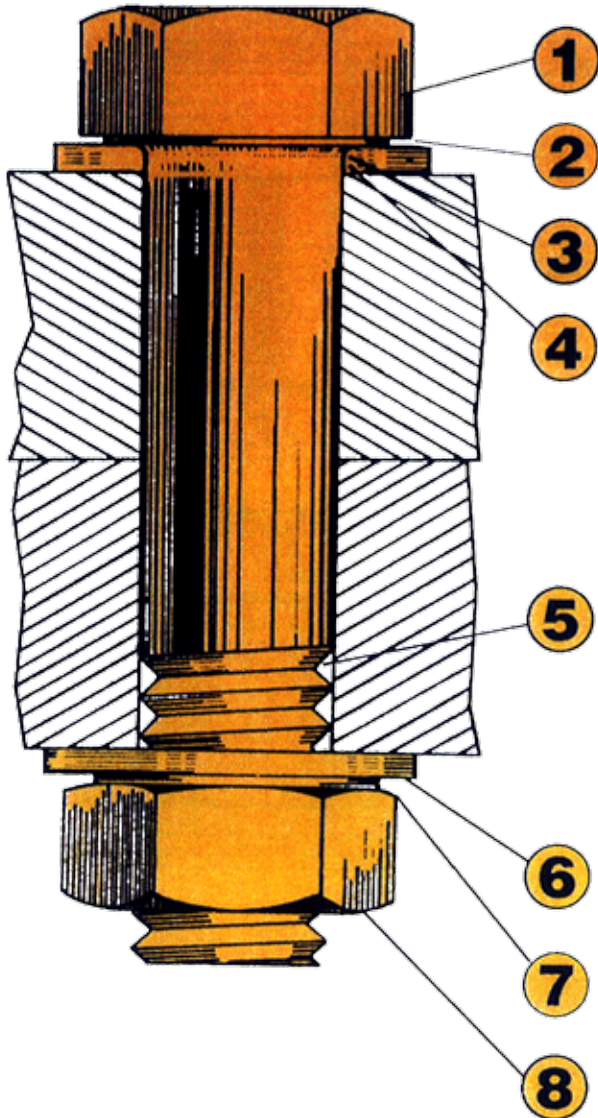


PRODUCT CODE	SIZE	BUNDLE
428-085	6 x 3 3/4 x 11	50

FASTENERS

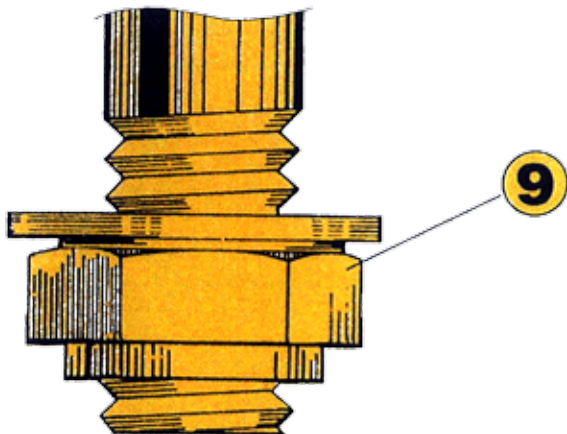
L9® Fastening System

L9® FASTENING SYSTEM

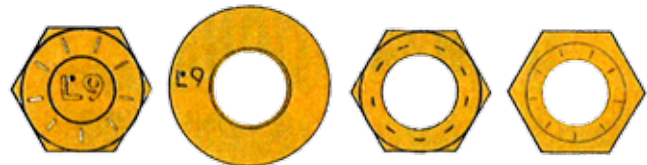


A HIGH STRENGTH SYSTEM OF HIGHLY ENGINEERED COMPONENTS

1. Thicker than standard bolt head adds wrenching surface.
2. Washer face eliminates corner drag.
3. Radius under bolt head adds strength.
4. Countersunk washer I.D. centers the washer against the bolt head bearing surface during tightening.
5. UNR radiused root bolt thread increases fatigue resistance by reducing the notch effect of conventional UN threads. The UNR thread radius is maintained into thread runout at the junction of thread to shank.
6. Smooth washer bearing surfaces distribute loads uniformly and reduced brinelling. Plated finish assists torquing.
7. Chamfers eliminate corner drag.
8. Thicker than standard nut side walls facilitate wrenching. Heat treating helps prevent splitting and stripping.
9. Collared L9 prevailing torque mental locknut for assemblies subject to vibration.



L9® HEAD MARKING IDENTIFICATION



L9® Bolthead

L9® Washer

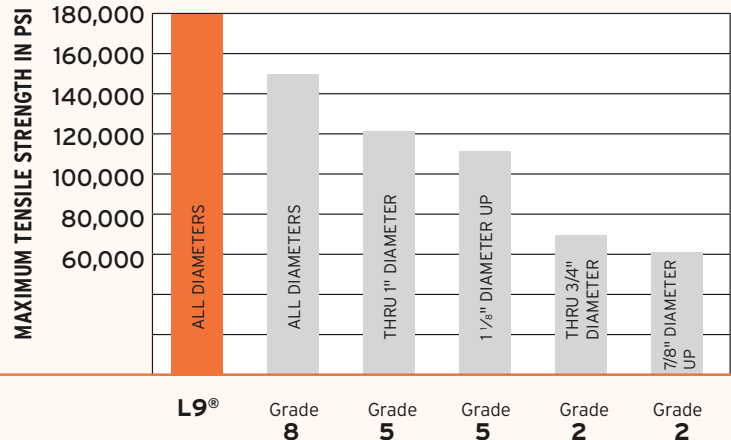
L9® Hex Nut

L9® Locknut

L9® DESIGN FEATURES

L9® Fastening System features 180,000 to 200,000 psi ultimate tensile strength having the minimum ductility of SAE J429 Grade 8 bolts for reduction in area and elongation.

COMPARATIVE STRENGTHS SAE GRADES 2, 5, 8 AND L9® BOLTS



L9® SYSTEM HARDNESS SPECIFICATIONS

Product	Diameter Range	Rockwell Hardness
Bolts	All	R/C 38-42
Nuts	1/4 thru 5/8 3/4 thru 1 1/2	R/C 28-34 R/C 32-38
Washers	All	15N 82-85

L9® SYSTEM PLATING SPECIFICATIONS

Product	Type	Thickness	Bake	Finish
Bolts	Zinc	.0002 - .0004	6 hrs @ 375 - 425°	Yellow Dichromate
Nuts	Cadmium and Wax	.0002 - .0004	6 hrs @ 375 - 425°	Yellow Dichromate
Locknuts	Cadmium and Wax	.0002 - .0004	6 hrs @ 375 - 425°	Yellow Dichromate
Washers	Zinc	.0002 - .0004	6 hrs @ 375 - 425°	Yellow Dichromate

Note: These specifications exceed the requirements of ASTM B633 FE/ZN 5. Type II (Zinc) and ASTM-80 Type TS (Cadmium). These finishes will meet a 96 hour salt spray test as a specified by ASTM B117.

USER CAUTIONS

Avoid fastener, and possible joint failure, by observing the following:

Do not substitute components in the L9 Fastening System. Non L9 components may not meet the system's requirements.

Do not alter the coatings as this can result in erratic and unpredictable clamp loads. Do not use supplementary lubricants.

Do not use the L9 system in service environments exceeding 400-degrees Fahrenheit. Any cadmium or zinc plated product is subject to degradation of corrosion resistance and possible liquid metal embrittlement at temperatures exceeding 400-degrees F.

Discuss the use of L9 bolts and washers in tapped holes, with Docap staff to establish correct tightening torques and methods. Excessive or insufficient clamp loads can cause major problems.

When tightening L9 bolts, use the recommended torque values. The self lubricating features of the system reduce required torque so that in some instances they are below those needed to tighten Grade 8 bolts.

FASTENERS

Use L9® Fastening System To Solve Common Problems

USE L9® FASTENING SYSTEM TO SOLVE THESE COMMON PROBLEMS

1



HEAD SEPARATE

CAUSED BY:

- Improper material selection
- Poor heat treat practice
- Poor heading practice
- Inadequate fillet under head
- Poor plating practice
- Poor joint design

2



THREAD NECK DOWN

- Improper strength grade selection
- High service loads
- Overtightening
- Poor heat treat practice
- Poor joint design

3



FATIGUE FRACTURE

- Loss of clamp load
- Inadequate tightening
- Cyclical service loads
- Exceeding initial clamp loads
- Poor joint design

4



DISHED WASHERS

- Soft low strength washer material (results in clamp load loss, loosening and fatigue.)

5



CRACKED OR SPLIT WASHERS

- Improper material selection
- Poor material quality
- Poor heat treat practice
- Poor plating practice

6



STRIPPED NUTS

- Improper strength grade selection
- Poor heat treat practice
- Inadequate nut design

7



CRACKED OR SPLIT NUTS

- Poor raw material quality
- Poor heat treat practice
- Poor forming practice

8



RUST AND CORROSION

- Improper selection of materials and plating for a specific corrosive environment
- Poor joint design

L9® HEX BOLTS ZINC DICHROMATE

PART NUMBER		LENGTH IN INCHES	PKG. QTY	LBS. PER 100 PCS.	
COARSE	FINE			COURSE	FINE
1/4" DIAMETER					
440002	440044	1/2	100	1.29	1.34
440006	440048	3/4	100	1.55	1.62
440010	440052	1	100	1.81	1.97
440012	440054	1 1/4	100	2.15	2.30
440014	440056	1 1/2	100	2.49	2.63
440016	440058	1 3/4	100	2.83	2.96
440018	440060	2	100	3.17	3.30
440022	440064	2 1/2	100	3.85	3.97
440026	440068	3	100	4.54	4.63
5/16" DIAMETER					
440086	440128	1/2	100	2.18	2.30
440090	440132	3/4	100	2.60	2.72
440094	440136	1	100	3.02	3.16
440096	440138	1 1/4	100	3.56	3.70
440098	440140	1 1/2	100	4.09	4.23
440100	440142	1 3/4	100	4.64	4.77
440102	440144	2	100	5.18	5.30
440106	440148	2 1/2	100	6.26	6.44
440110	440152	3	100	7.34	7.44
440114	-	3 1/2	50	8.16	8.16
440118	-	4	50	9.20	9.20
3/8" DIAMETER					
440170	-	1/2	100	3.14	3.14
440174	440216	3/4	100	4.73	4.02
440178	440220	1	100	4.33	4.68
440180	440222	1 1/4	100	4.92	5.34
440182	440224	1 1/2	100	5.69	6.11
440184	440226	1 3/4	100	6.42	6.88
440186	440228	2	100	7.24	7.65
440188	440230	2 1/4	50	8.02	8.42
440190	440232	2 1/2	50	8.79	9.19
440194	440236	3	50	10.34	10.73
440198	440240	3 1/2	50	11.95	12.27
440202	440244	4	50	13.45	13.81
440204	-	4 1/2	50	15.00	15.00
440206	-	5	50	16.55	16.55
440210	-	6	50	19.46	19.46

PART NUMBER		LENGTH IN INCHES	PKG. QTY	LBS. PER 100 PCS.	
COARSE	FINE			COURSE	FINE
7/16" DIAMETER					
440254	-	3/4	100	5.56	5.56
440258	440296	1	100	6.39	6.75
440260	440298	1 ¼	50	7.22	7.64
440262	440300	1 ½	50	8.05	8.53
440264	440302	1 ¾	50	9.10	9.58
440266	440304	2	50	10.15	10.71
440270	440308	2 ½	50	12.25	12.73
440274	440312	3	50	14.35	14.83
440278	440316	3 ½	25	16.45	17.01
440282	440320	4	25	18.55	19.11
440286	-	5	25	22.75	22.75
440290	-	6	25	16.73	26.73
1/2" DIAMETER					
440330	-	3/4	50	8.27	8.27
440334	440380	1	50	9.37	9.92
440336	440382	1 ¼	50	10.47	11.11
440338	440384	1 ½	50	11.57	12.30
440340	440386	1 ¾	50	12.67	13.48
440342	440388	2	50	14.04	14.86
440344	440390	2 ¼	50	15.42	16.24
440346	440392	2 ½	50	16.79	17.62
440350	440396	3	50	19.55	20.38
440354	440400	3 ½	25	22.30	23.15
440358	440404	4	25	25.05	25.90
440360	440406	4 ½	25	27.80	28.67
440362	440408	5	25	30.55	31.40
440366	440412	6	25	35.77	36.71
440370	440416	7	25	41.27	42.21
440374	440420	8	25	46.77	47.71
9/16" DIAMETER					
440422	-	1	25	11.99	11.99
440426	440456	1 ½	25	14.83	15.79
440430	440460	2	25	17.99	19.04
440434	440464	2 ½	25	21.47	22.52
440438	440468	3	25	24.95	26.00
440440	440470	3 ½	25	28.43	29.48
440442	440472	4	25	31.91	32.96
440446	-	5	25	38.87	38.87

180,000 MIN. P.S.I. Tensile

FASTENERS

L9® Hex Bolts Zinc Dichromate

L9® HEX BOLTS ZINC DICHROMATE (CONT)

PART NUMBER		LENGTH IN INCHES	PKG. QTY	LBS. PER 100 PCS.	
COARSE	FINE			COURSE	FINE
5/8" DIAMETER					
440482	440524	1	25	16.14	16.72
440484	440526	1 ¼	25	17.88	17.88
440486	440528	1 ½	25	19.62	20.48
440488	440530	1 ¾	25	21.36	22.25
440490	440532	2	25	23.10	24.24
440492	440534	2 ¼	25	25.24	26.38
440494	440536	2 ½	25	27.38	28.52
440496	440538	2 ¾	25	29.22	30.66
440498	440540	3	25	31.66	32.80
440502	440544	3 ½	25	35.94	37.08
440506	440548	4	25	40.02	41.36
440508	440550	4 ½	25	44.50	45.74
440510	440552	5	25	48.78	49.92
440512	440554	5 ½	25	53.06	54.20
440514	440556	6	25	56.93	58.22
440518	440560	7	25	65.55	66.68
440522	440564	8	25	74.46	75.34
440850	440566	9	25	83.02	83.91
440852	-	10	25	91.58	91.58
440854	-	11	25	99.31	99.31
440856	-	12	25	108.70	108.70
3/4" DIAMETER					
440570	440612	1 ½	20	31.47	32.61
440572	440614	1 ¾	20	34.01	35.30
440574	440616	2	20	36.55	38.07
440576	440618	2 ¼	20	39.07	40.60
440578	440620	2 ½	20	42.19	43.90
440580	440622	2 ¾	20	45.29	47.02
440582	440624	3	20	48.39	50.10
440586	440628	3 ½	20	54.50	56.30
440590	440632	4	20	60.79	62.50
440592	440634	4 ½	20	66.99	68.70
440594	440636	5	20	73.19	74.90
440596	440638	5 ½	20	79.39	81.10
440598	440640	6	20	85.03	86.93
440602	440644	7	20	97.43	99.33
440606	440648	8	20	109.07	110.89
440860	440870	9	20	122.17	124.13
440862	440872	10	15	134.60	136.53
440864	440874	11	15	147.02	147.50
440866	440875	12	15	156.00	156.00

PART NUMBER		LENGTH IN INCHES	PKG. QTY	LBS. PER 100 PCS.	
COARSE	FINE			COURSE	FINE
7/8" DIAMETER					
440650	440682	2	15	54.02	56.07
440654	440686	2 ½	15	61.06	63.55
440658	440690	3	15	69.48	71.50
440662	440694	3 ½	15	77.90	79.92
440666	440698	4	15	86.32	88.34
440668	440700	4 ½	15	94.74	96.76
440670	440702	5	15	103.13	105.18
440672	440704	5 ½	15	111.58	113.60
440674	440706	6	15	119.00	121.55
440678	440710	7	15	136.15	138.39
440680	440712	8	15	152.99	155.23
440880	440890	9	15	169.83	172.07
440882	440892	10	15	185.67	188.91
440884	440894	11	10	203.51	207.18
440886	440896	12	10	220.35	221.34
1" DIAMETER					
440714	-	2	10	72.40	72.40
440718	440748	2 ½	10	81.60	85.16
440722	440752	3	10	90.80	95.10
440726	440756	3 ½	10	101.80	106.10
440728	440758	4	10	112.80	117.10
440730	440760	4 ½	10	123.90	128.10
440732	440762	5	10	134.80	139.10
440734	440764	5 ½	10	145.80	150.10
440736	440766	6	10	115.90	161.10
440740	440770	7	10	177.90	183.10
440742	440772	8	10	199.70	205.10
440901	440970	9	8	221.90	227.10
440902	440906	10	8	243.90	249.10
440903	440907	11	8	265.98	266.70
440904	440908	12	8	287.90	287.70
1 1/8" DIAMETER					
440909	440917	3	16	118.27	122.69
440910	440918	3 ½	12	132.66	136.79
440911	440919	4	12	146.45	150.87
440912	440920	4 ½	12	160.54	164.96
440913	440921	5	8	174.35	179.05
440914	440922	6	8	201.64	207.23
440915	440923	7	8	229.82	235.41
440975	440924	8	8	258.10	263.59
440916	440925	10	8	314.36	319.95

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L9® HEX BOLTS ZINC DICHROMATE (CONT)

PART NUMBER		LENGTH IN INCHES	PKG. QTY	LBS. PER 100 PCS.	
COARSE	FINE			COURSE	FINE
1 1/4" DIAMETER					
440926	440939	3	12	148.85	161.53
440927	440940	3 1/2	8	166.23	179.11
440928	440941	4	8	183.61	196.49
440929	440942	4 1/2	8	200.99	213.87
440930	440943	5	6	218.37	231.25
440931	440944	5 1/2	6	235.75	248.63
440932	440945	6	6	251.86	265.20
440933	440946	7	6	286.62	299.96
440934	440947	8	6	321.38	334.72
440935	440948	9	6	356.14	369.48
440936	440949	10	6	390.90	404.24
440937	440950	11	4	424.50	440.60
440938	440951	12	4	458.60	475.10
1 1/2" DIAMETER					
440952	440959	4	5	285.50	300.97
440953	440960	5	5	334.60	350.63
440954	440961	6	5	383.70	400.29
440955	440962	7	4	434.80	449.12
440956	440964	8	4	481.90	496.20
440957	440968	10	4	580.10	597.00
440958	440972	12	3	678.30	694.40

180,000 MIN. P.S.I. Tensile

L9® NUTS AND WASHERS

L9® HEX NUTS CAD DICHROMATE & WAX

PART NUMBER		LENGTH IN INCHES	PKG. QTY	LBS. PER 100 PCS.
COARSE	FINE			COURSE
444002	444022	1/4 - 20, 28	100	.87
444004	444024	5/16 - 18, 24	100	1.25
444006	444026	3/8 - 16, 24	100	1.77
444008	444028	7/16 - 14, 20	50	3.33
444010	444030	1/2 - 13, 20	50	4.27
444012	444032	9/16 - 12, 18	25	6.77
444014	444034	5/8 - 11, 18	25	8.42
444016	444036	3/4 - 10, 16	20	14.50

PART NUMBER		LENGTH IN INCHES	PKG. QTY	LBS. PER 100 PCS.
COARSE	FINE			COURSE
444018	444038	7/8 - 9, 14	15	23.00
444020	444040	1 - 8, 14	10	34.10
444104	444128	1 1/8 - 7, 12	8	49.70
444110	444134	1 1/4 - 7, 12	8	67.60
444116	444140	1 1/2 - 7, 12	5	105.80

L9® STOVER LOCK NUTS CAD DICHROMATE & WAX

PART NUMBER		LENGTH IN INCHES	PKG. QTY	LBS. PER 100 PCS.
COARSE	FINE			COURSE
446002	446052	1/4 - 20, 28	100	0.77
446004	446054	5/16 - 18, 24	100	1.07
446006	446056	3/8 - 16, 24	100	1.54
446008	446058	7/16 - 14, 20	50	2.67
446010	446060	1/2 - 13, 20	50	3.48
446012	446062	9/16 - 12, 18	25	5.62
446014	446064	5/8 - 11, 18	25	6.84
446016	446066	3/4 - 10, 16	20	11.70
446018	446068	7/8 - 9, 14	15	18.90
446020	446070	1 - 8, 14	10	29.00
446022	446072	1 1/8 - 7, 12	8	42.30
446024	446074	1 1/4 - 7, 12	6	56.60
446026	446078	1 1/2 - 7, 12	5	91.80

L9® TENSION WASHERS ZINC DICHROMATE

PART NUMBER	LENGTH IN INCHES	PKG. QTY	LBS. PER 100 PCS.
448002	1/4	100	0.53
448004	5/16	100	0.61
448006	3/8	100	0.85
448008	7/16	50	1.59
448010	1/2	50	2.22
448012	9/16	50	2.88
448014	5/8	50	3.28
448016	3/4	40	5.00
448018	7/8	30	6.79
448020	1	20	8.35
448022	1 1/8	20	10.75
448024	1 1/4	12	16.04
448026	1 1/2	10	24.27

FASTENERS

L9® Nuts and Washers • Machinery Bushings • Key Stock

MACHINERY BUSHINGS

- Used on agricultural implements such as road machinery, mine and mill equipment, cars, trucks and tractors

• Package quantity = 25



PRODUCT CODE	PART NO.	SHAFT DIAMETER (IN)	OUTSIDE DIAMETER (IN)	GAUGE
456-001	M16L	9/16	1	18
456-004	M18L	5/8	1 1/8	18
456-005	M18M	5/8	1 1/8	14
456-007	M20L	3/4	1 1/4	18
456-008	M20M	3/4	1 1/4	14
456-009	M20H	3/4	1 1/4	10
456-010	M22L	7/8	1 3/8	18
456-011	M22M	7/8	1 3/8	14
456-013	M24L	1	1 1/2	18
456-014	M24M	1	1 1/2	14
456-015	M24H	1	1 1/2	10
456-016	M28L	1 1/8	1 3/4	18
456-017	M28M	1 1/8	1 3/4	14
456-018	M28H	1 1/8	1 3/4	10
456-019	M30L	1 1/4	1 7/8	18
456-020	M30M	1 1/4	1 7/8	14
456-021	M30H	1 1/4	1 7/8	10
456-022	M34L	1 3/8	2 1/8	18
456-023	M34M	1 3/8	2 1/8	14
456-024	M34H	1 3/8	2 1/8	10
456-025	M36L	1 1/2	2 1/4	18
456-026	M36M	1 1/2	2 1/4	14
456-027	M36H	1 1/2	2 1/4	10
456-029	M38M	1 5/8	2 3/8	14
456-030	M38H	1 5/8	2 3/8	10
456-032	M40M	1 3/4	2 1/2	14
456-033	M40H	1 3/4	2 1/2	10
456-035	M46M	1 7/8	2 3/4	14
456-036	M46H	1 7/8	2 3/4	10
456-038	M48M	2	3	14
456-039	M48H	2	3	10
456-041	M50M	2 1/8	3 1/8	14
456-042	M50H	2 1/8	3 1/8	10
456-044	M52M	2 1/4	3 1/4	14
456-045	M52H	2 1/4	3 1/4	10
456-047	M54M	2 3/8	3 3/8	14
456-048	M54H	2 3/8	3 3/8	10
456-050	M56M	2 1/2	3 1/2	14
456-051	M56H	2 1/2	3 1/2	10

(L) 18 gauge - 0.050" (M) 14 gauge - 0.083 (H) 10 gauge - 0.134"

KEY STOCK



- 12" length square bar
- Cold drawn steel AISI-C - 1018
- Hardness 140-188 Brinnell
- Yield strength 43,000/55,000 PSI
- Tensile strength of 70,000-85,000 PSI

- Chemical composition:
 - .15/.20 Carbon
 - .40 Phosphorus
 - .60/.90 Manganese
 - .50 Sulphur
- Material Test Report Available on request
- Package quantity = 6

PRODUCT CODE	PART NO.	SIZE (IN)
457-006	KS22	1/8
457-007	KS33	3/16
457-009	KS44	1/4
457-010	KS55	5/16
457-011	KS66	3/8
457-012	KS77	7/16
457-013	KS88	1/2
457-014	KS99	9/16
457-015	KS110	5/8
457-016	KS112	3/4
457-017	KS114	7/8
457-018	KS116	1

SPRING PINS

SPRING PINS KIT

- Contains 240 pcs, 15 popular sizes
- Packed in metal drawer
- Easy identification label in lid



PRODUCT CODE	PART NUMBER	PKG QTY
476-103	SK34	1

SPRING PINS - SLOTTED



- High Carbon Steel (1070 - 1095)
- Chamfered ends simplify insertion
- Spring action locks each pin tightly, easily removable with a punch
- Conform to MIL-P 10971, MS17401 to MS171900, MS9047-48, MS16562, NAS 561 and SAE std J496

• Package quantity = 50

PRODUCT CODE	PART NUMBER	NOMINAL DIAMETER X LENGTH (IN)
476-001	SP1	1/16 x 3/16
476-002	SP2	1/16 x 5/16
476-003	SP3	1/16 x 1/2
476-004	SP4	1/16 x 5/8
476-005	SP5	1/16 x 3/4
476-006	SP6	1/16 x 7/8
476-007	SP7	1/16 x 1
476-008	SP8	5/64 x 1/4
476-009	SP9	5/64 x 1/2
476-010	SP10	5/64 x 9/16
476-011	SP11	5/64 x 3/4
476-012	SP12	5/64 x 1
476-013	SP13	5/64 x 1 1/4
476-014	SP14	5/64 x 1 1/2
476-015	SP15	3/32 x 5/16
+ 476-016	SP16	3/32 x 1/2
+ 476-017	SP17	3/32 x 5/8
+ 476-018	SP18	3/32 x 3/4
+ 476-019	SP19	3/32 x 7/8
+ 476-020	SP20	3/32 x 1
476-021	SP21	3/32 x 1 1/4
476-022	SP22	3/32 x 1 1/2
476-023	SP23	1/8 x 3/8
+ 476-024	SP24	1/8 x 1/2
476-025	SP25	1/8 x 5/8
476-026	SP26	1/8 x 3/4
476-027	SP27	1/8 x 7/8
+ 476-028	SP28	1/8 x 1
476-029	SP29	1/8 x 1 1/4
476-030	SP30	1/8 x 1 1/2
476-031	SP31	1/8 x 1 3/4

PRODUCT CODE	PART NUMBER	NOMINAL DIAMETER X LENGTH (IN)
476-032	SP32	1/8 x 2
476-033	SP33	5/32 x 1/2
476-034	SP34	5/32 x 5/8
+ 476-035	SP35	5/32 x 3/4
+ 476-036	SP36	5/32 x 1
476-037	SP37	5/32 x 1 1/4
+ 476-038	SP38	5/32 x 1 1/2
476-039	SP39	3/16 x 1/2
476-040	SP40	3/16 x 5/8
+ 476-041	SP41	3/16 x 3/4
+ 476-042	SP42	3/16 x 1
+ 476-043	SP43	3/16 x 1 1/4
476-044	SP44	3/16 x 1 1/2
476-045	SP45	3/16 x 1 3/4
476-046	SP46	3/16 x 2
476-047	SP47	3/16 x 2 1/4
476-048	SP48	7/32 x 5/8
476-049	SP49	7/32 x 1 1/4
476-050	SP50	7/32 x 1 3/8
476-051	SP51	7/32 x 1 1/2
476-052	SP52	7/32 x 1 3/4
476-053	SP53	1/4 x 5/8
476-054	SP54	1/4 x 3/4
476-055	SP55	1/4 x 7/8
+ 476-056	SP56	1/4 x 1
476-057	SP57	1/4 x 1 1/4
+ 476-058	SP58	1/4 x 1 1/2
476-059	SP59	1/4 x 1 3/4
476-060	SP60	1/4 x 2
476-061	SP61	1/4 x 2 1/4
476-062	SP62	1/4 x 2 1/2
476-063	SP63	5/16 x 3/4
476-064	SP64	5/16 x 7/8
+ 476-065	SP65	5/16 x 1
+ 476-066	SP66	5/16 x 1 1/2
476-067	SP67	5/16 x 1 3/4
476-068	SP68	5/16 x 2
476-069	SP69	5/16 x 2 1/2
476-070	SP70	3/8 x 3/4
476-071	SP71	3/8 x 1
476-072	SP72	3/8 x 1 1/2
476-073	SP73	3/8 x 2
476-074	SP74	3/8 x 2 1/2
476-075	SP75	3/8 x 3
476-076	SP76	7/16 x 1
476-077	SP77	7/16 x 1 1/4
476-078	SP78	7/16 x 1 1/2
476-079	SP79	7/16 x 2
476-080	SP80	7/16 x 2 1/2
476-081	SP81	7/16 x 3
476-082	SP82	1/2 x 1 1/4
476-083	SP83	1/2 x 1 1/2
476-084	SP84	1/2 x 1 3/4
476-085	SP85	1/2 x 2
476-086	SP86	1/2 x 2 1/2
476-087	SP87	1/2 x 3

+ Included in SK34 Spring Pin Kit

FASTENERS

Spring Pins • Clevis Pins • Clevis Yolks

SPRING PINS (CONT)

SHEAR STRENGTH CHART

Diameter	Minimum Double Shear Strength	Diameter	Minimum Double Shear Strength
1/16"	425 lbs	7/32"	5700 lbs
5/64"	650 lbs	1/4"	7700 lbs
3/32"	1000 lbs	5/16"	11500 lbs
1/8"	2100 lbs	3/8"	76000 lbs
5/32"	3000 lbs	7/16"	20000 lbs
3/16"	4400 lbs	1/2"	25800 lbs

CLEVIS PINS

UNIVERSAL CLEVIS PINS

- Multiple cotter pin holes to provide wide range of grip lengths
- Reduce number of pins required for emergency coverage
- For cars, truck and farm implements
- Case hardened high carbon steel, plated
- **Package quantity = 6**



Product Code	Part Number	Dimensions Diameter x Length (in)
478-044	U44	1/4 x 2
478-054	U54	5/16 x 2
478-064	U64	3/8 x 2
478-074	U74	7/16 x 2
478-075	U75	7/16 x 2 1/2
478-076	U76	7/16 x 3
478-084	U84	1/2 x 2
478-085	U85	1/2 x 2 1/2
478-086	U86	1/2 x 3
478-106	U106	5/8 x 3
478-126	U126	3/4 x 3

STANDARD CLEVIS PINS

- Usable lengths shown are from under the head to start of hole.
- Case hardened high carbon steel
- **Package quantity = 25**



Product Code	Part Number	Diameter	Dimensions Length (in)	
			Overall	Usable
478-450	450	3/16	31/32	5/8
478-451	451	1/4	7/8	9/16
478-464	464	1/4	1 3/8	1 1/8
478-548	548	5/16	7/8	9/16
478-562	562	5/16	1 3/16	7/8

Product Code	Part Number	Diameter	Dimensions Length (in)	
			Overall	Usable
478-564	564	5/16	1 1/16	3/4
478-572	572	5/16	1 3/16	15/16
478-580	580	5/16		1 1/4
478-596	596	5/16	1 9/16	1 1/4
478-600	600	5/16	1 13/16	1 3/16
478-635	635	5/16	1 7/8	1 9/16
478-656	656	3/8	1	5/8
478-664	664	3/8	1 1/8	13/16
478-670	670	3/8	1 3/16	13/16
478-680	680	3/8	1 3/8	1 1/16
478-688	688	3/8	1 1/2	1 3/16
478-696	696	3/8	1 5/8	1 1/4
478-779	779	7/16	1 3/8	1
478-796	796	7/16	1 3/4	1 3/8
478-835	835	7/16	1 7/8	1 1/2
478-880	880	1/2		
478-891	891	1/2	1 1/2	1 1/8
478-905	905	1/2		
478-928	928	1/2	2 1/8	1 13/16

CLEVIS YOLKS

- Drop forged S.A.E. fine thread, bare
- 5 sizes service all cars and trucks
- Package includes clevis pins and cotter pins
- **Package quantity = 6**



Product Code	Part Number	Clevis Pin Number	Cotter Pin Size
479-004	CY4	451	1/16 x 1/2
479-005	CY5	562	3/32 x 1/2
479-006	CY6	670	3/32 x 1/2
479-007	CY7	779	3/32 x 1
479-008	CY8	891	1/8 x 1

CLEVIS YOLK DIMENSIONS

Product Code	Dimensions (in)				
	A	B	C	D	E
479-004	1/4	1/4 UNF	2	9/32	5/8
479-005	5/16	5/16 UNF	2 1/4	1 1/32	3/4
479-006	3/8	3/8 UNF	2 1/2	7/16	7/8
479-007	7/16	7/16 UNF	2 7/8	1/2	1
479-008	1/2	1/2 UNF	3	9/16	1 1/8

HITCH PIN CLIPS

- Made of oil tempered spring wire especially for agricultural implements, lawn mowers, construction and industrial machinery
- **Package quantity = 10**



HITCH PIN CLIP ASSORTMENT

- 15 popular sizes
- Contains 190 pieces
- Packed in metal display



PRODUCT CODE	PART NUMBER	PKG QTY
480-190	HP190	1

PRODUCT CODE	PART NO.	SIZE CATEGORY (IN)	RECOMMENDED DRILL HOLE SIZE (IN)	RECOMMENDED SHAFT DIAMETER MIN	MAX	OVERALL LENGTH	INSIDE DIAMETER OF EYE	GROOVE LENGTH I.D.
480-001	1	5/32	5/32 or 11/64	1/2 x 5/8	5/8 x 1 RECT	3	1/2	
480-002	2	1/8	+ 9/64	3/4	+ 1 1/8	3 1/4	1	
+ 480-003	3	3/32	7/64	1/4	+ 1/2	1 5/8	5/16	
480-004	4	11/64	11/64 or 3/16	1/2 x 3/4	5/8 x 1 RECT	3	5/8	
480-005	5	11/64	11/64 or 3/16	7/8	+ 1 1/16	2 5/8	7/8	
+ 480-006	6	3/16	3/16 or 13/64	+ 5/8	1	3 1/4	7/8	
+ 480-007	7	3/32	7/64	+ 1/4	5/8	2 5/16	5/8	
+ 480-008	8	3/16	3/16 or 13/64	+ 7/8	1 1/8	3 3/4	7/8	
+ 480-009	9	5/32	5/32 or 11/64	+ 3/4	1 1/8	3 5/16	3/4	
+ 480-010	10	5/32	5/32 or 11/64	5/8	1	2 15/16	3/4	
+ 480-011	11	1/8	9/64	+ 7/16	3/4	2 9/16	7/16	
480-012	12	11/64	11/64 or 3/16	1/2 x 1	7/8 x 1 RECT	3 1/16	7/8	
+ 480-013	13	3/32	3/32 or 7/64	+ 1/4	3/8	13/16	1/4	
+ 480-014	14	3/32	7/64	+ 3/8	3/4	2 1/2	7/16	
480-015	15	1/8	9/64	+ 1/2	3/4	1 9/16	7/16	
+ 480-016	16	1/8	9/64	+ 1/2	3/4	1 3/4	7/16	
+ 480-017	17	3/32	3/32 or 7/64	+ 3/8	1/2	1 9/16	5/16	
+ 480-018	18	1/16	5/64	+ 3/8	1/2	1 9/16	5/16	
0 480-019	19	1/4	1/4 or 17/64	ON APPL	ON APPL	4 3/8	3/4	
0 480-020	20	5/16	5/16 or 21/64	ON APPL	ON APPL	3 5/16	7/8	
+ 480-021	21	3/64	1/16	+ 1/8	3/16	9/16	1/8	
+ 480-022	22	1/16	5/64	+ 1/4	1/2	1 5/16	5/16	
+ 480-023	23	3/64	3/64	+ 3/16	3/8	1	1/4	
480-024	24	3/64	1/16	+ 1/4	3/8	1 9/16	5/16	
480-025	25	5/64	5/64	+ 5/16	3/8	1 13/32	9/64	
480-101	1x	.032				15/32	3/32	5/32
480-102	2x	.062				1	3/16	3/8
480-103	3x	.062				1 1/16	1/8	1/4
480-104	4x	.047				7/8	1/8	1/4
480-105	5x	.035				1/2	1/8	5/32
480-106	6x	.046 sq				15/16	3/16	5/16
480-107	7x	.105				2 1/16	7/16	25/32
480-110	10x	.177				2 5/8	3/4	3/4

0 High Carbon Wire - All others tempered

+ Included in Assortment HP190

See Hitch Pins chart on pg. I-5

FASTENERS

Snap Rings

SNAP RINGS

- Manufactured from high carbon S.A.E. 1060-1090 Steel and heat treated for resiliency and maximum performance
- Used as retainers on automotive, agricultural, industrial, appliance and heavy duty equipment
- **Package Quantity = 20**



PRODUCT CODE	PART NUMBER	RING SIZE (IN)	FREE DIA. A
482-025	1300-25	1/4	.280
482-031	1300-31	5/16	.346
482-037	1300-37	3/8	.415
482-043	1300-43	7/16	.482
482-050	1300-50	1/2	.548
482-056	1300-56	9/16	.620
482-062	1300-62	5/8	.694
482-068	1300-68	1 1/16	.763
482-075	1300-75	3/4	.831
482-081	1300-81	13/16	.901
482-087	1300-87	7/8	.971
482-093	1300-93	15/16	1.041
482-100	1300-100	1	1.111
482-106	1300-106	1 1/16	1.180
482-112	1300-112	1 1/8	1.249
482-125	1300-125	1 1/4	1.388
482-131	1300-131	1 5/16	1.456
482-137	1300-137	1 3/8	1.526
482-150	1300-150	1 1/2	1.660
482-175	1300-175	1 3/4	1.942
482-200	1300-200	2	2.210
482-325	1400-25	1/4	.225
482-331	1400-31	5/16	.281
482-337	1400-37	3/8	.338
482-343	1400-43	7/16	.395
482-350	1400-50	1/2	.461
482-356	1400-56	9/16	.521
482-362	1400-62	5/8	.579
482-368	1400-68	11/16	.635
482-375	1400-75	3/4	.693
482-381	1400-81	13/16	.751
482-387	1400-87	7/8	.810
482-393	1400-93	15/16	.867
482-400	1400-100	1	.925
482-412	1400-112	1 1/8	1.041
482-425	1400-125	1 1/4	1.156
482-431	1400-131	1 5/16	1.214
482-437	1400-137	1 3/8	1.272
482-450	1400-150	1 1/2	1.387
482-475	1400-175	1 3/4	1.618
482-500	1400-200	2	1.850
482-612	1500-12	1/8	.094

PRODUCT CODE	PART NUMBER	RING SIZE (IN)	FREE DIA. A
482-615	1500-15	5/32	.114
482-618	1500-x18	3/16	.122
482-619	1500-18	3/16	.145
482-625	1500-25	1/4	.207
482-631	1500-x31	5/16	.243
482-637	1500-37	3/8	.300
482-643	1500-43	7/16	.337
482-650	1500-50	1/2	.392
482-715	1540-15	5/32	.113
482-718	1540-18	3/16	.143
482-725	1540-25	1/4	.204
482-731	1540-31	5/16	.242
482-737	1540-37	3/8	.292
482-756	1540-56	1/2	.385

See Snap Ring chart on pg. I-4

SNAP RING ASSORTMENT

- Contains 480 Rings
- 34 popular sizes
- Packed in metal drawer
- Easy identification label in lid
- 561A pliers included



PRODUCT CODE	PART NUMBER	PKG QTY
482-834	SRA-34	1



TOOLS

48" Lift - All Jack..... 94	ISO Metric Fine75	ISO Metric Fine..... 79	Reduced Shank Drills72	Sutton Tools..... 83
Adjustable Button Dies -	Hand Taps -	Jobber Drills 70	Rivet Nuts 84	Tap Button Die Set 79
Chrome Steel77	Ground Thread.....80	Fractional..... 70	Rivet Nut Tool Kit 84	ISO Metric Coarse And Fine
ISO Metric Coarse.....77	Ground Thread High Speed	Metal Case..... 70	Rivets 84	Combination 79
ISO Metric Fine.....77	Steel..... 80	KDS Digital Angle Sensor.. 90	Hand Rivet Tool Kit 84	ISO Metric Coarse And UNF
NPT77	UNC..... 80	KDS Knives..... 87	Screw Extractors 80	Combination 79
UNC.....77	ISO Metric Coarse..... 81	Finger Guard L-Knife.....87	Screw Extractors Drill Set	Metric (ISO Coarse)..... 79
UNF77	NPT (Taper Pipe)..... 81	Grip Fit L-Knives.....87	 80	UNC..... 79
Axes.....95	UNF..... 81	KDS L-Knives.....87	Shears..... 85	UNC & UNF Combination. 79
Brass Jiggle Siphon..... 92	UNS..... 81	Multi-Pro L-Knives87	Multi-Purpose Shears..... 85	UNF 79
Brushes..... 96	ISO Metric Fine..... 82	Banana Sickle..... 88	Electrical Shears..... 86	Tape Measures..... 90
Button Die Holders 78	ISO Metric Spark Plug 82	Grip Fit G-Knives..... 88	Heavy Duty Shears..... 86	Quadspeed Long,
Cable and Spring	Hand Taps Set -	Job Boss Pro H-Cutters... 88	Heavy Duty Short Nose	Steel Tape..... 90
Wire Cutter..... 85	Chrome Steel76	Multi-Pro Hook It 88	Shears..... 86	Docap Tape Measure..... 91
Cable Cutters..... 85	ISO Metric Coarse.....76	Safety Master Knives..... 88	Multi-Purpose	Good Grip Stainless Steel
Bolt Cutters..... 85	ISO Metric Fine.....76	Slim S-Knives..... 88	Angle Shears 86	Tape..... 91
Cable Cutters..... 85	Spark Plug.....76	KDS Scissors..... 89	Shovels 97	Good Grip Steel Tape..... 91
Cutters	UNC.....76	KDS Stainless Steel	Drain Spade Turn Step	Taper Shank Drills.....72
Replacement Blades 85	UNF.....76	Scissors..... 89	Shovel (Track Shovel).....97	Tap Wrenches.....73
"C" Clamps..... 93	Hand Taps Set -	KDS Scraper 89	Grain Scoop Shovel.....97	T-Tap Wrenches 73
Centre Drills.....71	Ground Thread..... 82	Good Grip Scraper..... 89	Round Point Shovel.....97	Transfer Pumps 92
Chisel Set 95	Ground Thread High Speed	KDS Spare Blades..... 89	Round Point Shovel with	Fluid Lubricant Pail Pump 92
14 PC Punch & Chisel Set. 95	Steel..... 82	Magnetic Tools 91	Y Handle 97	Vises..... 93
Funnel (Heavy Duty)..... 92	ISO Metric Coarse..... 82	Telescopic Tools 91	Sidewalk Scraper 97	Fixed Base Vises with
Grease Coupler..... 93	ISO Metric Fine..... 82	Metric Scale 90	Square Point Shovel 97	Anvil..... 93
Hand Taps -	UNC..... 82	Panel Drills71	Square Point Shovel with	Replacement Jaws 93
Chrome Steel73	Heavy Duty Cobalt..... 83	"Twin Point"	Y Handle 97	Swivel Base Only..... 93
UNC.....73	Jobber Drills 83	Double Ended71	Sledge/Club Hammers with	
ISO Metric Conduit74	Hex Die Nuts -	Pipe Wrenches 84	Wood Handle..... 95	
ISO Metric Spark Plug74	Chrome Steel 78	Aluminum Pipe Wrench..... 84	Sledge Hammer with	
NPT (Taper Pipe).....74	UNC..... 78	Cast Iron Pipe Wrench..... 84	Fiberglass Handle 95	
UNF74	UNF..... 78	Power Puller 94	Slide Hammer 92	
UNS.....74	UNS..... 78	1 Ton Hand Power Puller .. 94	Snap Ring Pliers.....84	
ISO Metric Coarse.....75	ISO Metric Coarse..... 79	4 Ton Hand Power Puller . 94	Snow Brush..... 96	

JOBBER DRILLS

STANDARD DRILL SURFACE TREATMENT

The standard treatments applied to the various drill types are indicated on the respective pages of the catalogue.

SILVER JET

- This finish is recommended for the general purpose drilling of ferrous and non-ferrous materials but is particularly suitable for the drilling of aluminum, brass and non-abrasive diecast materials.

BLACK JET

- When tough or abrasive metals are being drilled, the use of a black jet drill is recommended. The P&N/Sutton Black Jet treatment produces an extremely hard, wear resistant surface, thereby improving noticeably the life of the drill. It is particularly suited for the drilling of cast iron high tensile steel, stainless steel and certain abrasive plastics.

METAL CASE



PART NUMBER	SET NUMBER	SIZE RANGE	RISES	QTY	PKG QTY
028828	3	1/16-1/2	64ths	29	1

FRACTIONAL

- Most popular drills used by engineers, tradesmen and home handymen
- Designed to give optimum performance in a wide range of materials
- Straight Shank
- High Speed Steel
- 118° point
- Black Jet Finish



	PART NUMBER	DIAMETER	DECIMAL EQUIVALENT	LENGTH (IN) FLUTE	LENGTH (IN) OVERALL	PKG QTY
*	005317	1/64	0.0156	3/16	3/4	10
*	002460	1/32	0.0312	1/2	1 3/8	10
*	002477	3/64	0.0469	3/4	1 3/4	10
*	000411	1/16	0.0625	7/8	1 7/8	10
*	000473	5/64	0.0781	1	2	10
	011035	3/32	0.0938	1 1/4	2 1/4	10
*	000190	7/64	0.1094	1 1/2	2 5/8	10
	005997	1/8	0.125	1 5/8	2 3/4	10
	005126	9/64	0.1406	1 3/4	2 7/8	10
	005430	5/32	0.1562	2	3 1/8	10
	005133	11/64	0.1719	2 1/8	3 1/4	10
	005140	3/16	0.1875	2 5/16	3 1/2	10
	004143	13/64	0.2031	2 7/16	3 5/8	10
	008042	7/32	0.2188	2 1/2	3 3/4	10
	006260	15/64	0.2344	2 5/8	3 7/8	10
	005690	1/4	0.25	2 3/4	4	10

* Available in Silver Jet Finish Only

JOBBER DRILLS (CONT)

FRACTIONAL (CONT)

PART NUMBER	DIAMETER	DECIMAL EQUIVALENT	LENGTH (IN) FLUTE	LENGTH (IN) OVERALL	PKG QTY
006963	17/64	0.2656	2 7/8	4 1/8	10
008684	9/32	0.2812	2 15/16	4 1/4	10
007465	19/64	0.2969	3 1/16	4 3/8	10
008691	5/16	0.3125	3 3/16	4 1/2	10
008707	21/64	0.3281	3 5/16	4 5/8	10
007724	11/32	0.3438	3 7/16	4 3/4	5
010182	23/64	0.3594	3 1/2	4 7/8	5
006734	3/8	0.3750	3 5/8	5	5
012155	25/64	0.3906	3 3/4	5 1/8	5
010199	13/32	0.4062	3 7/8	5 1/4	5
014265	27/64	0.4219	3 15/16	5 3/8	5
008059	7/16	0.4375	4 1/16	5 1/2	5
015132	29/64	0.4531	4 3/16	5 5/8	5
011042	15/32	0.4688	4 5/16	5 3/4	5
015149	31/64	0.4844	4 3/8	5 7/8	5
006970	1/2	0.5	4 1/2	6	5
007779	17/32	0.5312	4 13/16	6 5/8	1
006048	9/16	0.5625	4 13/16	6 5/8	1
006772	5/8	0.625	5 3/16	7 1/8	1

* Available in Silver Jet Finish Only

PANEL DRILLS

- P&N/Sutton Panel drills have been developed to drill holes for rivets in flat and curved panels
- Used by sheet metal workers and other tradesmen
- Recommended only for shallow holes no deeper than 1.1/4 times the drill diameter
- They can also be used for drilling hard materials eg. stainless steel
- When using twin point drills ensure that the chuck jaws are fully tightened
- High Speed Steel
- Silver Jet Finish
- Fractional and wire gauge
- 135° Self-centering point
- Straight shank
- No centre punching
- Drill cutting at break through
- Accurate round holes
- Minimum burr
- Easier assembly of panels
- Faster production

"TWIN POINT" DOUBLE ENDED



PART NUMBER	DIAMETER	FLUTE	LENGTH (IN) OVERALL	PKG QTY
000671	1/8	9/16	2	10
000145	Wire Ga.30	9/16	2	10

CENTRE DRILLS

- Combined drill and counter sink
- High Speed Steel
- The plain type centre drills are used to drill female 60° centre holes in ends of the shafts and components which will later revolve between centres
- Centre drills are also used to ensure accurate starting and centering
- Silver Jet Finish
- Manufactured to ANSI B94.11.1967 standard



PART NUMBER	NUMBER	PILOT DIAMETER (MM)	BODY DIAMETER (MM)	PKG QTY
004006	1	1.00	3.15	5
003160	2	2.00	5.00	5
002453	3	2.50	6.30	5
001456	4	3.15	8.00	5
001883	5	4.00	10.00	5
004877	6	5.00	12.50	1
009551	7	6.30	16.00	1
392301	8	8.00	20.00	1

TOOLS

Reduced Shank Drills • Taper Shank Drills

REDUCED SHANK DRILLS

- Designed to increase the drilling capacity of 1/4, 3/8 and 1/2 diameter drill chucks
- These drills must be used with extreme care and run at recommended speeds to avoid burning and blunting the drill point when drilling
- Straight Shank
- High Speed Steel
- Ground Land (Silver Jet)
- 118° point
- Black Jet Flute
- Fractional



PART NUMBER	DIAMETER	FLUTE LENGTH	OVERALL LENGTH	M.T.S. NO	PKG QTY
1/2 DIAMETER X 2 1/4 LONG					
• Black Jet Finish					
• Silver and Deming Type					
352565	33/64	0.5156	3 3/8	6	1
001937	17/32	0.5313	3 3/8	6	1
352572	35/64	0.5469	3 3/8	6	1
000893	9/16	0.5625	3 3/8	6	1
352589	37/64	0.5781	3 3/8	6	1
003436	19/32	0.5938	3 3/8	6	1
352596	39/64	0.6094	3 3/8	6	1
000237	5/8	0.6250	3 3/8	6	1
352602	41/64	0.6406	3 3/8	6	1
001692	21/32	0.6563	3 3/8	6	1
352619	43/64	0.6719	3 3/8	6	1
001081	11/16	0.6875	3 3/8	6	1
352626	45/64	0.7031	3 3/8	6	1
004617	23/32	0.7188	3 3/8	6	1
352633	47/64	0.7344	3 3/8	6	1
000855	3/4	0.7500	3 3/8	6	1
352640	49/64	0.7656	3 3/8	6	1
004167	25/32	0.7813	3 3/8	6	1
352657	51/64	0.7969	3 3/8	6	1
003535	13/16	0.8125	3 3/8	6	1
010250	27/32	0.8438	3 3/8	6	1
352671	55/64	0.8594	3 3/8	6	1
001234	7/8	0.8750	3 3/8	6	1
352688	57/64	0.8906	3 3/8	6	1
008745	29/32	0.9063	3 3/8	6	1
352695	59/64	0.9219	3 3/8	6	1
004853	15/16	0.9375	3 3/8	6	1
352701	61/64	0.9351	3 3/8	6	1
010656	31/32	0.9688	3 3/8	6	1
352718	63/64	0.9844	3 3/8	6	1
001388	1	1.0000	3 3/8	6	1
006321	1.1/16	1.0625	3 3/8	6	1
004075	1.1/8	1.1250	3 3/8	6	1
010663	1.3/16	1.1875	3 3/8	6	1
003900	1.1/4	1.25	3 3/8	6	1

TAPER SHANK DRILLS

- P&N/Sutton Black Jet taper shank drills are a general purpose drill suitable for a wide variety of material and industrial applications
- High Speed Steel
- Black Jet Finish
- They have Morse Taper Shanks for holding and driving
- The tang at the end of the shank is used for ejecting the drill from the socket or sleeve



PART NUMBER	DIAMETER	FLUTE LENGTH	OVERALL LENGTH	M.T.S. NO	PKG QTY
005447	1/2	3 31/32	7 5/32	1	1
008066	33/64	3 31/32	7 5/32	1	1
003283	17/32	4 1/4	7 7/16	1	1
005454	35/64	4 1/4	7 7/16	1	1
002774	9/16	4 1/2	8 3/8	2	1
005461	31/64	4 1/2	8 3/8	2	1
006024	19/32	4 1/2	8 5/8	2	1
007212	39/64	4 3/4	8 5/8	2	1
001449	5/8	4 7/8	8 5/8	2	1
005836	41/64	4 7/8	8 3/4	2	1
003412	21/32	4 7/8	8 3/4	2	1
017303	43/64	5 1/8	9	2	1
003122	11/16	5 1/4	9	2	1
009421	45/64	5 1/8	9	2	1
004679	23/32	5 1/2	9 1/8	2	1
009438	47/64	5 1/2	9 1/8	2	1
001609	3/4	5 1/2	9 3/8	2	1
010229	49/64	5 1/2	9 1/8	2	1
005843	25/32	5 3/4	9 3/8	2	1
013442	51/64	5 3/4	9 5/8	2	1
005294	13/16	5 7/8	9 5/8	2	1
016061	53/64	5 7/8	9 5/8	2	1
009445	27/32	5 7/8	9 3/4	2	1
013459	55/64	6 1/8	9 3/4	2	1
002422	7/8	6 1/8	9 3/4	2	1
017310	57/64	6 1/4	10	2	1
011615	29/32	6 1/4	10	2	1
006499	15/16	6 1/4	11	3	1
012261	61/64	6 1/4	11	3	1
008073	31/32	6 1/2	11	3	1
002316	1	6 1/2	11 1/2	3	1
012278	1 1/32	6 1/2	11 1/4	3	1
006284	1 1/16	6 5/8	11 3/8	3	1
004310	1 1/8	6 7/8	11 5/8	3	1
004150	1 1/4	7 1/4	12	3	1
011127	1 5/16	7 1/4	13 1/8	4	1
006291	1 1/2	7 7/8	13 3/4	4	1

TAP WRENCHES

- The P&N/Sutton bar pattern tapwrench is robustly constructed to withstand the torque applied during the tapping operation
- Correct selection of the tap wrench will ensure there is a positive holding grip between the square end of the tap and the V shape hardened and tempered steel jaws
- The knurled handle reduce hand slippage



PART NUMBER	NUMBER	HAND TAP RANGE (IN)
M9080108	0	M1-M8 125MM
M9080110	1	M1-M10 175MM
M9080112	1.5	M1-M12 175MM
M9080412	2	M4-M12 265MM
M9080520	3	M5-M20 375MM
M9080927	4	M9-M27 480MM
M9081233	5	M12-M33 700MM
M9081842	6	M18-M42 1000MM

T-TAP WRENCHES

- The P&N T pattern tap wrench is designed to reach those jobs that are inaccessible with the Bar pattern tap wrench



PART NUMBER	P&N REFERENCE NUMBER	NUMBER	HAND TAP RANGE (IN)
829618	300-7935	1/4	1/16 to 1/4
829625	300-7953	1/2	5/16 to 1/2

HAND TAPS - CHROME STEEL

- P&N/Sutton chrome steel taps are manufactured from high quality chromium tool steel
- The threads are formed using precision ground circular rolls, which together with modern quality control techniques ensure a quality product
- The flutes are polished to give a smooth cutting surface and sharp cutting edges
- After heat treatment, the chamfer lead is precision machine ground ensuring even cutting and quality threads
- 60° Thread form
- T = Taper, I = Intermediate, B = Bottoming



UNC

Part Number	Size	Threads Per Inch.	Shank Dia.	Length (In.) Thread	Length (In.) Overall	No. of Flutes	Tapping Drill Size	Type
020112	No. 10	24	0.194	7/8	2 3/8	3	5/32	T
017549	No. 10	24	0.194	7/8	2 3/8	3	5/32	I
017556	No. 10	24	0.194	7/8	2 3/8	3	5/32	B
014555	1/4	20	0.255	1	2 1/2	4	13/64	T
023267	1/4	20	0.255	1	2 1/2	4	13/64	I
014562	1/4	20	0.255	1	2 1/2	4	13/64	B
018799	5/16	18	0.318	1 1/8	2 23/32	4	17/64	T
018805	5/16	18	0.318	1 1/8	2 23/32	4	17/64	I
014579	5/16	18	0.318	1 1/8	2 23/32	4	17/64	B
011752	3/8	16	0.381	1 1/4	2 15/16	4	5/16	T
021690	3/8	16	0.381	1 1/4	2 15/16	4	5/16	I
017563	3/8	16	0.381	1 1/4	2 15/16	4	5/16	B
025117	7/16	14	0.323	1 7/16	3 5/32	4	3/8	T
027005	7/16	14	0.323	1 7/16	3 5/32	4	3/8	I
020129	7/16	14	0.323	1 7/16	3 5/32	4	3/8	B
011769	1/2	13	0.367	1 21/32	3 3/8	4	27/64	T
020136	1/2	13	0.367	1 21/32	3 3/8	4	27/64	I
013640	1/2	13	0.367	1 21/32	3 3/8	4	27/64	B
023274	9/16	12	0.429	1 21/32	3 19/32	4	31/64	T
035871	9/16	12	0.429	1 21/32	3 19/32	4	31/64	I
025124	9/16	12	0.429	1 21/32	3 19/32	4	31/64	B
023281	5/8	11	0.480	1 13/16	3 13/16	4	35/64	T
023298	5/8	11	0.480	1 13/16	3 13/16	4	35/64	I
017570	5/8	11	0.480	1 13/16	3 13/16	4	35/64	B
025131	3/4	10	0.590	2	4 1/4	4	21/32	T
032238	3/4	10	0.590	2	4 1/4	4	21/32	I
021706	3/4	10	0.590	2	4 1/4	4	21/32	B
017587	7/8	9	0.697	2 1/32	4 11/16	4	49/64	T
027012	7/8	9	0.697	2 1/32	4 11/16	4	49/64	I
021713	7/8	9	0.697	2 1/32	4 11/16	4	49/64	B
027029	1	8	0.800	2 1/2	5 1/8	4	7/8	T
032245	1	8	0.800	2 1/2	5 1/8	4	7/8	I
027036	1	8	0.800	2 1/2	5 1/8	4	7/8	B
420004	1 1/8	7	0.896	2 9/16	5 7/16	4	63/64	T
420011	1 1/8	7	0.896	2 9/16	5 7/16	4	63/64	I
420028	1 1/8	7	0.896	2 9/16	5 7/16	4	63/64	B
040264	1 1/4	7	1.021	2 9/16	5 3/4	4	1 1/64	T
040271	1 1/4	7	1.021	2 9/16	5 3/4	4	1 1/64	I
040288	1 1/4	7	1.021	2 9/16	5 3/4	4	1 1/64	B

TOOLS

Chrome Steel Hand Taps

HAND TAPS - CHROME STEEL (CONT)

UNF

Part Number	Size	Threads Per Inch.	Shank Dia.	Length (In.)		No. of Flutes	Tapping Drill Size	Type
				Thread	Overall			
016399	1/4	28	0.255	1	2 1/2	4	7/32	T
017594	1/4	28	0.255	1	2 1/2	4	7/32	I
016405	1/4	28	0.255	1	2 1/2	4	7/32	B
017600	5/16	24	0.318	1 1/8	2 23/32	4	6.9mm	T
025148	5/16	24	0.318	1 1/8	2 23/32	4	6.9mm	I
016412	5/16	24	0.318	1 1/8	2 23/32	4	6.9mm	B
013657	3/8	24	0.381	1 1/4	2 15/16	4	8.5mm	T
018812	3/8	24	0.381	1 1/4	2 15/16	4	8.5mm	I
010724	3/8	24	0.381	1 1/4	2 15/16	4	8.5mm	B
013060	7/16	20	0.323	1 1/16	3 5/32	4	25/64	T
018829	7/16	20	0.323	1 1/16	3 5/32	4	25/64	I
015422	7/16	20	0.323	1 1/16	3 5/32	4	25/64	B
017617	1/2	20	0.367	1 21/32	3 3/8	4	29/64	T
015439	1/2	20	0.367	1 21/32	3 3/8	4	29/64	I
023311	1/2	20	0.367	1 21/32	3 3/8	4	29/64	B
015446	9/16	18	0.429	1 21/32	3 19/32	4	33/64	T
023328	9/16	18	0.429	1 21/32	3 19/32	4	33/64	I
025155	9/16	18	0.429	1 21/32	3 19/32	4	33/64	B
018836	5/8	18	0.480	1 13/16	3 13/16	4	37/64	T
029559	5/8	18	0.480	1 13/16	3 13/16	4	37/64	I
018843	5/8	18	0.480	1 13/16	3 13/16	4	37/64	B
023335	3/4	16	0.590	2	4 1/4	4	11/16	T
029566	3/4	16	0.590	2	4 1/4	4	11/16	I
023342	3/4	16	0.590	2	4 1/4	4	11/16	B
018850	7/8	14	0.697	2 1/32	4 9/16	4	13/16	T
016429	7/8	14	0.697	2 1/32	4 9/16	4	13/16	I
029573	7/8	14	0.697	2 1/32	4 9/16	4	13/16	B
021720	1	12	0.800	2 1/2	5 1/8	4	59/64	T
029580	1	12	0.800	2 1/2	5 1/8	4	59/64	I
017624	1	12	0.800	2 1/2	5 1/8	4	59/64	B
035925	1 1/8	12	0.896	2 3/16	5 1/16	4	1 3/64	T
032313	1 1/8	12	0.896	2 3/16	5 1/16	4	1 3/64	I
050683	1 1/8	12	0.896	2 3/16	5 1/16	4	1 3/64	B
040318	1 1/4	12	1.021	2 3/16	5 3/4	6	1 11/64	T
035932	1 1/4	12	1.021	2 3/16	5 3/4	6	1 11/64	I
035949	1 1/4	12	1.021	2 3/16	5 3/4	6	1 11/64	B

UNS

Part Number	Size	Threads Per Inch.	Shank Dia.	Length (In.)		No. of Flutes	Tapping Drill Size	Type
				Thread	Overall			
032290	1	14	0.800	2 1/2	5 1/8	4	15/16	T
040301	1	14	0.800	2 1/2	5 1/8	4	15/16	I
032306	1	14	0.800	2 1/2	5 1/8	4	15/16	B

ISO METRIC SPARK PLUG

Part Number	Size	Pitch mm	Shank Dia.	Length (mm)		No. of Flutes	Tapping Drill Size	Type
				Thread	Overall			
029511	10	1.00	7.772	31.80	75	4	9.00	T
032207	10	1.00	7.772	31.80	75	4	9.00	I
023236	10	1.00	7.772	31.80	75	4	9.00	B
029528	12	1.25	9.322	42.10	86	4	10.50	T
025087	12	1.25	9.322	42.10	86	4	10.50	I
035833	12	1.25	9.322	42.10	86	4	10.50	B
012377	14	1.25	10.897	42.10	91	4	12.50	T
021683	14	1.25	10.897	42.10	91	4	12.50	I
020105	14	1.25	10.897	42.10	91	4	12.50	B

ISO METRIC CONDUIT

Part Number	Size	Pitch mm	Shank Dia.	Length (mm)		No. of Flutes	Tapping Drill Size	Type
				Thread	Overall			
029498	25	1.50	20.40	38.00	83	4	23.50	T
035819	25	1.50	20.40	38.00	83	4	23.50	I
040240	25	1.50	20.40	38.00	83	4	23.50	B
035826	32	1.50	26.00	38.00	102	4	30.50	T
029504	32	1.50	26.00	38.00	102	4	30.50	I
050669	32	1.50	26.00	38.00	102	4	30.50	B
420035	40	1.50	31.40	38.00	102	4	38.50	T
420042	40	1.50	31.40	38.00	102	4	38.50	I
420059	40	1.50	31.40	38.00	102	4	38.50	B
420066	50	1.50	41.90	51.00	127	6	48.50	T
420073	50	1.50	41.90	51.00	127	6	48.50	I
420080	50	1.50	41.90	51.00	127	6	48.50	B

NPT (TAPER PIPE)

- Bottoming Lead Only

Part Number	Size	Thread Per Inch.	Shank Dia.	Length (mm)		No. of Flutes	Tapping Drill Size	Type
				Thread	Overall			
017723	1/8	27	0.437	3/4	2 1/8	4	11/32	B
016443	1/4	18	0.562	1 1/16	2 1/16	4	7/16	B
017730	3/8	18	0.700	1 1/16	2 3/16	4	9/16	B
027098	1/2	14	0.687	1 3/8	3 1/8	4	45/64	B
027104	3/4	14	0.906	1 3/4	3 1/4	4	29/32	B
027111	1	11 1/2	1.125	1 3/4	3 3/4	4	1 3/64	B
040691	1 1/4	11 1/2	1.312	1 3/4	4	6	1 15/32	B
050799	1 1/2	11 1/2	1.500	1 3/4	4 1/4	6	1 23/32	B
036311	2	11 1/2	1.875	1 3/4	4 1/2	6	2 3/16	B

HAND TAPS - CHROME STEEL (CONT)

ISO METRIC COARSE

Part Number	Size	Thread Per Inch	Shank Dia.	Length (mm)		No. of Flutes	Tapping Drill Size	Type
				Thread	Overall			
018751	3	0.5	3.851	15.9	49	3	2.55	T
020099	3	0.5	3.851	15.9	49	3	2.55	I
025001	3	0.5	3.851	15.9	49	3	2.55	B
015385	4	0.7	4.267	19.1	54	4	3.4	T
016351	4	0.7	4.267	19.1	54	4	3.4	I
021614	4	0.7	4.267	19.1	54	4	3.4	B
011271	5	0.8	5.588	23.8	60	4	4.3	T
011288	5	0.8	5.588	23.8	60	4	4.3	I
015392	5	0.8	5.588	23.8	60	4	4.3	B
012360	6	1	6.477	25.4	64	4	5.1	T
015408	6	1	6.477	25.4	64	4	5.1	I
008189	6	1	6.477	25.4	64	4	5.1	B
011295	8	1.25	8.077	28.5	69	4	6.9	T
014531	8	1.25	8.077	28.5	69	4	6.9	I
017501	8	1.25	8.077	28.5	69	4	6.9	B
035697	9	1.25	9.677	31.8	75	4	7.9	T
035710	9	1.25	9.677	31.8	75	4	7.9	B
017518	10	1.5	7.772	31.8	75	4	8.6	T
008196	10	1.5	7.772	31.8	75	4	8.6	I
015415	10	1.5	7.772	31.8	75	4	8.6	B
021621	12	1.75	9.322	42.1	86	4	10.2	T
016368	12	1.75	9.322	42.1	86	4	10.2	I
021638	12	1.75	9.322	42.1	86	4	10.2	B
025032	14	2	10.897	42.1	91	4	12.20	T
040202	14	2	10.897	42.1	91	4	12.20	I
032153	14	2	10.897	42.1	91	4	12.20	B
021645	16	2	12.192	46	97	4	14.25	T
013626	16	2	12.192	46	97	4	14.25	I
014548	16	2	12.192	46	97	4	14.25	B
017525	20	2.5	16.561	50.8	114	4	17.50	T
023212	20	2.5	16.561	50.8	114	4	17.50	I
018768	20	2.5	16.561	50.8	114	4	17.50	B
035758	24	3	19.304	56.4	125	4	21.00	T
029443	24	3	19.304	56.4	125	4	21.00	I
035765	24	3	19.304	56.4	125	4	21.00	B
050577	30	3.5	25.566	65	138	4	26.50	T
050584	30	3.5	25.566	65	138	4	26.50	I
040233	30	3.5	25.566	65	138	4	26.50	B
050621	36	4	31.318	76.2	154	4	32.00	T
050638	36	4	31.318	76.2	154	4	32.00	I
050645	36	4	31.318	76.2	154	4	32.00	B

ISO METRIC FINE

Part Number	Size	Thread Per Inch	Shank Dia.	Length (mm)		No. of Flutes	Tapping Drill Size	Type
				Thread	Overall			
021652	8	1.00	8.077	28.50	69	4	7.10	T
029450	8	1.00	8.077	28.50	69	4	7.10	I
029467	8	1.00	8.077	28.50	69	4	7.10	B
050874	8	1.00	8.077	28.50	69	4	7.10	S
021669	10	1.25	7.772	31.80	75	4	8.90	T
013633	10	1.25	7.772	31.80	75	4	8.90	I
021676	10	1.25	7.772	31.80	75	4	8.90	B
035789	12	1.50	9.322	42.10	86	4	10.50	T
025056	12	1.50	9.322	42.10	86	4	10.50	I
023229	12	1.50	9.322	42.10	86	4	10.50	B
017532	14	1.50	10.897	42.10	91	4	12.50	T
018775	14	1.50	10.897	42.10	91	4	12.50	I
026954	14	1.50	10.897	42.10	91	4	12.50	B
025063	16	1.50	12.192	46.00	97	4	14.75	T
025070	16	1.50	12.192	46.00	97	4	14.75	I
018782	16	1.50	12.192	46.00	97	4	14.75	B
026961	18	1.50	13.767	46.00	102	4	16.50	T
032177	18	1.50	13.767	46.00	102	4	16.50	I
029474	18	1.50	13.767	46.00	102	4	16.50	B
026978	20	1.50	16.561	50.80	114	4	18.50	T
029481	20	1.50	16.561	50.80	114	4	18.50	I
032184	20	1.50	16.561	50.80	114	4	18.50	B

TOOLS

Chrome Steel Hand Taps Sets

HAND TAPS SET - CHROME STEEL

- Chrome Steel Hand Taps are available in sets of three which include: a taper, intermediate and bottoming tap
- The taps are supplied in a plastic case that protects the threads from damage



UNC

PART NUMBER	SIZE	THREADS PER INCH
027135	1/4	20
020242	5/16	18
023380	3/8	16
021782	7/16	14
017754	1/2	13
036373	9/16	12
027142	5/8	11
036380	3/4	10
036397	7/8	9
036403	1	8

UNF

PART NUMBER	SIZE	THREADS PER INCH
018928	1/4	28
036410	5/16	24
020259	3/8	24
021799	7/16	20
029702	1/2	20
023397	9/16	18
027159	5/8	18
036427	3/4	16
032641	7/8	14
036434	1	12

SPARK PLUG

PART NUMBER	SIZE (MM)	PITCH (MM)
089546	10	1
071787	12	1.25
071794	14	1.25

ISO METRIC COARSE

PART NUMBER	SIZE (MM)	PITCH (MM)
021775	3	0.50
017747	4	0.70
020235	5	0.80
013084	6	1.00
018911	10	1.50
025193	12	1.75
029696	14	2.00
025209	16	2.00
036359	20	2.50
040790	24	3.00

ISO METRIC FINE

PART NUMBER	SIZE (MM)	PITCH (MM)
025216	10	1.25
040806	12	1.50
040752	14	1.50
087788	16	1.50
050881	18	1.50
036366	20	1.50

ADJUSTABLE BUTTON DIES - CHROME STEEL

- Manufactured from high quality Chromium Tool Steel
- 60° Thread Form
- Quality threads and size accuracy are assured by the use of precision ground thread master taps to produce the threads.
- All cutting faces are ground after heat treatment to give high performance and quality threads.
- QC techniques ensure an balanced cutting action accurately threaded components.
- Button die are adjustable tools in that the thread size can be altered within narrow limits.
- Guides are available for use with 1.1/2" and 2" outside diameter button dies.
- When ordering specify the size, thread type and outside diameter of the die.



ISO METRIC COARSE

PART NUMBER	SIZE (MM)	OUTSIDE DIAMETER	THREAD PER INCH
007540	M6	1	1
011813	12	2	1.75
040905	14	2	2.00
006505	16	2	2.00
012414	20	2	2.50
016498	24	2	3.00
029757	M18	2	2.5

ISO METRIC FINE

PART NUMBER	SIZE	OUTSIDE DIAMETER	THREAD PER INCH
023410	8	1	1.00
020280	10	1	1.25
025247	12	1	1.25
027173	12	1	1.50
036472	12	2	1.50
081380	14	2	1.25
023434	14	2	1.50
013701	16	2	1.50
020303	18	2	1.50
020310	20	2	1.50

UNC

PART NUMBER	SIZE	OUTSIDE DIAMETER	THREAD PER INCH
025278	12	1	24
021836	1/4	1	20
016511	5/16	1	18
018980	3/8	1	16
020327	7/16	1	14
023441	1/2	1	13
018997	1/2	2	13
036489	9/16	2	12
019000	5/8	2	11
019017	3/4	2	10
027210	7/8	2	9
025308	1	2	8

UNF

PART NUMBER	SIZE	OUTSIDE DIAMETER	THREAD PER INCH
021843	10	1	32
014623	1/4	1	28
010359	5/16	1	24
016528	3/8	1	24
014630	7/16	1	20
019024	7/16	1 1/2	20
021850	1/2	1	20
017792	1/2	2	20
025322	9/16	2	18
006512	3/4	2	16
013725	7/8	2	14
014654	1	2	12

NPT

PART NUMBER	SIZE	OUTSIDE DIAMETER	THREAD PER INCH
021935	1/8	2	27
016566	1/4	2	18
023502	3/8	2	18
029856	1/2	2	14
029863	3/4	2	14
419961	1	2	11 1/2

TOOLS

Button Die Holders • Hex Die Nuts

ADJUSTMENT PROCEDURES FOR P&N/SUTTON BUTTONS DIES

To mount the die in the dieholder, the side screws are rotated anti-clockwise until the die can be inserted into the holder, with the Vee in the die locating on the centre screw. The side screws are then tightened on to the die until "finger tight", the screws entering the dimple holes adjacent to the Vee slot. The die is now retained in the holder.

The centre screw is now tightened down into the Vee slot and the side screws nipped tight with a screw driver. The die will now cut to its nominal size.

To **increase** the cutting size:
Release the tension on the side screws
Screw the centre screw in, say one turn
Re-tension the side screws

To **reduce** the cutting size:
Release the tension on the side screws
Unscrew the centre screw, say one turn
Re-tension the side screws

The die will now cut a *large* size

The die will now cut a *smaller* size

BUTTON DIE HOLDERS

- Both the 1.1/2" and 2" dieholder can be fitted with guides
- The guide ensures accurate alignment when cutting the thread
- Guides are available separately



PART NUMBER	DIE HOLDER SIZE	CUTTING SIZE OF DIES INCHES
829656	1	1/8 to 1/2
005027	1 1/2	1/4 to 5/8
007892	2	1/2 to 1

HEX DIE NUTS - CHROME STEEL

- Chromium tool steel
- 60° Thread Form
- The hexagonal shape die nut is used with a spanner or wrench for repairing external threads that have been damaged
- They are not recommended for cutting an original thread



UNC

PART NUMBER	SIZE	THREADS PER INCH
025414	1/4	20
016597	5/16	18
013770	3/8	16
014692	7/16	14
013138	1/2	13
027289	9/16	12
023540	5/8	11
027296	3/4	10
025421	7/8	9
027302	1	8
419978	1 1/8	7
419985	1 1/4	7
419992	1 1/2	6

UNF

PART NUMBER	SIZE	THREADS PER INCH
016603	1/4	28
012445	5/16	24
011356	3/8	24
011363	7/16	20
011875	1/2	20
020389	9/16	18
010779	5/8	18
010786	3/4	16
021966	7/8	14
015538	1	12
032757	1 1/8	12
023557	1 1/4	12
041117	1 1/2	12

UNS

PART NUMBER	SIZE	THREADS PER INCH
019093	1	14

HEX DIE NUTS - CHROME STEEL (CONT)

ISO METRIC COARSE

PART NUMBER	SIZE	THREADS PER INCH
017815	5	0.80
011851	6	1.00
009988	8	1.25
023526	10	1.50
010762	12	1.75
013756	16	2.00
021942	20	2.50
023533	24	3.00
020372	30	3.50
041100	36	4.00

ISO METRIC FINE

PART NUMBER	SIZE	THREADS PER INCH
029894	8	1.00
025407	10	1.00
015521	10	1.25
013763	12	1.25
011868	12	1.50
021959	14	1.50
029887	14	2.00
029900	16	1.50
029917	18	1.50
027272	20	1.50

TAP | BUTTON | DIE SET

- P&N/Sutton tap and button die sets are made to internationally recognized standards maintaining a degree of dimensional accuracy
- A wide range of sets are available to meet the needs of industrial and automotive, tradesmen and the home handyman
- Stored in metal cases

UNC

PART NUMBER	SET NUMBER	DIE DIAMETER (INCHES)	TAP WRENCH NUMBER	DESCRIPTION	DIE GUIDES SUPPLIED (AS MARKED)
<i>Set includes Intermediate Tap and Button Die for Each Size:</i>					
419527	TD0	1	0	1/4, 5/16, 3/8, 7/16, 1/2	
<i>Set includes Taper and Bottoming Tap and Button Die for Each Size:</i>					
027388	TD5	1 & 2	6	1/4, 5/16, 3/8, 7/16, 1/2, 5/8, 3/4	*
036632	TD8	1 & 2	0 & 7	1/4, 5/16, 3/8, 7/16, 1/2, 9/16, 5/8, 3/4, 7/8, 1	*

UNF

PART NUMBER	SET NUMBER	DIE DIAMETER (INCHES)	TAP WRENCH NUMBER	DESCRIPTION	DIE GUIDES SUPPLIED (AS MARKED)
<i>Set includes Taper and Bottoming Tap and Button Die for Each Size:</i>					
051260	TD8	1 & 2	0 & 7	1/4, 5/16, 3/8, 7/16, 1/2, 9/16, 5/8, 3/4, 7/8, 1	*

METRIC (ISO COARSE)

PART NUMBER	SET NUMBER	DIE DIAMETER (INCHES)	TAP WRENCH NUMBER	DESCRIPTION	DIE GUIDES SUPPLIED (AS MARKED)
<i>Set Includes Taper and Bottoming Tap and Button Die for Each Size:</i>					
419558	TD10	1	00	2, 2.5, 3, 3.5, 4, 4.5, 5mm	
027371	TD12	1 & 2	0 & 7	6, 8, 10, 12, 14, 16, 18, 20, 22, 24mm	*
419565	TD13	1	00 & 0	2, 2.5, 3, 3.5, 4, 4.5, 5, 6, 7, 8, 9, 10, 11, 12mm	
<i>Set Includes Intermediate Tap and Button Die for Each Size:</i>					
419534	TD14	1	0	6x1.0, 8x1.25, 10x1.25, 10x1.5, 12x1.75mm ISO FINE	

UNC & UNF COMBINATION

PART NUMBER	SET NUMBER	DIE DIAMETER (INCHES)	TAP WRENCH NUMBER	DESCRIPTION	DIE GUIDES SUPPLIED (AS MARKED)
<i>Set Includes Taper and Bottoming Tap and Button Die for Each Size in Both UNC and UNF:</i>					
019123	CTD8	1 & 2	6	1/4, 5/16, 3/8, 7/16, 1/2, 9/16, 5/8, 3/4	

ISO METRIC COARSE AND FINE COMBINATION

PART NUMBER	SET NUMBER	DIE DIAMETER (INCHES)	TAP WRENCH NUMBER	DESCRIPTION	DIE GUIDES SUPPLIED (AS MARKED)
<i>Set Includes Taper and Bottoming Tap and Button Die for Each Size in Both ISO Coarse and UNF:</i>					
027395	CTD9	1 & 2	6	ISO Coarse 6, 7, 8, 10, 12, 14, 16, 18, ISO Fine 8, 10, 12, 14, 16, 18, 14 x 1.25 Intermediate Tap Only	

ISO METRIC COARSE AND UNF COMBINATION

PART NUMBER	SET NUMBER	DIE DIAMETER (INCHES)	TAP WRENCH NUMBER	DESCRIPTION	DIE GUIDES SUPPLIED (AS MARKED)
<i>Set Includes Taper and Bottoming Tap and Button Die for Each Size in Both ISO Metric Coarse and UNF:</i>					
419596	CTD10	1	5	Intermediate Tap Only UNF 1/4, 5/16, 3/8, 7/16, 1/2 Metric Coarse 6, 7, 8, 10, 12	

TOOLS

Screw Extractors • Screw Extractors | Drill Sets • Ground Thread Hand Taps

SCREW EXTRACTORS

- Screw extractors are used for extracting screws, bolts and pipe.
- To remove a broken screw or stud, drill the recommended size hole in the broken end
- Use a tap wrench or spanner, turn the extractor in an anti-clockwise direction.
- The extractor does not have to be hammered in because it takes a quick and positive grip, "feeds" itself into the hole and should "start" the most stubbornly embedded part and turn it out on its own threads, leaving the original thread in the hole undamaged.
- A Screw extractor should not be used to remove a screw having a left hand thread, a broken press-fitted stud (interface fit), a broken tap, or a badly rusted screw.
- Unusual conditions will require the use of other sizes of drills and extractors, depending on the length of broken section, and it's depth in the hole.



PART NUMBER	EXTRACTOR NUMBER	FOR SCREWS & BOLTS (IN.)	FOR PIPE SIZES (IN.)	SIZE DRILL TO USE (IN.)	LENGTH OVERALL (IN.)	DIA. AT SMALL END	DIA. AT LARGE END	SALE TORQUE LEAD (LBS/FT)
005737	1	5/32-3/16		5/64	2 1/8	.050	.159	12
008226	2	7/32-1/4		5/64	2 1/16	.080	.205	24
007038	3	5/32		5/32	2 13/16	.125	.265	54
008233	4	3/8-1/2		7/32	3 1/16	.185	.341	60
009148	5	9/16-3/4	1/8-1/4	19/64	3 9/16	.262	.495	75
072227	6	7/8-1	3/8	27/64	3 15/16	.390	.609	105
072234	7	1-1 1/2	1/2	17/32	4 1/4	.500	.742	134
072241	8	1 3/8-1 3/4	3/4	13/16	4 3/8	.750	1.000	200

SCREW EXTRACTORS | DRILL SET



PART NUMBER	SET NUMBER	EXTRACTOR NUMBERS	PACKAGE
004105	15A	1 thru 6 (not shown)	Plastic Case
075747	20	1 thru 5 plus recommended size stub drills	Metal Case

HAND TAPS - GROUND THREAD

GROUND THREAD HIGH SPEED STEEL

- P&N/Sutton Ground Thread Hand Taps have straight flutes and are suitable for both hand and machine operation in materials where the chips break up readily and present no disposal problems.
- 60° Thread Form
- T = Taper I = Intermediate B = Bottoming



UNC

PART NUMBER	SIZE	THREADS PER INCH.	SHANK DIA.	LENGTH (IN.) THREAD OVERALL		NO. OF FLUTES	SUGGESTED TAPPING DRILL SZ	TYPE
011417	No.6	32	0.141	11/16	2	3	7/64	T
007328	No.6	32	0.141	11/16	2	3	7/64	I
008547	No.6	32	0.141	11/16	2	3	7/64	B
012582	No.8	32	0.168	3/4	2 1/8	3	1/8	T
014814	No.8	32	0.168	3/4	2 1/8	3	1/8	I
013282	No.8	32	0.168	3/4	2 1/8	3	1/8	B
015729	No.10	24	0.194	7/8	2 3/8	3	5/32	T
009230	No.10	24	0.194	7/8	2 3/8	3	5/32	I
008325	No.10	24	0.194	7/8	2 3/8	3	5/32	B
028019	No.12	24	0.220	15/16	2 3/8	3	11/64	T
025889	No.12	24	0.220	15/16	2 3/8	3	11/64	I
033860	No.12	24	0.220	15/16	2 3/8	3	11/64	B
005362	1/4	20	0.255	1	2 1/2	4	13/64	T
005904	1/4	20	0.255	1	2 1/2	4	13/64	I
002897	1/4	20	0.255	1	2 1/2	4	13/64	B
006833	5/16	18	0.318	1 1/8	2 23/32	4	17/64	T
004266	5/16	18	0.318	1 1/8	2 23/32	4	17/64	I
005379	5/16	18	0.318	1 1/8	2 23/32	4	17/64	B
004648	3/8	16	0.381	1 1/4	2 15/16	4	5/16	T
006116	3/8	16	0.381	1 1/4	2 15/16	4	5/16	I
004358	3/8	16	0.381	1 1/4	2 15/16	4	5/16	B
015736	7/16	14	0.323	1 1/16	3 5/32	4	3/8	T
008851	7/16	14	0.323	1 1/16	3 5/32	4	3/8	I
006550	7/16	14	0.323	1 1/16	3 5/32	4	3/8	B
008332	1/2	13	0.367	1 21/32	3 3/8	4	27/64	T
007335	1/2	13	0.367	1 21/32	3 3/8	4	27/64	I
005911	1/2	13	0.367	1 21/32	3 3/8	4	27/64	B
024028	9/16	12	0.429	1 29/32	3 39/32	4	31/64	T
025896	9/16	12	0.429	1 29/32	3 39/32	4	31/64	I
019437	9/16	12	0.429	1 29/32	3 39/32	4	31/64	B
013961	5/8	11	0.480	1 9/16	3 13/16	4	35/64	T
006123	5/8	11	0.480	1 9/16	3 13/16	4	35/64	I
010458	5/8	11	0.480	1 9/16	3 13/16	4	35/64	B
010069	3/4	10	0.590	2	4 1/4	4	21/32	T
008349	3/4	10	0.590	2	4 1/4	4	21/32	I
009667	3/4	10	0.590	2	4 1/4	4	21/32	B
018065	7/8	9	0.697	2 1/32	4 11/16	4	49/64	T
014821	7/8	9	0.697	2 1/32	4 11/16	4	49/64	I
012599	7/8	9	0.697	2 1/32	4 11/16	4	49/64	B
013978	1	8	0.800	2 1/2	5 1/8	4	7/8	T
018072	1	8	0.800	2 1/2	5 1/8	4	7/8	I
013985	1	8	0.800	2 1/2	5 1/8	4	7/8	B

HAND TAPS - GROUND THREAD (CONT)

UNC (CONT)

PART NUMBER	SIZE	THREADS PER INCH.	SHANK DIA.	LENGTH (IN.) THREAD OVERALL	NO. OF FLUTES	SUGGESTED TAPPING DRILL SZ	TYPE
022314	1.1/8	7	0.896	2 9/16 5 1/16	4	63/64	T
018089	1.1/8	7	0.896	2 9/16 5 1/16	4	63/64	I
024035	1.1/8	7	0.896	2 9/16 5 1/16	4	63/64	B
033891	1.1/4	7	1.021	2 9/16 5 3/4	4	1 1/64	T
024042	1.1/4	7	1.021	2 9/16 5 3/4	4	1 1/64	I
028026	1.1/4	7	1.021	2 9/16 5 3/4	4	1 1/64	B

UNF

PART NUMBER	SIZE	THREADS PER INCH.	SHANK DIA.	LENGTH (IN.) THREAD OVERALL	NO. OF FLUTES	SUGGESTED TAPPING DRILL SIZE	TYPE
010892	10	32	0.194	7/8 2 1/8	3	5/32	T
007922	10	32	0.194	7/8 2 3/8	3	5/32	I
008356	10	32	0.194	7/8 2 3/8	3	5/32	B
006840	1/4	28	0.255	1 2 1/2	4	7/32	T
004907	1/4	28	0.255	1 2 1/2	4	7/32	I
004723	1/4	28	0.255	1 2 1/2	4	7/32	B
007588	5/16	24	0.318	1 1/8 2 23/32	4	6.9mm	T
004273	5/16	24	0.318	1 1/8 2 23/32	4	6.9mm	I
004914	5/16	24	0.318	1 1/8 2 23/32	4	6.9mm	B
005751	3/8	24	0.381	1 1/4 2 5/16	4	8.5mm	T
005386	3/8	24	0.381	1 1/4 2 5/16	4	8.5mm	I
003764	3/8	24	0.381	1 1/4 2 5/16	4	8.5mm	B
009247	7/16	20	0.323	1 1/8 3 5/32	4	25/64	T
006567	7/16	20	0.323	1 1/8 3 5/32	4	25/64	I
003313	7/16	20	0.323	1 1/8 3 5/32	4	25/64	B
008868	1/2	20	0.367	1 23/32 3 3/8	4	29/64	T
005249	1/2	20	0.367	1 23/32 3 3/8	4	29/64	I
006857	1/2	20	0.367	1 23/32 3 3/8	4	29/64	B
010076	9/16	18	0.429	1 23/32 3 19/32	4	33/64	T
012612	9/16	18	0.429	1 23/32 3 19/32	4	33/64	I
007595	9/16	18	0.429	1 23/32 3 19/32	4	33/64	B
010083	5/8	18	0.480	1 19/16 3 13/16	4	37/64	T
007069	5/8	18	0.480	1 19/16 3 13/16	4	37/64	I
006130	5/8	18	0.480	1 19/16 3 13/16	4	37/64	B
008875	3/4	16	0.590	2 4 1/4	4	11/16	T
007076	3/4	16	0.590	2 4 1/4	4	11/16	I
007601	3/4	16	0.590	2 4 1/4	4	11/16	B
011950	7/8	14	0.697	2 1/2 4 11/16	4	13/16	T
010465	7/8	14	0.697	2 1/2 4 11/16	4	13/16	I
009674	7/8	14	0.697	2 1/2 4 11/16	4	13/16	B
020808	1	12	0.800	2 1/2 5 1/8	4	59/64	T
014838	1	12	0.800	2 1/2 5 1/8	4	59/64	I
018096	1	12	0.800	2 1/2 5 1/8	4	59/64	B

UNS

PART NUMBER	SIZE	THREADS PER INCH.	SHANK DIA.	LENGTH (IN.) THREAD OVERALL	NO. OF FLUTES	SUGGESTED TAPPING DRILL SIZE	TYPE
024066	1	14	0.800	2 1/2 5 1/8	4	15/16	T
015743	1	14	0.800	2 1/2 5 1/8	4	15/16	I
014845	1	14	0.800	2 1/2 5 1/8	4	15/16	B

NPT (TAPER PIPE)

• Bottoming Tap Only

PART NUMBER	SIZE	THREADS PER INCH.	SHANK DIA.	LENGTH (IN.) THREAD OVERALL	NO. OF FLUTES	SUGGESTED TAPPING DRILL SIZE	TYPE
006871	1/8	27	0.437	3/4 2 1/8	4	11/32	B
007649	1/4	18	0.562	1 1/16 2 1/16	4	7/16	B
009728	3/8	18	0.700	1 1/16 2 9/16	4	9/16	B
008905	1/2	14	0.687	1 3/8 3 1/8	4	45/64	B
011462	3/4	14	0.906	1 3/4 3 3/4	4	29/32	B
012001	1	11 1/2	1.125	1 3/4 3 1/4	4	1 1/64	B

ISO METRIC COARSE

PART NUMBER	SIZE	THREADS PER MM.	SHANK DIA.	LENGTH (MM) THREAD OVERALL	NO. OF FLUTES	SUGGESTED TAPPING DRILL SIZE	TYPE
003467	3	0.5	3.15	18 48	3	2.5	T
002989	3	0.5	3.15	18 48	3	2.5	I
002996	3	0.5	3.15	18 48	3	2.5	B
001890	4	0.7	4	21 53	4	3.30	T
001586	4	0.7	4	21 53	4	3.30	I
001968	4	0.7	4	21 53	4	3.30	B
001630	5	0.8	5	25 58	4	4.20	T
001173	5	0.8	5	25 58	4	4.20	I
001005	5	0.8	5	25 58	4	4.20	B
000848	6	1	6.3	30 66	4	5.00	T
000794	6	1	6.3	30 66	4	5.00	I
000824	6	1	6.3	30 66	4	5.00	B
001319	8	1.25	8	35 72	4	6.80	T
001098	8	1.25	8	35 72	4	6.80	I
000923	8	1.25	8	35 72	4	6.80	B
001593	10	1.5	10	39 80	4	8.50	T
001722	10	1.5	10	39 80	4	8.50	I
001425	10	1.5	10	39 80	4	8.50	B
002521	12	1.75	9	29 89	4	10.20	T
002323	12	1.75	9	29 89	4	10.20	I
002781	12	1.75	9	29 89	4	10.20	B
010403	14	2	11.2	30 95	4	12.00	T
009643	14	2	11.2	30 95	4	12.00	I
010410	14	2	11.2	30 95	4	12.00	B
003474	16	2	12.5	32 102	4	14.00	T
003757	16	2	12.5	32 102	4	14.00	I
003344	16	2	12.5	32 102	4	14.00	B
018027	18	2.5	14	37 112	4	15.50	T
020754	18	2.5	14	37 112	4	15.50	I
030869	18	2.5	14	37 112	4	15.50	B
006383	20	2.5	14	37 112	4	17.50	T
004518	20	2.5	14	37 112	4	17.50	I
006390	20	2.5	14	37 112	4	17.50	B
010854	24	3	18	45 130	4	21.00	T
009216	24	3	18	45 130	4	21.00	I
009223	24	3	18	45 130	4	21.00	B
010052	30	3.5	20	48 138	4	26.50	T
011936	30	3.5	20	48 138	4	26.50	I
011943	30	3.5	20	48 138	4	26.50	B
018041	36	4	25	57 162	4	32.00	T
014791	36	4	25	57 162	4	32.00	I
016818	36	4	25	57 162	4	32.00	B

TOOLS

Ground Thread Hand Taps

HAND TAPS - GROUND THREAD (CONT)

ISO METRIC FINE

PART NUMBER	SIZE	THREADS PER MM.	SHANK DIA.	LENGTH (MM) THREAD OVERALL		NO. OF FLUTES	SUGGESTED TAPPING DRILL SIZE	TYPE
016825	8	1	8	22	72	4	7.00	T
012568	8	1	8	22	72	4	7.00	I
013275	8	1	8	22	72	4	7.00	B
007311	10	1.25	10	24	80	4	8.80	T
003351	10	1.25	10	24	80	4	8.80	I
005058	10	1.25	10	24	80	4	8.80	B
013923	12	1.5	9	29	89	4	10.5	T
006406	12	1.5	9	29	89	4	10.5	I
010427	12	1.5	9	29	89	4	10.5	B
010885	14	1.5	11.2	30	95	4	12.5	T
012575	14	1.5	11.2	30	95	4	12.5	I
008837	14	1.5	11.2	30	95	4	12.5	B
013930	16	1.5	12.5	32	102	4	14.5	T
010434	16	1.5	12.5	32	102	4	14.5	I
008844	16	1.5	12.5	32	102	4	14.5	B
027999	18	1.5	14	37	112	4	16.5	T
016832	18	1.5	14	37	112	4	16.5	I
016849	18	1.5	14	37	112	4	16.5	B
011400	20	1.5	14	37	112	4	18.5	T
009650	20	1.5	14	37	112	4	18.5	I
010441	20	1.5	14	37	112	4	18.5	B
025865	22	1.5	16	38	118	4	20.5	T
019420	22	1.5	16	38	118	4	20.5	I
015705	22	1.5	16	38	118	4	20.5	B
030906	24	2	18	45	130	4	22.0	T
022284	24	2	18	45	130	4	22.0	I
023960	24	2	18	45	130	4	22.0	B

ISO METRIC SPARK PLUG

PART NUMBER	SIZE	THREADS PER MM.	SHANK DIA.	LENGTH (MM) THREAD OVERALL		NO. OF FLUTES	SUGGESTED TAPPING DRILL SIZE	TYPE
025872	10	1	10	24	80	4	9	T
018058	10	1	10	24	80	4	9	I
013947	10	1	10	24	80	4	9	B
014807	12	1.25	9	29	89	4	10.8	T
010861	12	1.25	9	29	89	4	10.8	I
010878	12	1.25	9	29	89	4	10.8	B
020778	14	1.25	11.2	30	95	4	12.8	T
013954	14	1.25	11.2	30	95	4	12.8	I
023977	14	1.25	11.2	30	95	4	12.8	B

HAND TAPS SET - GROUND THREAD

GROUND THREAD HIGH SPEED STEEL

- Chromium tool steel taps are available in set of three which include: a taper, intermediate and bottoming tap
- The taps are supplied in a plastic case that protects the threads from damage



UNC

PART NUMBER	SIZE	PITCH
014067	1/4	20
010939	5/16	18
010496	3/8	16
020983	7/16	14
014074	1/2	13

ISO METRIC COARSE

PART NUMBER	SIZE	PITCH
008912	3	0.50
005584	4	0.70
005393	5	0.80
004440	6	1.00
005409	8	1.25
006581	10	1.50
038445	18	2.50
031156	24	3.00

ISO METRIC FINE

PART NUMBER	SIZE	PITCH
044347	24	2.00

TOOLS

Sutton - Heavy Duty Cobalt Drills

SUTTON TOOLS HEAVY DUTY COBALT

JOBBER DRILLS

- Thick Core - For increased rigidity in hard materials
- Precision Engineered Parallel Shank - For accurate hole size
- Made from HSS Cobalt - The 5% cobalt formula improves abrasive & heat resistance, for increased strength at higher cutting temperatures
- Colour Tempered Surface Finish - Enables identification of cobalt tool material
- 135° Split Point (drills > 2mm & 3/32) - Enables accurate positioning and less drilling pressure



PRODUCT CODE	P&N REFERENCE NUMBER	DESCRIPTION	PKG QTY
020068	D1080159	DRL JBBR SINPAC 1/16 COBALT	1
026855	D1080238	DRL JBBR SINPAC 3/32 COBALT	1
026862	D1080278	DRL JBBR SINPAC 7/64 COBALT	1
035529	D1080198	DRL JBBR SINPAC 5/64 COBALT	1
093321	D1080318	DRL JBBR SINPAC 1/8 COBALT	1
093338	D1080357	DRL JBBR SINPAC 9/64 COBALT	1
093345	D1080397	DRL JBBR SINPAC 5/32 COBALT	1
093352	D1080437	DRL JBBR SINPAC 11/64 COBALT	1
093369	D1080476	DRL JBBR SINPAC 3/16 COBALT	1
093376	D1080516	DRL JBBR SINPAC 13/64 COBALT	1
093383	D1080556	DRL JBBR SINPAC 7/32 COBALT	1
093390	D1080595	DRL JBBR SINPAC 15/64 COBALT	1
093406	D1080635	DRL JBBR SINPAC 1/4 COBALT	1
093413	D1080676	DRL JBBR SINPAC 17/64 COBALT	1
093420	D1080714	DRL JBBR SINPAC 9/32 COBALT	1
093437	D1080754	DRL JBBR SINPAC 19/64 COBALT	1
093444	D1080794	DRL JBBR SINPAC 5/16 COBALT	1
093451	D1080833	DRL JBBR SINPAC 21/64 COBALT	1
093468	D1080873	DRL JBBR SINPAC 11/32 COBALT	1
093475	D1080913	DRL JBBR SINPAC 23/64 COBALT	1
093482	D1080953	DRL JBBR SINPAC 3/8 COBALT	1
093499	D1080992	DRL JBBR SINPAC 25/64 COBALT	1
093505	D1081032	DRL JBBR SINPAC 13/32 COBALT	1
093512	D1081072	DRL JBBR SINPAC 27/64 COBALT	1
093529	D1081111	DRL JBBR SINPAC 7/16 COBALT	1
093536	D1081151	DRL JBBR SINPAC 29/64 COBALT	1
093543	D1081191	DRL JBBR SINPAC 15/32 COBALT	1
093550	D1081231	DRL JBBR SINPAC 31/64 COBALT	1
093567	D1081269	DRL JBBR SINPAC 1/2 COBALT	1
100272	D109S3	COBALT HD 29 PC DRILL SET - 1/16-1/2X1/64	1

TOOLS

Rivets • Pipe Wrenches • Snap Ring Pliers

RIVETS

HAND RIVET TOOL KIT

- 1 hand rivet tool and 200 rivets
- Interchangeable nozzle busings for 3/32", 1/8", 5/32" and 3/16" rivets



PRODUCT CODE	DESCRIPTION	PKG QTY
655-100	Hand Rivet Tool Kit	1

RIVET NUTS

RIVET NUT TOOL KIT

- Ideal for materials that cannot be tapped or welded
- May be used as a blind fastener or anchor screw
- Kit contains 40 rivet nuts and one riveting tool in a handy plastic case
- Specifically designed for aluminium product thickness no greater than 1mm



PRODUCT CODE	DESCRIPTION	PKG QTY
656-100	Rivet Nut Tool Kit	1

REPLACEMENT RIVET NUTS

PRODUCT CODE	DESCRIPTION	PKG QTY
656-210	6-32	50
656-220	8-32	50
656-230	10-24	50
656-240	1/4-20	50

PIPE WRENCHES

CAST IRON PIPE WRENCH

- Heavy duty construction
- Malleable cast iron handle
- Exceeds ANSI standard



PRODUCT CODE	DESCRIPTION	PKG QTY
648-142	8" Heavy Duty Pipe Wrench	1
648-143	10" Heavy Duty Pipe Wrench	1
648-144	12" Heavy Duty Pipe Wrench	1
648-145	14" Heavy Duty Pipe Wrench	1
648-146	18" Heavy Duty Pipe Wrench	1
648-147	24" Heavy Duty Pipe Wrench	1
648-148	36" Heavy Duty Pipe Wrench	1
648-149	48" Heavy Duty Pipe Wrench	1

ALUMINUM PIPE WRENCH



PRODUCT CODE	DESCRIPTION	PKG QTY
648-172	12" Aluminum Wrench	1
648-173	14" Aluminum Wrench	1
648-174	18" Aluminum Wrench	1
648-175	24" Aluminum Wrench	1
648-176	36" Aluminum Wrench	1
648-177	48" Aluminum Wrench	1

SNAP RING PLIERS

- High Carbon hardened and tempered
- Specially formed tips grip rings securely and release easily
- Permits use with both internal and external snap rings



PRODUCT CODE	DESCRIPTION	PKG QTY
648-050	Snap Ring Pliers	1

CABLE AND SPRING WIRE CUTTER

- Cuts cleanly eliminating frayed ends
- One hand shearing action
- Cable cutting capacity of 3/16" diameter
- Spring wire cutting capacity of 1/16" diameter
- SK-5 blades
- Comfortable vinyl coated handles



PRODUCT CODE	DESCRIPTION	CASE QTY
648-040	Cable and Spring Wire Cutter	6

CABLE CUTTERS

CABLE CUTTERS

- Stainless steel blades, precision ground and hardened for long lasting sharp edges
- Cuts up to 10mm soft cable
- Handles designed for either left or right handed users
- Easy to use safety lock
- Spring action
- Light weight



PRODUCT CODE	DESCRIPTION	CASE QTY
690-320	Cable Cutters	6

BOLT CUTTERS

- Drop forged Cr-Mo steel blades
- Satin finished blades
- Hardness of blades: HRC53-60
- Blade clearance adjusted with eccentric bolt
- Textured grip



PRODUCT CODE	DESCRIPTION	PKG QTY
690-350	12" Bolt Cutters	1
690-352	14" Bolt Cutters	1
690-354	18" Bolt Cutters	1
690-356	24" Bolt Cutters	1
690-358	30" Bolt Cutters	1
690-360	36" Bolt Cutters	1
690-362	42" Bolt Cutters	1

CUTTERS REPLACEMENT BLADES

- Drop forged Chrome Vanadium steel blades
- Hardness HRC56-62

PRODUCT CODE	DESCRIPTION	PKG QTY
690-351	12" Replacement Blades	1
690-353	14" Replacement Blades	1
690-355	18" Replacement Blades	1
690-357	24" Replacement Blades	1
690-359	30" Replacement Blades	1
690-361	36" Replacement Blades	1
690-363	42" Replacement Blades	1

SHEARS

MULTI-PURPOSE SHEARS

- Great for both light and duty applications
- Cuts wire, wood, branches, doweling, rope, cord, cardboard, leather and many other materials
- Stainless steel blades, precision ground and hardened for long lasting sharp edges
- Handles designed for either left or right handed users
- Easy to use safety lock
- Spring action
- Light weight



PRODUCT CODE	DESCRIPTION	PKG QTY	CASE QTY
690-321	Multi-purpose shears	1	6

SHEARS (CONT)

HEAVY DUTY SHEARS

- Ideal for cutting heavy cloth, fabric, rubber, upholstery, rope leather, cardboard & poultry processing
- Stainless steel blades, precision ground and hardened for long lasting sharp edges
- Ergonomic handles made from TPE, can be used for either left or right hand cutting
- Adjustable knife edge with nut and bolt construction
- Light weight



PRODUCT CODE	DESCRIPTION	PKG QTY	CASE QTY
690-322	Multi-purpose shears	1	6

ELECTRICAL SHEARS

- Blades are made of high carbon stainless steel with vanadium and molybdenum
- One serrated blade reduces slippage
- Specially designed for cutting Optical Fibre
- Ideal for cutting soft cable, insulating materials, electrical tape and cable ties
- Designed for both left and right handed users



PRODUCT CODE	DESCRIPTION	PKG QTY	CASE QTY
690-324	Electrical Shears	1	6

HEAVY DUTY SHORT NOSE SHEARS

- Great for both heavy and light duty applications
- Cuts heavy cloth, fabric, rubber upholstery, rope, leather, cardboard & poultry processing
- Stainless steel blades, precision ground for long lasting edges
- Ergonomic handles made from TPE are designed for left/right handed users
- Adjustable knife edge with nut and bolt construction
- Light weight



PRODUCT CODE	DESCRIPTION	PKG QTY	CASE QTY
690-326	Heavy duty short nose shears	1	6

MULTI-PURPOSE ANGLE SHEARS

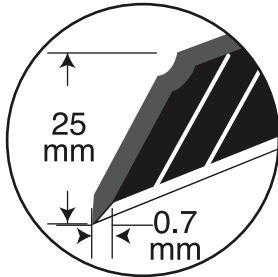
- Great for both heavy and light duty applications
- Cuts wire, wood, branches, doweling, rope, cord, cardboard, leather and more
- Stainless steel blades, precision ground for long lasting sharp edges
- Handles designed for either left or right handed users
- Easy to use safety lock
- Spring action
- Light weight



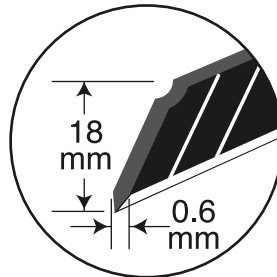
PRODUCT CODE	DESCRIPTION	PKG QTY	CASE QTY
690-327	Multi-purpose Angle Shears	1	6

KDS KNIVES

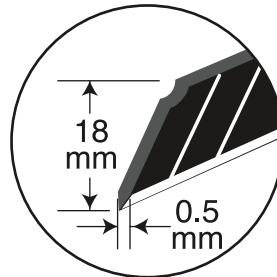
H-Blades



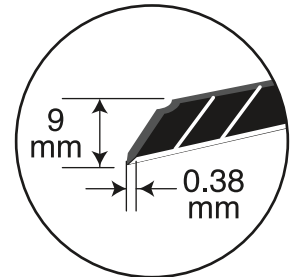
G-Blades



L-Blades



S-Blades



KDS L-KNIVES

- Heavy Duty extra thick Stainless Steel sleeve
- Comes with 2 extra blades (L-blades) stored in handle



PRODUCT CODE	DESCRIPTION	PKG QTY
L-18	Auto lock cutter with automated locking slider	1
L-19	Twist lock cutter for safe secure cutting	1

MULTI-PRO L-KNIVES

- Can be used for tucking carpet, prying lids off paint and other cans, and scoring & cut cardboard to make boxes



PRODUCT CODE	DESCRIPTION	PKG QTY
L-25	Multi-Pro Twist Lock L-Knife	1

GRIP FIT L-KNIVES

- Ergonomic design for all-day use, with rubber grips on top and bottom
- Comes with 2 extra blades (Power Black L-blades) stored in handle



PRODUCT CODE	PART NUMBER	DESCRIPTION	PKG QTY
L-22		Grip Fit Auto Lock L-Knife	1
L-23	690-202	Grip Fit Twist Lock L-Knife	1

FINGER GUARD L-KNIFE

- Protect your fingers while cutting rough materials like shingles and carpet backing or compress materials like insulation
- Screw-lock slider
- Loaded with one Power Black blade
- Comes with 2 extra blades (Power Black L-blades) stored in handle



PRODUCT CODE	PART NUMBER	DESCRIPTION	PKG QTY
L-30	690-200	Finger Guard Knife	1

TOOLS

KDS Retractable Knives

KDS KNIVES

GRIP FIT G-KNIVES

- Cuts heavier materials
- Ergonomic design for all-day use, with rubber grips on top and bottom.
- Comes with 2 extra blades (Power Black G-blades) stored in handle



PRODUCT CODE	DESCRIPTION	PKG QTY
G-15	Auto Lock G-Knife	1
G-16	Twist Lock G-Knife	1

JOB BOSS PRO H-CUTTERS

- Super heavy duty knife with soft rubber grip
- Screw type slider securely locks the blade in place



PRODUCT CODE	DESCRIPTION	PKG QTY
H-12	Super heavy duty knife with strong ABS plastic body	1
H-13	Super heavy duty knife with Elastomer body	1

SAFETY MASTER KNIVES

- **SA-11B** - Ergonomically designed rubberized, non-slip grip safety knife with TITANIUM-edged blades. With 1 spare blade included.
- **SA-12B** - Auto-retracting blade, ergonomic handle, with adjustable depth settings. With 10 spare blades included.



PRODUCT CODE	DESCRIPTION	PKG QTY
SA-11B	Safety Master Knife with Titanium Edge Blade	1
SA-12B	Safety Master Metal Knife	1
SA-14	Auto Self Retracting Knife	1

SLIM S-KNIVES



S-11B



S-13



S-14YE

PRODUCT CODE	DESCRIPTION	PKG QTY
S-11B	KDS Stainless Steel w/ sliding lock Comes with 2 Stainless Steel Spare Blades	1
S-13	KDS Dura Slim w/ sliding lock Comes with 2 Stainless Steel Spare Blades	1
S-14YE	KDS Pocket Slim w/ sliding lock Comes with 2 Spare Blades	1
S-18	KDS Snap-Blade, Acute Angle	1

MULTI-PRO HOOK IT

- Loaded with snap hook blade for cutting surface materials without damaging what is underneath
- Great for carpet, it can also be used for prying off lids



PRODUCT CODE	DESCRIPTION	PKG QTY
HK-12	Multi-Pro Hook It Blade	1
HK-5EVO	Snap Hook Blade	1

BANANA SICKLE

- Recommended for multi-purpose use i.e. flooring, roofing etc.
- High carbon steel blade
- Yellow painted wooden handle.



PRODUCT CODE	DESCRIPTION	PKG QTY
BK-11	Banana Sickle	1

KDS SCRAPER

GOOD GRIP SCRAPER

- Superior to other scrapers, with an ergonomic handle and non-stick head
- Blades can be changed with your thumb
- No drivers or coins needed
- Comes with 5 no-snap Power Black L-blades



PRODUCT CODE	DESCRIPTION	PKG QTY
SCL200	Good Grip 200mm (8") Scraper	1
SCL300	Good Grip 300mm (12") Scraper	1
SCL600	Good Grip 600mm (24") Scraper	1

KDS SCISSORS

KDS STAINLESS STEEL SCISSORS

- For professionals & DIY users
- Stainless steel blades



PRODUCT CODE	DESCRIPTION	PKG QTY
KSC-1	KDS Stainless Steel Scissors	1
KSC-2	KDS Serrated Scissors	1

KDS SPARE BLADES

- KDS Blades have fewer impurities (sulfur, manganese, etc.) finer and denser carbon grains, and a composition that gives higher pliability results in a longer-lasting and sharpness.
- Power Black Blades are focused on sharpness (25% sharper than Power White blades)
- Power White Blades are focused on durability
- Stainless Steel Blades are perfect for wet environments.



PRODUCT CODE	TYPE	THICKNESS	DESCRIPTION	PKG QTY
GB-10BEVO	Black	.60mm	18mm x 0.6mm EVO black blades, 10 pack - Fits all KDS L & G Knives KDS	1
GB-50BEVO	Black	.60mm	18mm x 0.6mm EVO black blades, 50 pack - Fits all KDS L & G Knives KDS	1
HB-10EVO	White	.70mm	EVO silver 25mm blades, 10 pack KDS	1
HB-10BEVO	Black	.70mm	Fits all brands of H-knives (10 blades in a plastic case)	1
HB-10BNLEVO	Black	.70mm	EVO black 25mm solid, non-striated blades, 10 pack KDS	1
HB-5SCL	White	.70mm	Fits all of Good Grip Scraper (5 blades in a plastic case)	1
HK-5EVO	White	0.50mm	Snap Hook Blade - OLFA EQ.#LH-20B KDS	1
HSB-Z	White	0.60mm	Fits a Standard Saw Blade	1
LB-10BEVO	Black	0.50mm	Fits all brands of L-knives (10 blades in a plastic case)	1
LB-10BNLEVO	Black	0.50mm	EVO black solid, non-striated L-blades, 10 pack	1
LB-10EVO	White	0.50mm	Fits all brands of L-knives (10 blades in a plastic case)	1
LB-50BEVO	Black	0.50mm	Fits all brands of L-knives (50 blades in a plastic case)	1
LB-50EVO	White	0.50mm	Fits all brands of L-knives (50 blades in a plastic case)	1
SB-10EVO	White	0.38mm	Fits all brands of slim S-knives (10 blades in a plastic case)	1
SB-10BEVO	Black	0.38mm	Fits all brands of slim S-knives (10 blades in a plastic case)	1
SB-50EVO	White	0.38mm	Fits all brands of slim S-knives (50 blades in a plastic case)	1
SB-50BEVO	Black	0.38mm	Fits all brands of slim S-knives (50 blades in a plastic case)	1
SB-50SEVO	Stainless Steel	0.38mm	Fits all brands of slim S-knives (50 blades in a plastic case)	1
TB-10T	Titanium	0.65mm	Fits all trapezoid-blade knives (10 blades in a plastic case)	1
TB-50B	Black	0.80mm	Fits all trapezoid-blade knives (50 blades in a plastic case)	1
TB-5B	Black	0.80mm	Fits all trapezoid-blade knives (5 blades in a plastic case)	1



TOOLS

KDS Replacement Blades • KDS Digital Angle Sensor • Metric Scale • Tape Measures

KDS SPARE BLADES SPECIFICATION

L-SERIES

LB-10BHNL / LB-50BHNL 110x18x0.5



LB-10BH / LB-50BH 110x18x0.5



LB-10H / LB-50H 110x18x0.5



G-SERIES

GB-10BH / GB-50BH 110x18x0.6



GB-10H / GB-50H 110x18x0.6



H-SERIES

HB-10BHNL 140.5x25x0.7



HB-10BH 140.5x25x0.7



HB-10H 140.5x25x0.7



S-SERIES

SB-10BHNL / SB-50BHNL 85.3x9.2x0.38



SB-10BH / SB-50BH 85.3x9.2x0.38



SB-10H / SB-50H 85.3x9.2x0.38



SB-10SH / SB-50SH 85.3x9.2x0.38



Stainless

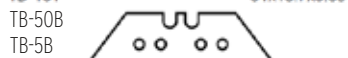
SNAP HOOK BLADE

HK-5 110x18x0.5



TRAPEZOID

TB-10T 61x18.7x0.65



TB-50B
TB-5B

SAW BLADE

HSB-Z 110.5x18x0.6



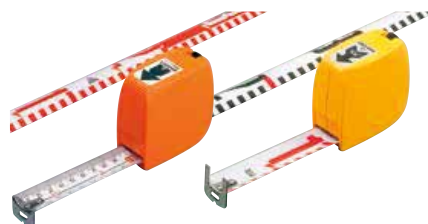
KDS DIGITAL ANGLE SENSOR

- For for measuring angles or distances
- It has neodymium magnet and V slot structure which is excellent to measure pipes.
- It features a hold function for easy recording.



PRODUCT CODE	DESCRIPTION	PKG QTY
DAS-V60	Digital Angle Sensor	1
DAS-F51	Digital Angle Sensor 360° Magnetic	1

METRIC SCALE



PRODUCT CODE	DESCRIPTION	PKG QTY
MN25-02M	2M mini-rod, metric scale KDS	1

TAPE MEASURES

QUADSPEED LONG, STEEL TAPE

- 4-speed crank for fast rewind
- Extruded nylon coating covers the blade over the edges
- Wide rubberized grip for use in wet conditions while wearing gloves
- Rubber shock-absorbing base
- Hook end for one-person use
- Scale in both metric and imperial



PRODUCT CODE	DESCRIPTION	PKG QTY
ST13-30MEDH	30 M / 100'	1
ST13-60MEDH	60M / 200'	1

TAPE MEASURES

GOOD GRIP STEEL TAPE

- 25' / 7.5M x 1" with metric and imperial graduations.
- Scales on both sides of the blades
- Thumb slider to apply brake, push down to lock the blade
- Dura-coat on the blade
- 100x stronger than acrylic
- Diamond -pattern rivets



PRODUCT CODE	SIZE	DESCRIPTION	PKG QTY	CASE QTY
DVG25-75YEB	1" x 25'	Imperial Measurements	1	4
DVG25-75YMEB	1" x 25'	Imperial and Metric Measurements	1	4
DVZ25-80M	25mm x 8 M	Metric Measurements	1	4

GOOD GRIP STAINLESS STEEL TAPE

- Various sizes with metric and imperial graduations.
- Scales on both sides of the blades
- Thumb slider to apply brake, push down to lock the blade
- Nylon-coated blade
- 100x stronger than acrylic
- Diamond -pattern rivets
- Can be washed clean



PRODUCT CODE	SIZE	DESCRIPTION	PKG QTY	CASE QTY
GG25-75YMEB	1" x 25'	Stainless Steel Imperial and Metric Measurements	1	4
GGEVO25-75WMEB	25MMx7.5M/25	Pro Grade Metric/Imperial	1	4

DOCAP TAPE MEASURE

- Bright colours make it easy to find
- Flexible steel blade coated with lacquer
- Toggle locking system
- Positive locking knob and automatic power return
- ABS durable plastic case
- Built durable plastic case
- Removable belt clip
- Red indicator every 10 cm and/or every foot
- Structural stud indicator



PRODUCT CODE	SIZE	DESCRIPTION	PKG QTY	CASE QTY
644-001	1" x 25'	Imperial and Metric Measurements	1	24
644-002	1" x 25'	Imperial Measurements ONLY	1	24
644-003	3/4" x 16'	Imperial and Metric Measurements	1	24
644-004	3/4 x 16'	Imperial Measurements ONLY	1	24

MAGNETIC TOOLS

TELESCOPIC TOOLS

- Telescopic reach picks up metal object in hard to reach places
- Can be used as a pointer
- Pocket clip keeps tool close at hand



PRODUCT CODE	DESCRIPTION	PKG QTY	CASE QTY
636-010	3 in 1 Telescopic Magnetic/Mirror/Scriber	1	12
636-012	Telescopic Pick-up Tool	1	12

TOOLS

Brass Jiggle Siphon • Transfer Pumps • Slide Hammers • Funnel

TRANSFER PUMPS

FLUID LUBRICANT PAIL PUMP

- Fits 5 gallon open head pails
- Pumps most non-corrosive fluids
- Equipped with 4" oil resistant hose and spout
- Includes drum pail cover



PRODUCT CODE	DESCRIPTION	PKG QTY
638-042	Fluid Lubricant Pail Pump	1

FUNNEL (HEAVY DUTY)

- Handy handle
- Manufactured from heavy duty white polypropylene plastic
- Non sparking material
- For use with oil, kerosene gasoline, fuel oil, etc.
- Also safe for milk products
- Temperature range -40° to 250°F



PRODUCT CODE	PART NO.	DESCRIPTION	PKG QTY
649-045	45D	4.1/2" Diameter	1
649-060	60D	6" Diameter	1
649-100	100D	10" Diameter	1

BRASS JIGGLE SIPHON

- An easy and safe way to siphon liquids
- No more bad spills
- Non-static hose
- 2 meter x 1/2" tube
- Can be used around the house, in the car and boat as well as for industrial use



PRODUCT CODE	DESCRIPTION	PKG QTY	CASE QTY
648-678	Brass Jiggle Siphon	1	24

SLIDE HAMMER

- 22" slide handle with a 4.3/4lb sliding hammer
- Comes with the following attachments:
 - *External 3 Jaw puller* - allows you to remove gears and bearings
 - *Internal 3 Jaw puller* - provides gripping for a variety of internal pulling jobs
 - *External 2 Jaw puller* - ideal for close quarter pulling jobs
 - *Internal 2 Jaw puller* - facilitates easy removal of bearing cups and outer races
 - *Grip Wrench Adaptor* - allows you to attach grip type wrench to slide hammer
 - *Puller Hook* - use to remove oil seals and bearings situated where conventional methods don't work
 - *Rear Axle Puller* - removes flange type axles from most passenger cars and light trucks
 - *Dent Puller* - pulls out of hard to get at dents and creases in auto bodies



PRODUCT CODE	DESCRIPTION	PKG QTY
647-770	Slide Hammer	1

VICES

FIXED BASE VISES WITH ANVIL

- Heavy duty construction
- Vise head and body made from grey cast iron
- Handle and terminal fittings made of reinforced carbon steel
- Replaceable reinforced carbon steel jaws
- Spindle made from reinforced carbon steel
- Extra deep throat to handle large materials
- Swivel bases available in grey cast iron



PRODUCT CODE	DESCRIPTION	PKG QTY
647-710	3"	1
647-711	4"	1
647-712	5"	1
647-713	6"	1
647-714	8"	1

SWIVEL BASE ONLY



PRODUCT CODE	DESCRIPTION	PKG QTY
647-720	3"	1
647-721	4"	1
647-722	5"	1
647-723	6"	1
647-724	8"	1

REPLACEMENT JAWS



PRODUCT CODE	DESCRIPTION	PKG QTY
647-730	3"	2
647-731	4"	2
647-732	5"	2
647-733	6"	2
647-734	8"	2

"C" CLAMPS

- Made from forge-able cast malleable iron
- Tensile strength



PRODUCT CODE	DESCRIPTION	TENSILE STRENGTH	PKG QTY
647-791	"C" Clamp - 2"	800 kgs	1
647-792	"C" Clamp - 3"	1000 kgs	1
647-793	"C" Clamp - 4"	1300 kgs	1
647-794	"C" Clamp - 5"	1500 kgs	1
647-795	"C" Clamp - 6"	1800 kgs	1
647-796	"C" Clamp - 8"	2000 kgs	1
647-797	"C" Clamp - 10"	2500 kgs	1
647-798	"C" Clamp - 12"	2800 kgs	1

GREASE COUPLER



PRODUCT CODE	DESCRIPTION	PKG QTY
UC-2020	HD Lock-on Grease Coupler with Relief Valve	1
UC-2121	HD Lock On Grease Coupler (w/o Relief Valve)	1

TOOLS

Power Puller • Lift Jack

POWER PULLER

1 TON HAND POWER PULLER

- Horizontal pulling capacity: 2000 lbs (1000 kgs)
- Vertical lifting capacity: 1000 lbs (500 kgs)
- Single line cable: 3/16" x 5mm x 12ft
- Double line cable: 3/16" x 5mm x 6ft
- 2 hooks
- Single gear and pawl
- Stores conveniently in plastic blowcase



PRODUCT CODE	DESCRIPTION	PKG QTY
647-901	1 ton hand power puller	1

4 TON HAND POWER PULLER

- Heavy duty stamped steel
- Twin drive pawl and twin stop pawl
- 3 drop forged steel hooks with spring safety catches
- Double safety switches
- 10 ft cable
- Lifting capacity: 2000kgs/4000lbs
- Maximum lift: 4.5 ft
- Pulling capacity: 4000kgs/8000lbs



PRODUCT CODE	DESCRIPTION	PKG QTY
647-904	4 ton hand power puller	1

48" LIFT - ALL JACK

- 7000lb lifting capacity
- Can be used as a jack, hoist, crane and a clamp
- It can be used for such functions as lifting, pushing and pulling
- Known as a Farmer's Jack



PRODUCT CODE	DESCRIPTION	PKG QTY
647-740	Farmer's Jack	1

SLEDGE/CLUB HAMMERS WITH WOOD HANDLE



PRODUCT CODE	DESCRIPTION	PKG QTY	CASE QTY
648-370	4 lb Club Hammer	1	8
648-371	4 lb Sledge Hammer Hickory Handle	1	8
648-372	6 lb Sledge Hammer Hickory Handle	1	4
648-373	8 lb Sledge Hammer Hickory Handle	1	4
648-375	10 lb Sledge Hammer Hickory Handle	1	4
648-374	12 lb Sledge Hammer Hickory Handle	1	2
648-376	16 lb Sledge Hammer Hickory Handle	1	2
648-369	20 lb Sledge Hammer	1	1
REPLACEMENT HANDLES		LENGTH	
648-371H	4 lb Replacement Hickory Handle	1	16"
648-372H	6 lb Replacement Hickory Handle	1	28"
648-373H	8 - 12 lb Replacement Hickory Handle	1	36"
648-376H	16 lb Replacement Hickory Handle	1	36"
648-369H	20 lb Replacement Handle	1	36"

SLEDGE HAMMER WITH FIBERGLASS HANDLE



PRODUCT CODE	DESCRIPTION	PKG QTY	CASE QTY
648-424	4 lb Sledge Hammer with Fiberglass Handle	1	8
648-426	6 lb Sledge Hammer with Fiberglass Handle	1	4
648-428	8 lb Sledge Hammer with Fiberglass Handle	1	4
648-430	10 lb Sledge Hammer with Fiberglass Handle	1	4
648-431	12 lb Sledge Hammer with Fiberglass Handle	1	4
648-433	16 lb Sledge Hammer with Fiberglass Handle	1	2
648-435	20 lb Sledge Hammer with Fiberglass Handle	1	2
REPLACEMENT HANDLES		LENGTH	
648-424H	4 lb Replacement Fiberglass Handle	1	16"
648-426H	6 lb Replacement Fiberglass Handle	1	36"
648-430H	10-12 lb Replacement Fiberglass Handle	1	36"
648-433H	16-20 lb Replacement Fiberglass Handle	1	36"

AXES



PRODUCT CODE	DESCRIPTION	PKG QTY
648-377	1½ lb Axe with Fiberglass Handle	1
648-378	2½ lb Axe with Fiberglass Handle	1
648-379	4 lb Axe with Fiberglass Handle	1
648-380	4 lb Axe	1

CHISEL SET

14 PC PUNCH & CHISEL SET

- S.A.E.
- Drop forged chrome vanadium steel
- Specially designed anvil heads
- Ends are precision ground and highly polished
- Comes in a heavy duty roll pouch



PRODUCT CODE	DESCRIPTION	PKG QTY
690-214	14 Pc punch & chisel assortment	1

BRUSHES



PRODUCT CODE	PART NO	DESCRIPTION	PKG QTY	CASE QTY
645-001	PC-1	Parts Cleaning	1	24



PRODUCT CODE	DESCRIPTION	PKG QTY	CASE QTY
645-002	Brass Utility	1	48



PRODUCT CODE	PART NO	DESCRIPTION	PKG QTY	CASE QTY
645-004	B4	Wire Scratch - 4 x 16 Rows	1	12



PRODUCT CODE	DESCRIPTION	PKG QTY	CASE QTY
645-005	Shoe Handle - 4 x 16 Row Wire	1	12



PRODUCT CODE	DESCRIPTION	PKG QTY	CASE QTY
645-007	Mini Brush Crimped Stainless Wire	1	48



PRODUCT CODE	PART NO	DESCRIPTION	PKG QTY	CASE QTY
645-200	6235	Bench Brush	1	6

SNOW BRUSH

- Adjustable
- Telescopic handle
- 11" width
- Length 28" extends to 46"



PRODUCT CODE	DESCRIPTION	PKG QTY	CASE QTY
645-250	Snow Brush	1	12

SHOVELS

All Shovels are sold only in Bundles of 6

SIDEWALK SCRAPER



PRODUCT CODE	DESCRIPTION	BUNDLE
645-265	Sidewalk scraper	6

SQUARE POINT SHOVEL



PRODUCT CODE	DESCRIPTION	BUNDLE
645-270	Square Point Shovel	6
645-271H	Replacement Handle 48"	1

ROUND POINT SHOVEL



PRODUCT CODE	DESCRIPTION	BUNDLE
645-271	Round Point Shovel	6
645-271H	Replacement Handle 48"	1

DRAIN SPADE TURN STEP SHOVEL (TRACK SHOVEL)



PRODUCT CODE	DESCRIPTION	BUNDLE
645-272	Drain Spade Turn Step Shovel	6
645-272H	Replacement Handle 28"	1

GRAIN SCOOP SHOVEL



PRODUCT CODE	DESCRIPTION	BUNDLE
645-273	Grain Scoop Shovel	6
645-273H	Replacement Handle 28"	1

ROUND POINT SHOVEL WITH Y HANDLE



PRODUCT CODE	DESCRIPTION	BUNDLE
645-275	Round Point Shovel with Y handle	6

SQUARE POINT SHOVEL WITH Y HANDLE



PRODUCT CODE	DESCRIPTION	BUNDLE
645-276	Square Point Shovel with Y handle	6



MISCELLANEOUS

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TAPES

PVC TAPE

- Cold resistant
- Temperature rating -7°C to + 80°C
- 7 mil thickness
- 10 rolls/sleeve
- Case quantity = 250
- Available in 6 colours



PRODUCT CODE	PART NUMBER	DESCRIPTION	PKG QTY	CASE QTY
554-300	PVC33 (Black)	3/4" x 33'	10	250
554-500	PVC66 (Black)	3/4" x 66'	10	250
554-510	PVC66W (White)	3/4" x 66'	10	250
554-520	PVC66Y (Yellow)	3/4" x 66'	10	250
554-530	PVC66B (Blue)	3/4" x 66'	10	250
554-540	PVC66G (Green)	3/4" x 66'	10	250
554-545	PVC66K (Orange)	3/4" x 66'	10	250
554-550	PVC66R (Red)	3/4" x 66'	10	250

MASKING TAPE (UTILITY GRADE PAPER)

- Thickness: 4.8 mils (121.92 mic)
- Adhesion to Steel: 42 oz/in (4.6 N/cm)
- Tensile 16lb/in (28.02 N/cm)
- Operating Temperature: 30° - 150°F
- Colors: Natural



PRODUCT CODE	DESCRIPTION	PKG QTY	CASE QTY
554-250	(18mm / 3/4") x 55m	1	48 (rolls)
554-251	(24mm / 1") x 55m	1	36
554-252	(36mm / 1 1/2") x 55m	1	24
554-253	(48mm / 2") x 55m	1	24

PVC COLOUR TAPE ASSORTMENT

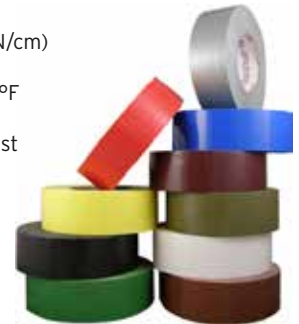
- Contains 6 different colours
- Case quantity = 20



PRODUCT CODE	DESCRIPTION	PKG QTY
554-560	PVC Assortment tapes	1

DUCT TAPES

- Thickness: 9 mils (228 mic)
- Adhesion to Steel: 50 oz/in (5.47 N/cm)
- Tensile 29lb/in (50.78 N/cm)
- Operating Temperature: 30° - 200°F
- 24 Rolls in a case
- Other colours available upon request



PRODUCT CODE	COLOUR	PKG QTY	CASE QTY
554-200	Silver	1	24
554-201	Black	1	24
554-202	Blue	1	24
554-203	Green	1	24
554-204	White	1	24
554-205	Yellow	1	24
554-206	Red	1	24
554-230	Silver	1	24
554-240	Silver	1	24

COLD WEATHER TAPE

- Flame retardant
- Cold resistant
- Temperature rating -19°C to + 90°C
- 8 mil thickness
- Case quantity = 250



PRODUCT CODE	PART NUMBER	DESCRIPTION	PKG QTY	CASE QTY
554-100	CWT66	3/4" x 66'	10	250

MISCELLANEOUS

Tapes

TAPES (CONT)

DOUBLE SIDED TAPE

- 0.8mm polyethylene foam coated
- Water and solvent resistant
- High internal strength
- Superior resistance to high temperature
- Case quantity = 90



PRODUCT CODE	DESCRIPTION	PKG QTY	CASE QTY
554-581	1" x 10m	1	90

14-DAY PAINTER'S MASKING TAPE

- UV Resistant - Provides clean removal for up to 14 days.
- Resists most paints and varnishes.
- Excellent conformability.
- Colors: Blue



PRODUCT CODE	DESCRIPTION	PKG QTY	CASE QTY
554-261	(24mm / 1") x 50m	1	72 (rolls)
554-262	(36mm / 1½") x 50m	1	48
554-263	(48mm / 2") x 50m	1	36

CARTON SEALING TAPE



PRODUCT CODE	DESCRIPTION	PKG QTY	CASE QTY
554-641	48mmx100m	1	100

THREAD SEALANT TAPE

- 100% TFE fluorocarbon
- Temperature rating -450°F to 600°F



PRODUCT CODE	DESCRIPTION	PKG QTY	CASE QTY
554-710	1/2" x 480"	1	1200
554-720	3/4" x 480"	1	500
554-730	1 x 480"	1	500

PINK WATER SEALANT TAPE



PRODUCT CODE	DESCRIPTION	PKG QTY	CASE QTY
554-740	1/2" x 260"	1	100

YELLOW GAS SEALANT TAPE



Product Code	Description	Pkg Qty	Case Qty
554-750	1/2" x 260"	1	100

MISCELLANEOUS

Tie Wire • Ties • Solder

TIE WIRE



GENERAL PURPOSE	STAINLESS STEEL	REBAR WIRE
• 18 gauge	• 18 gauge	• 16 gauge
• 2 lb spool	• 1 lb spool	• 3.125 lb spool
• Soft annealed	• Approximately 164'	• Approximately 291'
• Approximately 328'		

PRODUCT CODE	DESCRIPTION	PKG QTY	CASE QTY
560-100	General Purpose	1	24
560-110	304-Stainless Steel	1	24
560-120	Rebar Wire	1	12

RUBBER TIE DOWNS

- EPDM rubber tie down
- 'S' hooks
- Rotate stock



PRODUCT CODE	DESCRIPTION	PKG QTY	CASE QTY
647-400	10"	10	100
647-405	15"	10	100
647-410	21"	10	100
647-420	31"	10	100

SNAPPI-HOOKER TIE DOWNS



- New TTS hooks
- Cold weather EPDM
- Extra thick
- Made in North America

PRODUCT CODE	DESCRIPTION	PKG QTY
647-430	9" Snappi-Hooker Cold Temp Heavy Duty Tie-Down	1
647-431	15" Snappi-Hooker Cold Temp Heavy Duty Tie-Down	1
647-432	20" Snappi-Hooker Cold Temp Heavy Duty Tie-Down	1
647-433	30" Snappi-Hooker Cold Temp Heavy Duty Tie-Down	1
647-434	Snappi-Hooker Cold Temp Heavy Duty Tie-Down Display	1
647-435	Snappi-Hooker Cold Temp Heavy Duty Tie-Down Display (display only, no product)	1
647-436	9" Snappi-Hooker Black	1
647-437	15" Snappi-Hooker Black	1
647-438	20" Snappi-Hooker Black	1
647-439	30" Snappi-Hooker Black	1

SOLDER



PRODUCT CODE	DESCRIPTION	PKG QTY
563-100	Lead Free Wire Solder-1/8"- 95/5%-1 lb.	1
563-105	Rosin Flux Core Solder-1/16" 1/4 lb.	1
563-110	Rosin Flux Core Solder-3/32" 1/4 lb.	1
563-115	Paste Flux - 1.5 oz	1

MISCELLANEOUS

Tire & Wheel Assemblies • Wheel Chocks

TIRE & WHEEL ASSEMBLIES



Size	Ply	Axle/Bore	Tread	Load Capacity	Product Code
2.80 / 2.50 x 4	2	5/8"	Patterned	80 kgs	642-509
4.10 / 3.50 x 4	2	5/8"	Patterned	80 kgs	642-510
4.10 / 4.00 x 4	4	3/4"	Rib	100 kgs	642-511
4.10 / 3.50 x 4	6	3/4"	Patterned	100 kgs	642-512
4.00 / 3.50 x 8	2	3/4"	Rib	120 kgs	642-514
4.80 / 4.00 x 8	2	3/4"	Rib	150 kgs	642-516

PRODUCT CODE	DESCRIPTION	PKG QTY
642-509	9" Tire & Wheel assemblies - patterned	1
642-510	10" Tire & Wheel assemblies - patterned	1
642-511	11" Tire & Wheel assemblies - rib	1
642-512	12" Tire & Wheel assemblies - patterned	1
642-514	14" Wheel Barrow wheels - rib	1
642-516	16" Wheel Barrow wheels - rib	1

WHEEL CHOCKS



PRODUCT CODE	DESCRIPTION	PKG QTY
515-000	One-sided - 8"x4"x6" - 1.82 kg	1
515-002	Two-sided - 10"x8"x6" - 3.84 kg	1
515-003	One-sided jumbo - 9.5"x6.5"x7.5" - 6.2 kg	1

FLAT FREE TIRES



PRODUCT CODE	DESCRIPTION	PKG QTY
642-520	10" Flat Free Cart Wheel	1
642-521	11" Flat Free Hand Truck Wheel	1
642-522	12" Flat Free Wheel	1
642-523	14" Flat Free Wheelbarrow Wheel - narrow hub	1
642-524	16" Flat Free Wheelbarrow Wheel - wide hub	1

MISCELLANEOUS

Outdoor Kits • Shimstock

OUTDOOR KITS

HUNTER'S FIELD KIT

- PERFECT FOR RV's • CAMPING • HUNTING • PICNICS
- Easy to Clean Impact Resistant Carrying Case with sliding locks
- Tungsten Carbide Knife Sharpener
- 6 Pairs of Disposable Rubber Gloves
- 13" Hunter's Handsaw with 7-3/4" Blade
- 13-13/16" Butcher Knife with 7-1/2" Blade
- 10-3/4" Skinning Knife with 5-3/8" Blade
- 10-7/8" Boning Knife with 5-1/2" Blade
- 1-8" utility scissors



PRODUCT CODE	DESCRIPTION	PKG QTY	CASE QTY
690-143	Hunter's Field Kit	1	6

FISHING KIT

- Ready for the road, just pick up and go!
- Stainless steel blades
- Handles with two plastic components
- Components:
 - 1 - Cutting board
 - 1 - Large fillet knife with 8" blade
 - 1 - Small knife with 6.1/16" blade
 - 1 - Fish scale with 5.3/8" serrated blade
 - 1 - Fish balance with compass and 3 ft tape measure mm/inch
 - 1 - 8" utility scissor
 - 1 - Knife sharpener MS 1
 - 1 - Rubber coated "Sure Grip" filleting glove
 - 1 - Storage case



PRODUCT CODE	DESCRIPTION	PKG QTY	CASE QTY
690-144	Fishing Kit	1	6

SHIMSTOCK



PRODUCT CODE	PART NUMBER	EXACT THICKNESS
BRASS 6" X 100"		
556-101	SB - 61	.001
556-102	SB - 62	.002
556-103	SB - 63	.003
556-104	SB - 64	.004
556-105	SB - 65	.005
556-106	SB - 66	.006
556-107	SB - 67	.007
556-108	SB - 68	.008
556-110	SB - 610	.010
556-111	SB - 612	.012
556-112	SB - 615	.015
556-113	SB - 620	.020
556-114	SB - 625	.025
STEEL 6" X 100"		
556-201	SS - 61	.001
556-202	SS - 62	.002
556-203	SS - 63	.003
556-204	SS - 64	.004
556-205	SS - 65	.005
556-206	SS - 66	.006
556-207	SS - 67	.007
556-208	SS - 68	.008
556-209	SS - 610	.010
556-210	SS - 612	.012
556-211	SS - 615	.015
556-212	SS - 620	.020
556-213	SS - 625	.025
+ STAINLESS STEEL 6" X 50"		
556-301	ST - 61	.001
556-302	ST - 62	.002
556-303	ST - 63	.003
556-304	ST - 64	.004
556-305	ST - 65	.005
556-306	ST - 66	.006
556-307	ST - 67	.007
556-308	ST - 68	.008
556-309	ST - 610	.010
556-310	ST - 612	.012
556-311	ST - 615	.015
556-312	ST - 620	.020
556-313	ST - 625	.025

MISCELLANEOUS

Eye Protection • Trigger Sprayer • First Aid • Fire Extinguishers

EYE PROTECTION



PRODUCT CODE	DESCRIPTION	PKG QTY
7098200	Ultra-Lightweight Eye Protection c/w Anti-Fog - Clear	1

TRIGGER SPRAYER



PRODUCT CODE	DESCRIPTION	PKG QTY
650-721	Sprayer only	1
650-722	Bottle only - 500 ml	1
650-723	Bottle only - 750 ml	1

SAFETY PRODUCTS

FIRST AID KIT - CSA COMPLIANT

- Moisture and dustproof
- Meets Ontario WCB and DOT requirements only
- Can be wall mounted



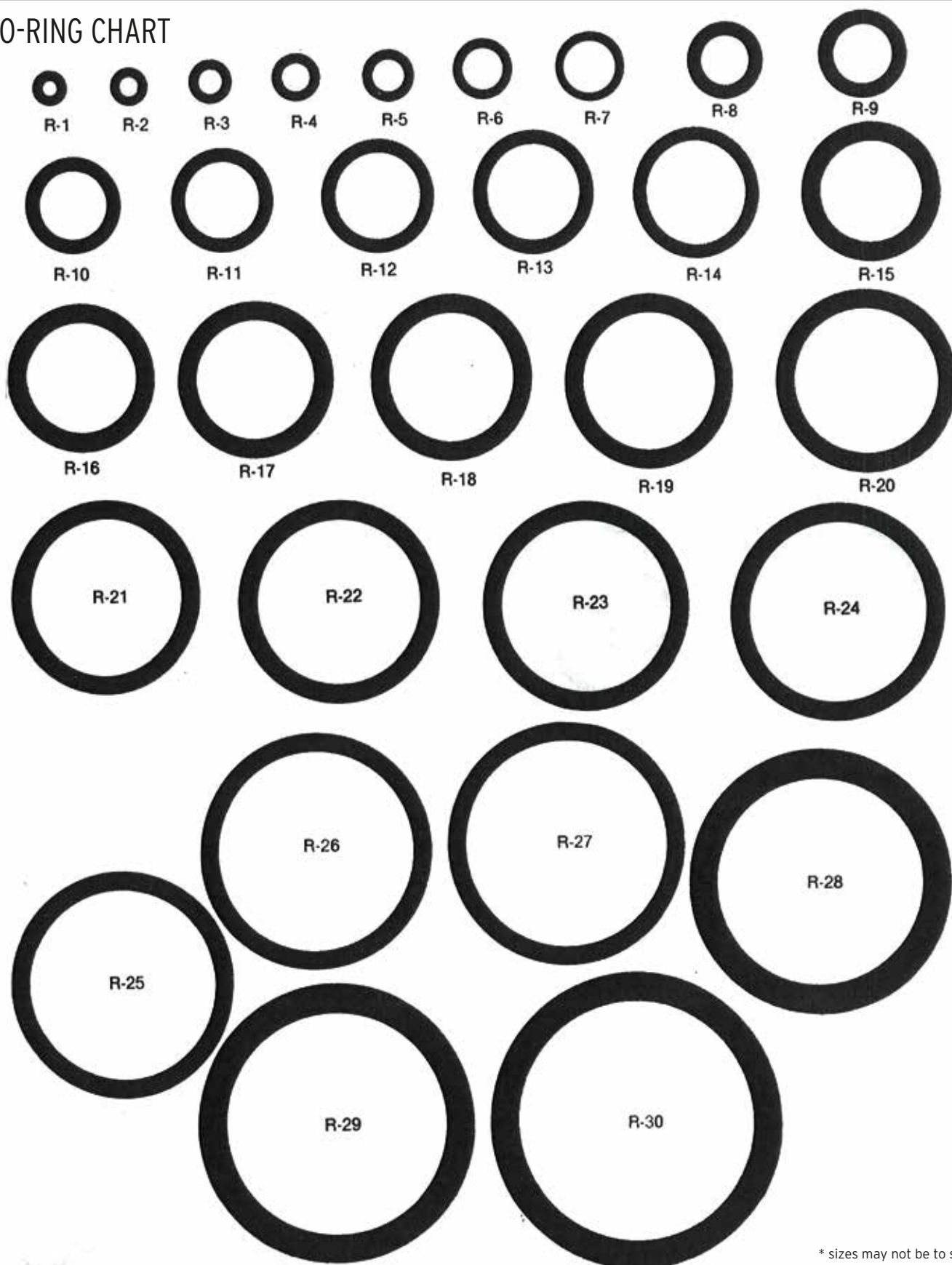
Product Code	Part Number	Pkg Qty
567-500	WCB-T	1

FIRE EXTINGUISHERS



PRODUCT CODE	DESCRIPTION	PKG QTY
567-000	2.5lb Dry Chem Fire Ext 1-A: 10-B:C	1
567-001	5lb Dry Chem Fire Ext 3-A 40-B C With Vehicle Bracket	1
567-002	5lb Dry Chemi Fire Ext 3-A 40-B C With Wall Hook	1
567-003	10lb Dry Chem Fire Ext. 6-A 80-B C	1
567-004	20lb Dry Chem Fire Ext. 10 -A 120-B :C	1

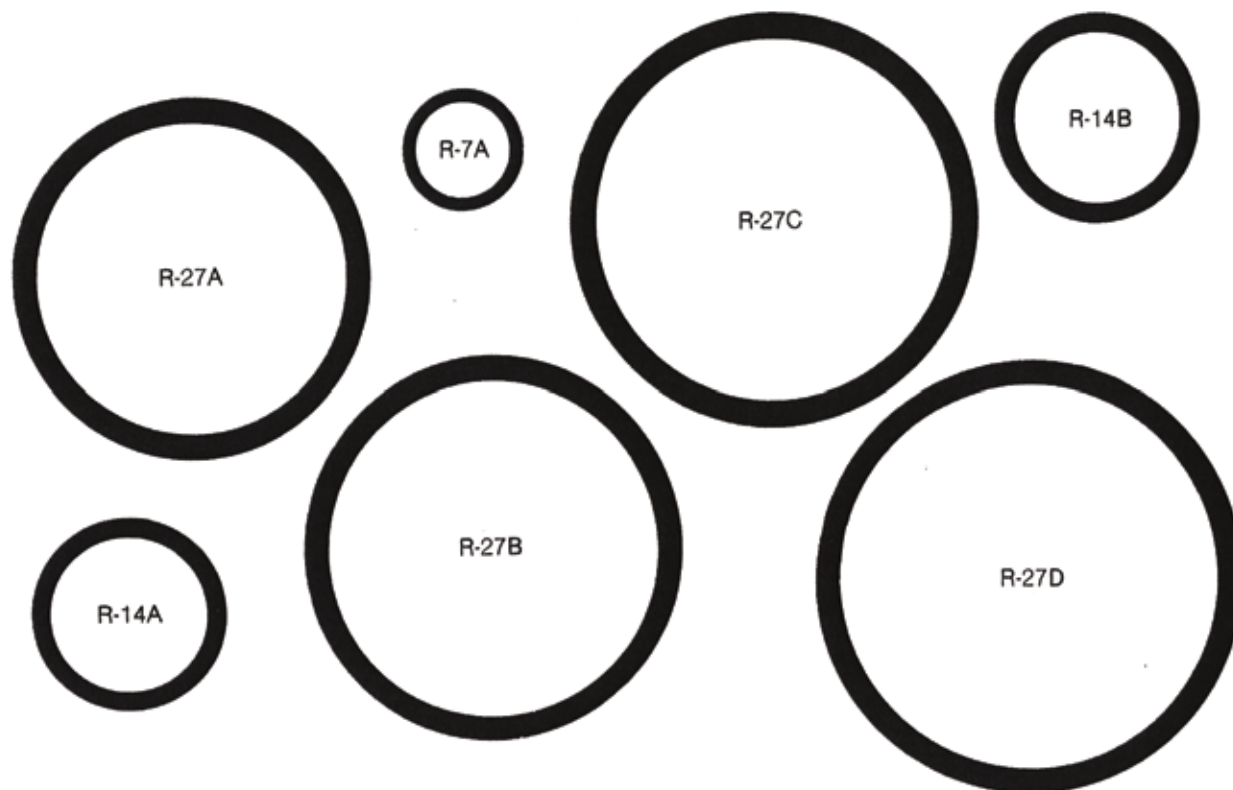
O-RING CHART



* sizes may not be to scale

INDEX

O-RING CHART



sizes may not be to scale

GROMMETS CHART



EWG-1
1/8x9/32
Pkg. Qty. 25



EWG-31
3/8x3/4
Pkg. Qty. 25



RBG-2
3/8
Pkg. Qty. 25



EWG-6
3/16x5/16
Pkg. Qty. 25



EWG-34
7/16x3/4
Pkg. Qty. 25



RBG-3
1/2
Pkg. Qty. 25



EWG-13
1/4x1/2
Pkg. Qty. 25



EWG-36
1/2x21/32
Pkg. Qty. 25



RBG-4
5/8
Pkg. Qty. 25



EWG-21
5/16x17/32
Pkg. Qty. 25



EWG-44
5/8x1
Pkg. Qty. 10



RBG-5
3/4
Pkg. Qty. 25



EWG-26
3/8x1/2
Pkg. Qty. 25



EWG-45
3/4x15/16
Pkg. Qty. 10



RBG-6
7/8
Pkg. Qty. 10



EWG-27
3/8x9/16
Pkg. Qty. 25



RBG-1
5/16
Pkg. Qty. 25

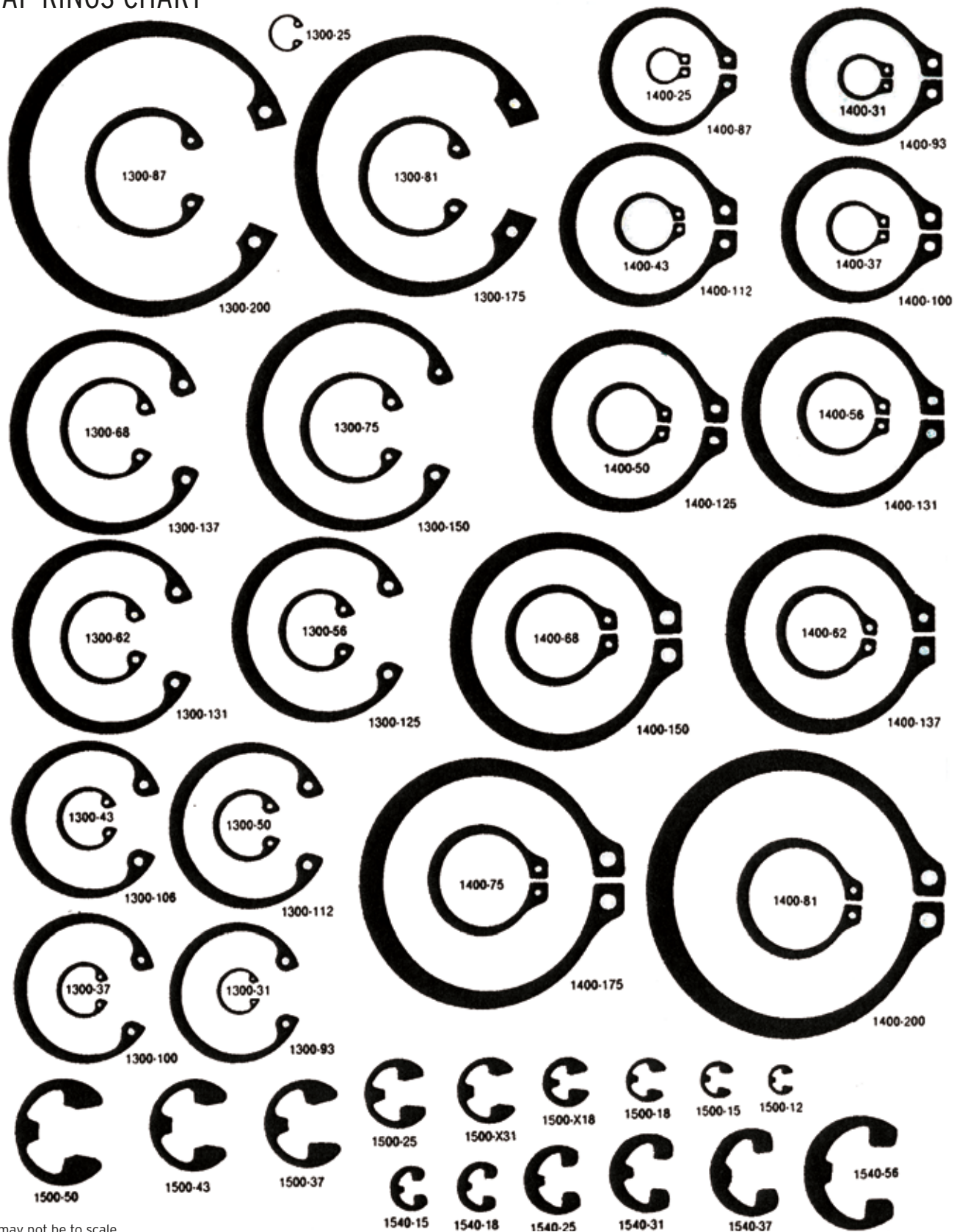


RBG-7
1
Pkg. Qty. 10

sizes may not be to scale

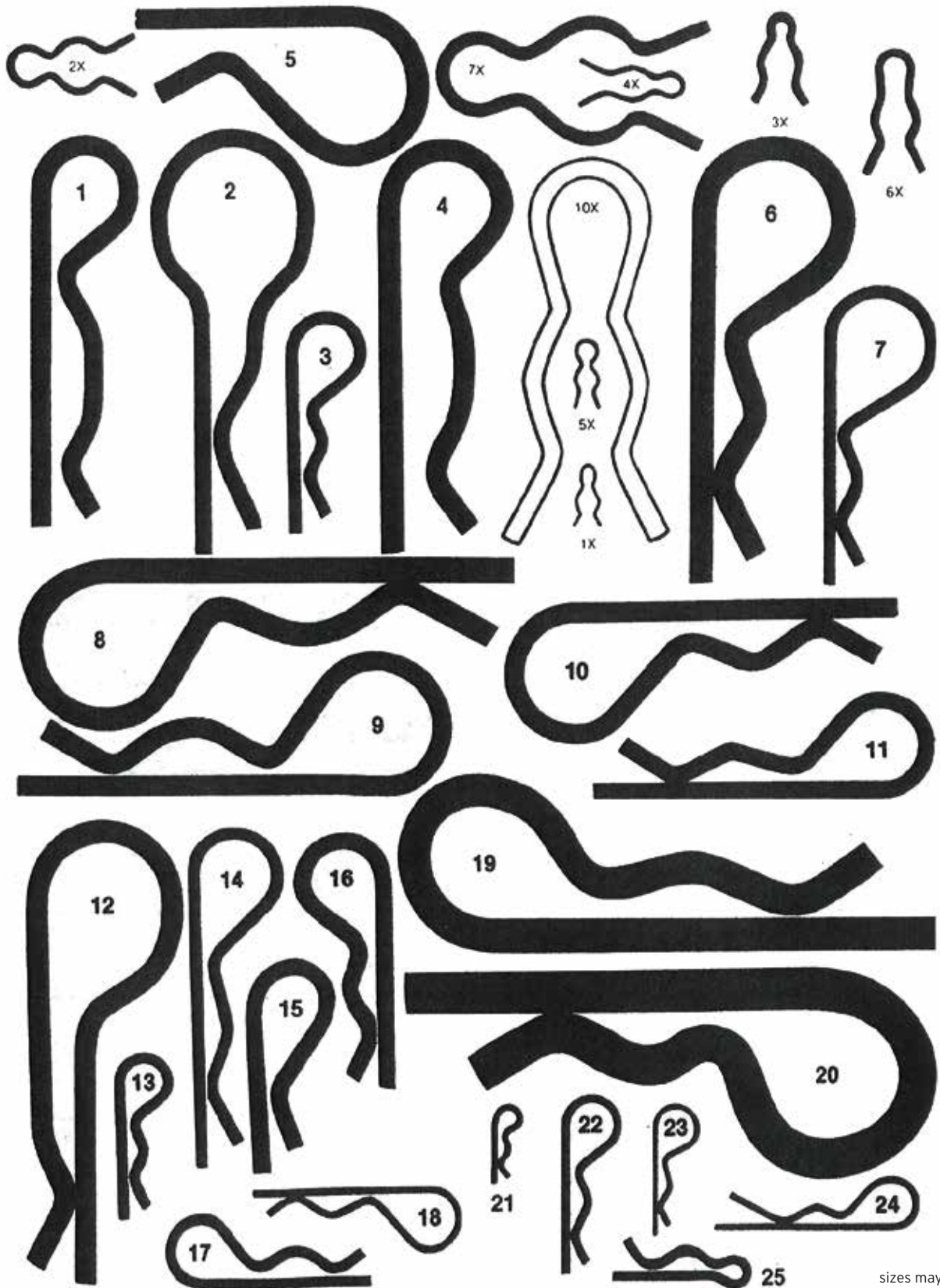
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SNAP RINGS CHART



sizes may not be to scale

HITCH PINS CHART



sizes may not be to scale

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TERMS & CONDITIONS OF SALE

• TERMS AND CONDITIONS OF SALE •

The following terms and conditions, including the Return Policy, are applicable to all Docap product lines.

PAYMENT TERMS

Subject to the provisions of CREDIT APPROVAL, terms are Net 30 days upon issuance of invoice; past due thereafter and payable in Canadian funds

FREIGHT POLICY

F.O.B Docap locations

Freight will be prepaid on orders of \$1000.00 or more on net invoice value, however, the following exceptions will apply:

Prepaid Freight will NOT apply to the following product:

- Bench Vises
- Bolt Bins
- Drum quantity of Spray Nine Product
- Superlube Drum

Prepaid requirements for Threaded Rod orders will be a minimum \$2000.00

Prepaid requirements for Spray Nine orders will be a minimum of \$1000.00

CANCELLATION

Standard orders for stocked items may be cancelled without charge if communicated to Docap in time to stop the shipment.

Special orders may NOT be cancelled.

BACKORDERS

Backorders will be shipped once a month, or with next customer order, whichever comes first, however the minimum order must exceed \$40.00 if it's shipping without a new order.

DISCLAIMER

Not all geographical areas of Canada are covered by the above freight policy; please contact your nearest Docap office listed below for confirmation of these terms and conditions. Docap may add to, change or remove any part of these Terms and Conditions of Sale at any time, without notice.

• TERMES ET CONDITIONS DE VENTE •

Les termes et conditions de vente suivants, incluant la politique de retour, s'appliquent sur tous les produits Docap.

TERMES DE PAIEMENT

Sujet aux conditions de l'approbation de crédit, le terme est de « Net 30 jours » à partir de la date de facturation, considéré comme en souffrance passé ce délai et payable en fonds canadiens.

POLITIQUE DE TRANSPORT

F.A.B. succursale Docap.

Le transport sera prépayé sur toute commande excédant \$1000.00 net sur la facture avant taxes. Toutefois, les exceptions suivantes s'appliquent :

- Étaux d'établi
- Ensembles de boulons
- Produits Spray Nine en vrac
- Superlube Drum

Le transport prépayé pour les tiges filetées sera de \$2,000.00 minimum.

Le transport prépayé pour le produit Spray Nine sera de \$1,000.00 minimum.

CANCELLATION

Les commandes régulières pour les items en inventaire peuvent être annulées sans frais en communiquant avec Docap avant l'envoi de celle-ci.

Les commandes spéciales ne peuvent être annulées.

RUPTURE DE MARCHANDISE

Les commande du client, selon la première éventualité, cependant, la facture minimale de la commande en souffrance doit dépasser le montant minimum de la facture de Docap de \$40.00

EXCEPTION

Certaines exceptions s'appliquent selon votre région concernant les frais de transport, veuillez contacter le bureau de Docap le plus près, aux endroits mentionnés ci-dessous pour la confirmation de ces termes et conditions. Docap peut ajouter, changer ou enlever une de ces conditions de ventes à n'importe quel moment, sans aucun avertissement.

RETURN POLICY

• RETURN POLICY •

All returns must be authorized by a Docap Customer Service Representative. Product may only be sent back after getting a pre-authorized Return Goods Authorization (RGA) number. For an RGA number please contact your nearest Docap branch listed below.

Docap will accept product, returned for Credit, once in a calendar year, to a maximum of 5% of previous year's sales, per product line.

Product must be returned to Docap within 14 calendar days of the issuance of the RGA. All products must be returned with Docap issued RGA number, packing slip/invoice and packed in the original packaging including any accessories, manuals, documentation, and registration that shipped with the product.

Returned product must not be installed or altered and must be in its original packaging, in saleable condition.

Products that are special order, custom built, not listed or identified as discontinued products are non-returnable.

The Purchaser is responsible for shipping product, prepaid, back to our location. Docap recommends that you use a carrier that offers shipment tracking for all returns and either insure your package for safe return to Docap or declare the full value of the shipment so that you are completely protected if the shipment is lost or damaged in transit.

AUTHORIZED RETURNS

Authorized returns may be subject to a 25% restocking charge. Any costs in excess of 25% restocking charge incurred in placing the goods in saleable condition will be charged to the Purchaser by a corresponding deduction from the allowed credit.

Shipping charges will not be refunded.

UNAUTHORIZED RETURNS

Any unauthorized returns will NOT be accepted and will be sent to the Purchaser with shipping costs collect.

CLEARANCE SALES

Sales of items marked as "Clearance" or "Specials" are FINAL. There will be no returns or exchanges of those items.

DEFECTIVE PRODUCT

Product considered defective for credit return must be authorized by Docap. Docap in its discretion, along with its Vendors, will determine whether the returned defective products are in fact defective. All products that are deemed not defective, the Purchaser will be responsible for shipping costs of the product back to them.

• POLITIQUE DE RETOUR •

Tous les retours doivent être autorisés par un représentant du service à la clientèle de Docap. Tout produit ne peut être retourné qu'après avoir obtenu un numéro de pré-autorisation de retour de marchandise (RGA). Afin d'obtenir un numéro de pré-autorisation (RGA), veuillez contacter un représentant du service à la clientèle à la succursale Docap la plus près de chez-vous. Le produit retourné doit avoir été acheté dans les douze (12) derniers mois et représenter moins de cinq pourcent (5%) des achats de l'année par ligne de produit.

Le produit doit être retourné à Docap dans les quatorze (14) jours suivant l'émission du numéro de pré-autorisation. Tout produit retourné à Docap doit être accompagné du numéro de pré-autorisation, d'une copie de bon de livraison et/ou d'une copie de la facture originale, dans son emballage original incluant tout accessoire, manuels, documentation et enregistrement inclus à l'origine. Le produit retourné ne doit pas avoir été installé ou modifié et doit être dans son emballage original, en condition de revente.

Les items commandés spécialement, assemblés sur mesure, non listés ou identifiés comme discontinués sont non-retournables.

L'acheteur doit assumer l'expédition, port payé, vers la succursale Docap. Afin de sécuriser le retour, Docap recommande d'utiliser un transporteur qui offre le service de repérage et d'assurer le colis ou de mentionner une valeur déclarée pour tout retour. Ceci permettra de compenser en cas de perte ou dommages en cours de transit. Si vous choisissez d'utiliser un transporteur n'offrant pas ces services, vous devrez assumer les pertes ou dommages encourus durant l'expédition.

RETOURS AUTORISÉS

Les retours autorisés peuvent être sujets des frais de manutention de vingt-cinq pourcent (25%). Les coûts dépassant vingt-cinq pourcent (25%) occasionnés par la remise en état des items seront déduits du montant alloué au crédit. Les frais d'expédition ne seront pas remboursés.

RETOURS NON AUTORISÉS

Tout retour non autorisé sera refusé et retourné à l'expéditeur à ses frais.

VENTE DE LIQUIDATION

Toutes les ventes indiquées "Liquidation" ou "Spécial" sont FINALES. Il n'y aura ni retour ni échange sur ces items.

PRODUIT DÉFECTUEUX

Le retour d'un produit considéré comme défectueux doit être pré autorisé par Docap. Il sera à la discrétion de Docap, selon les directives du manufacturier de déterminer la défectuosité du produit. Pour les produits considérés comme non défectueux, le coût du transport de retour à l'expéditeur sera aux frais de celui-ci.



Canbuilt, a Canadian-based manufacturer specializes in designing and producing a wide range of industrial, automotive, and body shop equipment tailored for demanding environments. Their product portfolio includes professional-grade air compressors, sandblasting and abrasive blasting cabinets, body and collision repair tools, hydraulic lifts, portable cranes, and fluid handling systems for oil, waste oil, grease, and more. They also supply tire changers, wheel balancers, heavy-duty workbenches, and a complete line of automotive service and workshop essentials.

Recognized for their focus on construction, innovative engineering, and customer-driven solutions, their equipment is trusted by body shops, fleet maintenance operations, industrial facilities, and automotive service centers across North America. Products are built to deliver long-term performance, reliability, and efficiency, helping businesses maintain high productivity and meet industry standards with confidence.

As a master distributor of top quality brands (listed below) for the automotive and industrial marketplace, Docap supplies: Chain & Rigging, Fuses, Connectors, Fans, Switches, Work Lights, Fasteners, Pins & Clips, Nuts, Washers, Vices, Jacks, Axes & Shovels, Funnel, Pliers, Rivets, Sledge Hammers, Tie Downs, Safety, Tape, Ties, Tie Wire, Wheel Chocks.



Alligator Patented Inflate-Thru "Gator Cap"
For Commercial Vehicles



Total car care and detailing products



Hex and Torx Drivers in Ball End,
Chamfered and in all styles of L Wrench,
T Handles, Bits, Blades, Screwdrivers



Automotive and Industrial Equipment: Safety
Stands, Workbenches, Utility Carts, Engine
Cranes, Jacks, Compressors, Hydraulic
Presses, Oil Drains, Transfer Pumps Oil And
Lube Kits



Switches, Battery Related Products,
Solenoids and Relays, Electrical Connectors,
Warning Devices, Pilot Lights, Lamps &
Sockets, Terminal Blocks



Threaded Inserts for Thread Repair,
Helical Inserts, Key Locking Inserts
and EZ-Lok Brand



Next Generation car care products



Automotive Paint Products



Bolt Bins, Industrial Storage,
Material Handling



Smooth Lotion Hand Cleaner



Complete Fuel System Cleaner



Non-Marring Mallets and Hammers.
Buffalo Rawhide and soft-faced mallets,
Tool & Die, Metal Working



Stainless Steel Worm Gear, Specialty
Clamps for Auto, Industrial, Plumbing,
Marine and Specialty Hose Clamps



Utility Knives in all Configurations, Putty
Knives, Scrapers, Plumb Bobs, Pocket
Tapes, Long Tapes, Clamps, Digital Angel
Measures



Tire Charging and Tire Maintenance Tools



Paints, Stains and Finishes



High Tensile Strength Fastening System
for use in High Stress Environments



Fuses, Fuse Blocks, Automotive Sensors,
Magnetic Sensors, Reed Switches, TVS
Diodes and Arrays, PolyZen Devices,
PTC's



Wooden File Handles, Skroo-Zon,
Long and Short Ferrule, Cleaners



Air Accessories, Couplers, Plugs,
Inflator Gauges, Hoses and Reels,
Blo-Guns, Grease Guns, Pneumatic
Accessories, FRL's

For prices and more information, please contact your nearest branch:

TORONTO (HEAD OFFICE)

Tel: 905.673.0000

MONTRÉAL

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EDMONTON

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Precision German-made drivers and sockets manufactured using advanced CNC technology. Their "Cool Nitrogen" hardening process ensures better clamping and higher torque. Trusted across industries for durability and engineering accuracy.



Heavy-duty cleaning wipes designed for hands, tools, and surfaces, ideal for removing grease, paint, sealants, and more. Infused with skin conditioners like Aloe Vera and Vitamin E, they clean effectively without harsh chemicals. Made in the UK.



A versatile hand-mixable epoxy stick that sets steel-hard in 20 minutes. Available in metal, plastic, and wood versions, it bonds, plugs, and patches even under water. Can be sanded, drilled, and painted once cured.



Bulls Eye delivers high-pressure, adjustable spray performance for cleaning, rinsing, and more. They're ideal for both professional and home applications. Their compact design offers strong spray control with minimal effort.



American manufacturer, C.H. Hanson specializes in high-quality marking tools including carpenter pencils, retractable pencil pulls, and the VersaSharp sharpener. They also offer durable layout squares, making them a go-to brand for accurate



Non-toxic mold control solutions made in Canada. Effectively eliminates and prevents mold, mildew, and musty odors without using bleach or harmful chemicals. Suitable for use in homes, vehicles, and commercial settings.



Inventor of the original Dripless caulking gun, designed to stop material flow when the trigger is released. Their caulking guns are ergonomic, reliable, and ideal for clean, controlled applications. Widely used in construction and renovation.



Bright, attention-grabbing LED "OPEN" signs for storefronts and service counters. Features 6 lighting modes and 5 speed settings including solid, flashing, and fading. Energy-efficient and highly visible.



A magnetic access panel system for quick, tool-free installation over drywall, tile, or plywood. Ideal for residential or commercial applications where discreet access to electrical or plumbing is needed. Simple to use and reusable.



EATON provides reliable electrical components including sockets, switches, plates, receptacles, and connectors. Trusted for quality and safety in residential and commercial installations.



Premium safety glasses designed for comfort and protection in demanding environments. CSA-certified with anti-fog and anti-scratch coatings, and military-grade ballistic protection. Available in various lens styles and tints.



Innovative ratchet straps that allow side-loading of the strap, saving up to 35% time in securing loads. No need to pull the strap through the ratchet—just slide, tighten, and secure. European design built for speed and safety.



Austrian manufacturer of premium drilling and woodworking tools. Known for their Forstner bits, mortise chisels, and plug cutters, offering superior accuracy and long life. A favorite among fine woodworkers and professionals.

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The *Frederickson* Metric Square

A 400mm x 600mm cast aluminum framing square with metric rafter, brace, octagon, and mitre cut tables. Precision-crafted for carpenters and framers who need accuracy in layout and design. Durable and lightweight for jobsite use.



Tool belts designed with maximum comfort and ergonomic support for electricians and carpenters. Made from high-density nylon webbing to resist fraying and wear.



GREX manufactures high-quality pneumatic tools including nailers, staplers, brads, and pins, as well as professional-grade airbrushing systems. Known for precision, performance, and innovation, GREX tools are trusted for woodworking, finishing, and detailed spray applications in automotive, art, and industrial work.



Hultafors offers premium hand tools known for precision, durability, and ergonomic design. Their range includes measuring tools, knives, hammers, and pry bars trusted by professionals across trades.



One of the fastest-curing industrial adhesives available, developed by Granitex. Bonds materials in seconds with superior strength. Ideal for use on wood, plastic, metal, ceramic, and more.



Israeli-based company that produces high-accuracy levels, laser tools, and measuring systems. Known for durable design and advanced features like magnetized bases and digital readouts. Used by pros in construction and surveying.



South Korean brand specializing in tape measures, measuring wheels, and construction measuring tools. Known for innovation like self-locking tapes and ergonomic cases. Trusted worldwide for reliable jobsite accuracy.



One of the world's oldest pencil manufacturers, based in Nuremberg, Germany. Offers durable carpenter pencils and industrial markers for precise layout. Combines classic craftsmanship with modern performance.



Offers industrial-grade markers and layout crayons that function like paint in crayon form. Ideal for metal fabrication, welding, and construction where visibility and durability are essential. Widely used in demanding work environments.



Quick and easy surface marking tool that creates a visible point with a single push. Designed to mark through tile, wood, plaster, and metal surfaces with no smudge. A reliable tool for pre-drilling and precise layout.



Provides a full line of CSA-certified protective eyewear under the "Crews" brand. Lenses feature anti-fog and scratch-resistant coatings and meet military ballistic standards. Designed for comfort and performance in industrial settings.



Eco-friendly, water-based cleaner that removes industrial grease, grime, and contaminants. Non-toxic and biodegradable, it's safe for skin and ideal for environmental cleanup. Designed to outperform traditional chemical cleaners.



Italian brand specializing in pneumatic fastening systems including staplers, nailers, and brad tools. Engineered for industrial use with a focus on precision and durability. Popular in woodworking, packaging, and upholstery industries.



Power-Line 200 medium, black permanent markers. Black permanent markers are essential tools in industrial settings for creating clear, durable markings on equipment, inventory, and parts.

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Rath's PR88 product line offers industrial skin protection solutions, including creams and lotions that create a barrier against oils, solvents, and chemicals. These products help safeguard workers' skin, and improve cleanliness.



The only chalk line that can be released and rewound without damage or tangle. Reduces mess and improves accuracy during marking tasks. Innovative tool for layout and framing work.



Southwire[®]

Southwire is a leading manufacturer of industrial lighting solutions, offering high-performance, durable lighting products designed for tough jobsite conditions. Trusted by contractors.



Twisted and braided nylon construction twine on durable reels. Ideal for layout work in masonry, landscaping, and carpentry. Bright colors improve visibility on the jobsite.



Makers of the iconic Speed Square and other layout tools for framing and construction. Made from durable cast aluminum with clear markings for precise measuring and cutting. Trusted by professionals for generations.



Canadian brand known for ergonomic knee pads designed for jobsite comfort. Offers gel-cushioned and professional-grade options for flooring, tiling, and construction work.



U.S.-based manufacturer of surface and jobsite protection products like X-Board and drop cloths. Offers a wide range of solutions for paint, flooring, marine, and auto industries. Known for durability and easy-to-use designs.



American-made measuring products including steel bench tapes and oil field gauging tapes. Built to withstand extreme jobsite conditions and deliver precise results. Used in construction, surveying, and oil & gas sectors.



Global brand offering versatile hook-and-loop fasteners for industrial, household, and construction use. Known for durability, reusability, and easy application. A staple in everything from cable management to temporary mounting.



WORX[®] Biodegradable Hand Cleaner is an industrial-strength, all-natural hand cleaner formulated to effectively remove tough greases, oils, paints, and inks without harsh chemicals. Its green-certified, pH-balanced formula is gentle on skin, making it ideal for mechanics, contractors, and industrial workers seeking a powerful yet skin-friendly solution.

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