



TECHNICAL DATA

PROPERTIES and CHARACTERISTICS of RUBBER													
TYPE	NATURAL RUBBER	BUNA-S	NEO-PRENE	BUTYL	NITRILE COPOLYMERS	EPT	THIOLKOL FA ST		SILICONE	FLUORO-CARBON	HYPALON ACRYLIC		ISO-PRENE
Specific Gravity	.93	.94	1.23	.92	1.00	0.85	1.34	1.25	.95	1.85	1.1	1.09	.92
Tensile Strength, psi													
Pure Gum	3000	1000	3000	1500	600	300	170	200	0	1800-3000	2100	400	3000
Reinforced	4000	2000	3000	2000	4000	2500	1300	1300	1000	2500-3500	2800	1800	4000
Practical Shore A Hardness Range	30-100	40-100	40-95	40-75	20-100	40-90	20-80	20-80	20-90	55-80	45-95	40-90	30-100
Resiliency													
Room Temperature	E	G	G	P	F	G-E	F	F	G	P	G	P	E
Hot	E	G	G	G	F	G-E	F-G	F-G	F	F	E	E	E
Tear Resistance	G	P-F	G	G	F	G	G	G	F	F-G (gum) G-E (reinf.)	F	F	G
Abrasion Resistance	E	G-E	E	F-G	E	G-E	F	F	F	G-E	E	G	E
Atmospheric Aging Resistance	P	P	E	G-E	F	E	E	E	E	E	E	E	P
Oxidation Resistance	G	G	G	G-E	F	E	E	E	E	E	E	E	G
Heat Resistance	F-G	F-G	G	G-E	G	E	F	F-G	E	E	E	E	F-G
Low Temperature Flexibility	E	G	F	F	F	G-E	G	E	E	F	F	P	E
Compression Set	F-G	P-F	P (GN) G (W)	F	G	G-E	P	F	E	F-G	F	G	F-G
Permeability	F	F	G	E	E	G-E	E	E	F	G-E	G	G	F
Flame Resistance	P	P	E	P	P	P	P	P	F	E	G	P	P
Acid Resistance													
Dilute	G	F-G	E	E	G	G-E	G	G	G	E	E	F	G
Concentrated	F-G	F-G	G	E	F	G-E	P	P	P	E	E	P	F-G
Moisture Resistance	F-G	G-E	F	E	E	E	F	F	E	E (perox.) F (amine)	E	F	F-G
Solvent Resistance													
Hydrocarbons	P	P	F*	P	E	P	E	E	F	E	F	G	P
Oxygenated Solvents	G	G	P	E	P	E	G	G	G	P** G***	F	P	G
Oil and Gasoline	P	P	G	P	E	P	E	E	F	G	F	E	P
Animal and Vegetable Oils	P-G	P-G	G	E	E	P	E	E	G	G	F	E	P-G
Dielectric Properties	G-E	G	P-F	G-E	P	E	G	G	E	G	G	P	G-E

E = Excellent

G = Good

F = Fair

P = Poor

*except aromatics

**Ketones, esters

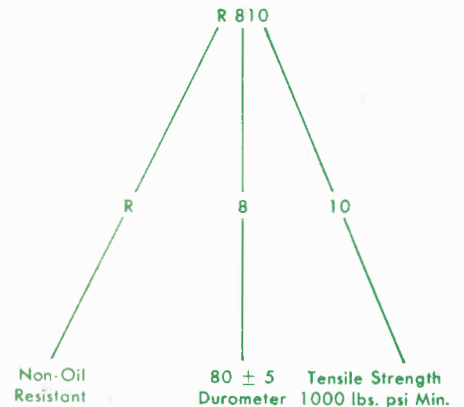
***alcohols

A.S.T.M. SPECIFICATIONS

The American Society for Testing Materials (A.S.T.M.) has compiled a group of specifications concerning rubber which defines its quality in quantitative terms so that both the manufacturer and buyer are protected. Other groups have selected their own standards such as the Society of Automotive Engineers (SAE), American Manufacturers Association (AMA), and the Army, Navy and Air Force. Even with this large group of specifications, there are many applications that are not completely covered. Fortunately, the following A.S.T.M. specifications may be adopted in practically all applications by adding special tests under a suffix letter.

MEANING OF SUFFIX LETTERS

Suffix Letter	Test Required
A	Heat Resistance
B	Compression Set
C	Ozone or Weather Resistance
D	Compression Deflection Resistance
E	Fluid Resistance
F	Low Temperature Resistance
G	Tear Resistance
H	Flex Resistance
J	Abrasion Resistance
K	Adhesion
L	Water Resistance
M	Flammability Resistance
N	Impact Resistance
P	Staining Resistance
R	Resiliency
Z	Any special requirement to be specified in detail



EXPLANATION OF SPECIFICATIONS

The American Society for Testing Materials and the Society of Automotive Engineers have jointly established a combination letter and numeral designation for specifications concerning natural and synthetic rubber compounds. These specifications are known as A.S.T.M. D735-61T. The following explanation is written around this specification. If we break average specification numbers down into their component parts for illustration purposes, we have:

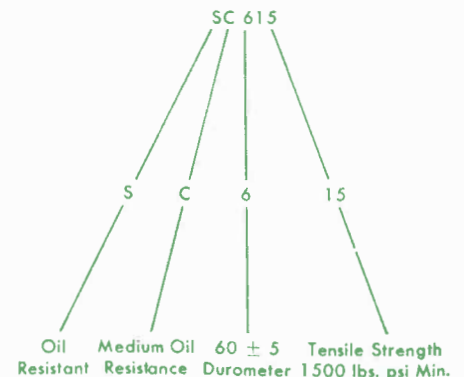
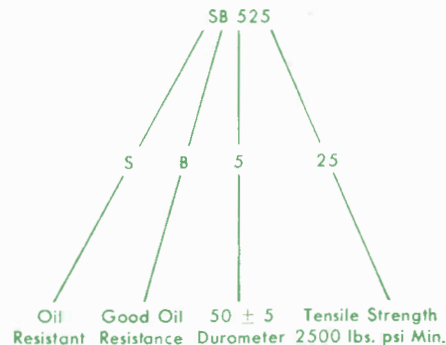


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GRINDING

By grinding, Allstates will re-shape a piece of stock material to fit your specifications. This process eliminates the need for a mold and cuts the cost factor for low volume production. Numerous shapes are readily available. A rotating abrasive stone grinds the stock to the desired contour.



Extruded stock can be ground to many shapes. Picture shows a bushing before and after an operator has completed the grinding operation.



DRILLING

When drilling, Allstates uses a hollow bit which minimizes the amount of disfiguration to the part as the hole is drilled. The hollow bit pulls the drilled portion up into the bit and it is then ejected like a rifle cartridge. This process allows continuous and rapid drilling since the scrap is automatically removed from the working area.

Fabrication also has special tools which make it possible to counter-bore holes in material 60 durometer or harder. Counter-bore is a recess larger than the thru-hole which provides room for a bolt or wrench to enter the hole without having the bolt extend above the surface of the material.

EXTRUSION FABRICATING

Allstates Fabrication will cut stocked extrusion to your required length, either manually or in a die-cut operation. Extrusions can also be slit, hole-punched and notched in the Fabricating Department.

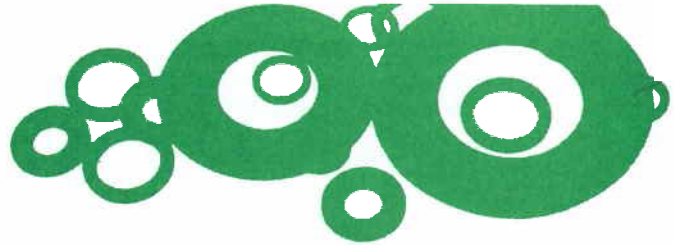


STANDARD SPLITS

-  Straight Split
-  Tangent Split
-  Diagonal Split

GROMMET SPLITTING

If your particular operation calls for split grommets, you can order a standard part from our grommet catalog and the Fabrication Division will split the grommets through manual or kick press operation.



WASHERS

Washers are a volume specialty of the Allstates Fabrication and Prototype Division. We make them in volume lots at a real saving to you.

A washer is a small, flat, perforated disc used for placing beneath a nut or an axle bearing or a joint to serve as a cushion, to prevent leakage, or to relieve friction. Washers can be manufactured with steel rule, striker, or compound dies. Just as metals are die-cut, hard elastomers can be die-cut using high-speed roll and air feed equipment at similar production rates. Allstates Fabrication is capable of producing precision washers, in large volume and at low cost.

The greatest advantage of die-cut washers is the smooth surface of the finished parts. Cutting washers from sheet eliminates the tool and knife marks which are characteristic of other methods. Our precision washers have excellent working tolerances and solve the problem of cut marks.

GASKETS

Gaskets are another specialty of the Fabrication Division. A gasket is a formable material clamped between two essentially stationary faces to prevent the escape of matter through an opening or joint. Gasket applications demand a wide range of sizes and types of materials. In addition to custom fabricating, we die-cut gaskets in all of the following materials:

- *Rubber & Silicone Sponge (Open & Closed Cell)
- *Solid Rubber & Silicone
- *Solid Polyurethane; Viton & Epichlorohydrin

CUSTOMIZING

The Allstates Fabrication and Prototype Division employs most of the techniques described in this section to save you the cost of new tooling, particularly on low volume runs. If one of Allstates' thousands of standard parts would suit your application with some alteration, the Division modifies the part to your specifications.

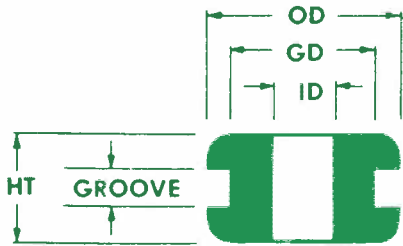
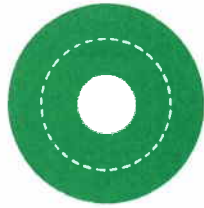
If the I.D. of a standard part must be made larger, our special tools will drill holes in existing parts or blocks cut from slab or sheet.

Grinders are used to change the groove dimensions or the O.D. to make standard parts fit your requirements. We produce low volume grommets and bushings from sheet and sleeve rubber instead of quoting new tooling.

Our slitters fabricate weather stripping, sponge rubber with or without adhesive, and solid rubber. Our automatic, manual or guillotine machines handle sheet and slab up to 3 inches thick. Arbor cutting equipment manufactures washers and spacers from standard in-stock tubing.

Piece marking or stamping is applied to items using hand stamps or other methods, as you specify.

Allstates also does special packing. We'll bag your parts, or pack them in chipboard tubes to facilitate your automatic feed equipment.



MS-35489

SUPERSEDES AN931.

MILITARY STANDARD GROMMETS

RUBBER, HOT-OIL & COOLANT RESISTANT MATERIAL

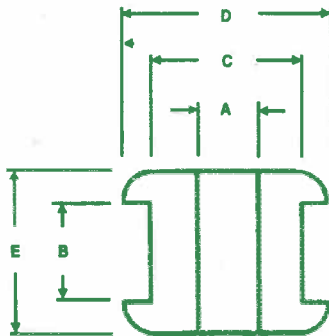
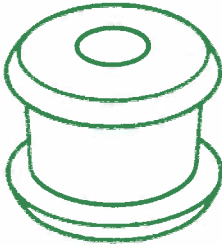
SPECIFICATION: MIL-G-3036

Purchasing grommets under this specification should include a waiver of the samples test and affidavits required by revision MIL-G-3036. Our packing slip contains a certification of material with each shipment. In the event the very strict testing requirements of revision MIL-G-3036 are required, there will be an extra charge for laboratory expenses.

CONSTANT			1/16 GROOVE			1/8 GROOVE			3/16 GROOVE			1/4 GROOVE		
ID	GD	OD	HT.	Part No.	MS NO.	HT.	Part No.	MS NO.	HT.	Part No.	MS NO.	HT.	Part No.	MS NO.
1/8	1/4	11/32	3/16	A0054-G	1									
1/8	9/16	3/4	3/16	A3757	2	1/4	A3758	31	5/16		60	3/8		89
1/8	1	1-1/4	1/4	A2297	3	5/16	A2851	32	3/8	A2751	61	7/16	A2551	90
3/16	5/16	7/16	3/16	A2286	4	1/4	A2852	33	5/16	A2752	62	3/8	2552	91
3/16	9/16	3/4	3/16	A2279	134									
3/16	5/8	7/8	3/16	A3759	5	1/4	A3760	34	5/16		63	3/8		92
1/4	7/16	5/8	3/16	A0097	6	1/4	A2854	35	5/16	A2754	64	3/8	A2554	93
1/4	3/4	1	1/4	A3761	7	5/16	A3762	36	3/8	A2791	65	7/16	A2591	94
1/4	1	1-1/4	1/4	A2298	8	5/16	A2855	37	3/8	A2755	66	7/16	A2555	95
5/16	9/16	13/16	5/16	A2113	9	3/8	A2856	38	7/16	A2756	67	1/2	A2556	96
5/16	3/4	1	5/16	A2280	10	3/8	A2857	39	7/16	A2757	68	1/2	A2557	97
5/16	13/16	1-1/16	5/16	A3834	118	3/8	A3835	122	7/16		136	1/2	A3837	130
3/8	5/8	7/8	5/16	A2281	11	3/8	A2858	40	7/16	A2758	69	1/2	A2558	98
3/8	1	1-1/4	1/4	A2299	12	5/16	A2859	41	3/8	A2799	70	7/16	A2599	99
7/16	11/16	15/16	5/16	A2282	13	3/8	A2860	42	7/16	A2760	71	1/2	A2560	100
1/2	13/16	1-1/16	5/16	A2283	14	3/8	A2861	43	7/16	A2761	72	1/2	A2561	101
1/2	1-1/4	1-1/2	1/4	A2284	15	5/16	A2862	44	3/8	A2762	73	7/16	A2562	102
9/16	13/16	1-1/16	5/16	A2295	16	3/8	A2863	45	7/16	A2763	74	1/2	A2563	103
5/8	7/8	1-1/8	5/16	A2285	17	3/8	A2864	46	7/16	A2764	75	1/2	A2564	104
5/8	1-1/4	1-1/2	1/4	A2296	18	5/16	A2865	47	3/8	A2765	76	7/16	A2565	105
11/16	1	1-5/16	3/8	A2273	19	7/16	A2866	48	1/2	A2766	77	9/16	A2566	106
3/4	1-1/16	1-3/8	3/8	A0804	20	7/16	A2867	49	1/2	A2767	78	9/16	A2567	107
3/4	1-7/16	1-13/16	3/8	A2275	21	7/16	A2869	50	1/2	A2769	79	9/16	A2569	108
3/4	1-1/4	1-5/8	1/4	A2274	135	5/16	A2868	123	3/8	A2768	127	7/16	A2568	131
3/4	1-1/4	1-5/8	1/4	A2274	119				3/8	A2768	126			
3/4	1-5/8	2	3/8	A10204	120	7/16		124	1/2		128	9/16		132
7/8	1-1/4	1-5/8	7/16	A2276	22	1/2	A2870	51	9/16	A2770	80	5/8	A2570	109
7/8	1-5/8	2	7/16	A2300	121	1/2	A2871	125	9/16	A2771	129	5/8	A2571	133
1	1-3/8	1-3/4	7/16	A2277	23	1/2	A2872	52	9/16	A2772	81	5/8	A2572	110
1	1-7/8	2-1/4	7/16	A2301	24	1/2	A2873	53	9/16	A2773	82	5/8	A2573	111
1-1/4	2-3/8	2-3/4	7/16	A2302	25	1/2	A2874	54	9/16	A2774	83	5/8	A2574	112
1-1/4	2-1/2	2-7/8	7/16		26	1/2		55	9/16		84	5/8		113
1-1/2	1-3/4	2-1/8	7/16	A2278	27	1/2	A2875	56	9/16	A2775	85	5/8	A2575	114
1-1/2	2-3/4	3-1/4	7/16	A3995	28	1/2	A3996	57	9/16		86	5/8		115
1-3/4	3-1/4	3-3/4	1/2		29	9/16		58	5/8		87	11/16		116
2	3-1/2	4	1/2		30	9/16		59	5/8		88	11/16		117

GROMMETS

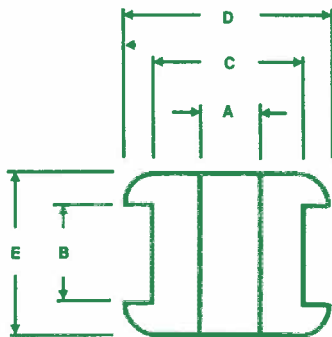
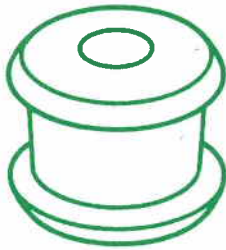
PLAIN BORE ROUNDED



A Bore Diameter	B Groove Width	C Groove Diameter	D Outside Diameter	E Overall Thickness	PART NO.
7/64	3/64	1/2	11/16	9/32	A1272
1/8	1/32	3/16	1/4	3/32	A1070
1/8	1/32	7/16	5/8	3/16	A10123
1/8	1/16	1/4	11/32	3/16	A0054G
1/8	1/16	7/16	5/8	3/16	A0562
1/8	1/16	9/16	3/4	3/16	A3757
1/8	1/16	1	1-1/4	1/4	A2297
1/8	3/32	3/8	1/2	5/16	A2425
1/8	1/8	9/16	3/4	1/4	A3758
1/8	1/8	1	1-1/4	5/16	A2851
1/8	3/16	1	1-1/4	3/8	A2751
1/8	1/4	1	11/4	7/16	A2551
1/8	9/32	3/8	1/2	1/2	A2424
5/32	1/16	1/4	3/8	3/16	A1259
5/32	1/16	1-1/8	1-3/8	3/8	A6059
5/32	3/32	1/4	7/16	3/8	A0374
5/32	1/8	1/4	11/32	1/4	A10290
11/64	3/32	1/4	7/16	3/8	A1958
3/16	1/32	5/16	7/16	7/32	A1390
3/16	1/32	3/8	7/16	7/32	A10199
3/16	1/32	11/16	7/8	7/32	A2045
3/16	1/16	9/32	7/16	7/32	A0382
3/16	1/16	5/16	7/16	3/16	A2286
3/16	3/64	5/16	1/2	1/4	A1453
3/16	1/16	1/2	11/16	23/32	A1135
3/16	1/16	9/16	3/4	3/16	A2279
3/16	1/16	5/8	7/8	3/16	A3759
3/16	3/32	9/32	7/16	7/32	A1734
3/16	3/32	11/32	5/8	3/8	A2537
3/16	1/8	5/16	7/16	1/4	A2852
3/16	1/8	3/8	5/8	5/16	AF0704
3/16	1/8	5/8	7/8	1/4	A3760
3/16	3/16	5/16	7/16	5/16	A2752
3/16	3/16	3/8	5/8	3/8	A0704
3/16	1/4	5/16	7/16	3/8	A2552
3/16	5/8	7/8	1	13/16	A0379
13/64	1/8	13/32	9/16	3/8	A0565
7/32	3/64	5/16	1/2	19/64	A1286
7/32	3/64	7/16	5/8	11/64	A1355
7/32	1/16	5/16	7/16	3/16	A1411
7/32	1/8	1/2	3/4	3/8	A2429
15/64	3/16	3/8	5/8	3/8	A1840
1/4	1/32	25/64	1/2	5/32	A5164
1/4	1/32	7/16	5/8	3/16	A10124
1/4	1/32	5/8	7/8	3/16	A10126
1/4	1/16	3/8	1/2	1/4	A2902
1/4	1/16	7/16	5/8	3/16	A0097
1/4	1/16	3/4	1	1/4	A3761
1/4	1/16	1	1-1/4	1/4	A2298
1/4	3/32	3/8	1/2	1/4	A2901
1/4	1/8	3/8	1/2	1/4	A2903
1/4	1/8	7/16	5/8	1/4	A2854
1/4	1/8	1/2	3/4	3/8	A10046
1/4	1/8	3/4	1	5/16	A3762
1/4	1/8	1	1-1/4	5/16	A2855
1/4	3/16	7/16	5/8	5/16	A2754
1/4	3/16	1/2	5/8	7/16	A2335
1/4	3/16	3/4	1	3/8	A2791
1/4	3/16	1	1-1/4	3/8	A2755

GROMMETS

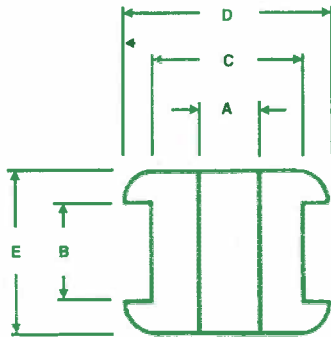
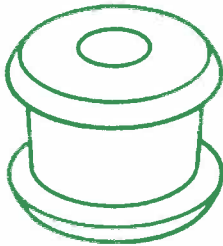
PLAIN BORE ROUNDED



A Bore Diameter	B Groove Width	C Groove Diameter	D Outside Diameter	E Overall Thickness	PART NO.
1/4	1/4	7/16	5/8	3/8	A2554
1/4	1/4	15/32	5/8	1/2	A0696
1/4	1/4	3/4	1	7/16	A2591
1/4	1/4	1	1-1/4	7/16	A2555
17/64	1/16	15/32	5/8	5/16	A1240
9/32	1/16	3/8	9/16	1/4	A0763
9/32	1/4	15/32	11/16	7/16	A0190
19/64	1/4	3/8	1/2	3/8	A10139
5/16	1/16	7/16	9/16	3/16	A0263
5/16	1/16	7/16	5/8	9/32	A0505
5/16	1/16	9/16	13/16	5/16	A2113
5/16	1/16	3/4	1	5/16	A2280
5/16	1/16	13/16	1-1/16	5/16	A3834
5/16	3/32	7/16	5/8	5/16	A2538
5/16	3/32	15/32	3/4	11/32	A2214
5/16	1/8	9/16	13/16	3/8	A2856
5/16	1/8	3/4	1	3/8	A2857
5/16	1/8	3/4	1	1/2	A0167
5/16	1/8	13/16	1-1/16	3/8	A3835
5/16	3/16	9/16	13/16	3/8	A0705
5/16	3/16	9/16	13/16	7/16	A2756
5/16	3/16	3/4	1	7/16	A2757
5/16	3/16	13/16	1-1/16	7/16	A3836
5/16	1/4	1/2	5/8	5/8	A10089
5/16	1/4	9/16	13/16	1/2	A2556
5/16	1/4	3/4	1	1/2	A2557
5/16	1/4	13/16	1-1/16	1/2	A3837
5/16	3/8	3/8	9/16	1/2	A0316
11/32	1/16	17/32	25/32	1/4	A2004
3/8	1/32	9/16	13/16	1/4	A10159
3/8	1/32	5/8	7/8	3/16	AF10126
3/8	1/32	1	1-1/4	1/4	A10127
3/8	1/16	1/2	5/8	1/4	A0230
3/8	1/16	1/2	11/16	9/32	A1724
3/8	1/16	5/8	7/8	5/16	A2281
3/8	1/16	23/32	31/32	11/32	A10259
3/8	1/16	1	1-1/4	1/4	A2299
3/8	3/32	1/2	5/8	1/4	A10048
3/8	3/32	3/4	1	9/32	A10291
3/8	1/8	1/2	5/8	13/32	A0545
3/8	1/8	17/32	3/4	3/8	A0546
3/8	1/8	5/8	7/8	3/8	A2858
3/8	1/8	3/4	31/32	3/8	AF9519
3/8	1/8	1	1-1/4	5/16	A2859
3/8	1/8	1-3/8	1-5/8	3/8	AF10042
3/8	3/16	9/16	13/16	3/8	A0896
3/8	3/16	5/8	7/8	7/16	A2758
3/8	3/16	1	1-1/4	3/8	A2799
3/8	11/64	3/4	1	11/32	A10281
3/8	1/4	1/2	3/4	1/2	A0828
3/8	1/4	9/16	3/4	5/8	A2600
3/8	1/4	5/8	7/8	1/2	A2558
3/8	1/4	3/4	1	1/2	A7279
3/8	1/4	1	1-1/4	7/16	A2599
3/8	3/8	9/16	3/4	3/4	A2596
3/8	9/16	19/32	23/32	3/4	A10044

GROMMETS

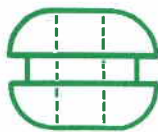
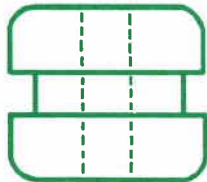
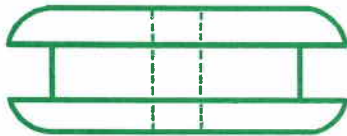
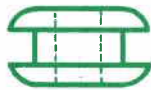
PLAIN BORE ROUNDED



A Bore Diameter	B Groove Width	C Groove Diameter	D Outside Diameter	E Overall Thickness	PART NO.
7/16	1/16	9/16	3/4	1/4	A1787
7/16	1/16	11/16	15/16	5/16	A2282
7/16	1/8	11/16	15/16	3/8	A2860
7/16	1/8	11/16	15/16	3/8	A2533
7/16	5/32	9/16	11/16	11/32	A6288
7/16	3/16	9/16	11/16	3/8	A0560
7/16	3/16	11/16	15/16	7/16	A2760
7/16	1/4	5/8	3/4	1/2	A10049
7/16	1/4	11/16	15/16	1/2	A2560
7/16	1/4	1-1/4	1-1/2	1/2	A10330
1/2	1/32	1	1-1/4	1/4	A10141
1/2	1/16	13/16	1-1/16	5/16	A2283
1/2	1/16	1	1-1/4	1/4	A2426
1/2	1/16	1-1/4	1-1/2	1/4	A2284
1/2	1/16	1-7/16	1-3/4	3/8	A2339
1/2	3/32	3/4	7/8	11/32	A0452
1/2	3/32	3/4	31/32	9/32	A1862
1/2	3/32	25/32	1	11/32	A2341
1/2	1/8	3/4	1	1/2	A0653
1/2	1/8	13/16	1-1/16	3/8	A2861
1/2	1/8	1-1/4	1-1/2	5/16	A2862
1/2	3/16	13/16	1-1/16	7/16	A2761
1/2	3/16	1-1/4	1-1/2	3/8	A2762
1/2	1/4	13/16	1-1/16	1/2	A2561
1/2	1/4	1-1/4	1-1/2	7/16	A2562
1/2	3/8	3/4	1	5/8	A0807
17/32	1/16	11/16	13/16	5/16	A2408
17/32	1/8	11/16	13/16	1/4	A2409
17/32	3/16	11/16	13/16	5/16	A2407
9/16	1/16	3/4	7/8	15/64	A1720
9/16	1/16	13/16	1-1/16	5/16	A2295
9/16	1/16	1-3/32	1-9/32	3/8	A0099
9/16	3/32	1	1-1/4	17/64	A10015
9/16	1/8	13/16	1-1/16	3/8	A2863
9/16	3/16	7/8	1-1/16	7/16	A2512
9/16	3/16	13/16	1-1/16	7/16	A2763
9/16	1/4	11/16	15/16	1/2	A10050
9/16	1/4	13/16	1-1/16	1/2	A2563
9/16	3/8	7/8	1-1/16	5/8	A2513
9/16	1	13/16	1-1/8	1-1/4	A2406
19/32	7/64	47/64	15/16	19/64	A1177
19/32	3/16	29/32	1-3/16	7/16	A0686
5/8	1/16	7/8	1-1/8	5/16	A2285
5/8	1/16	1-1/4	1-1/2	1/4	A2296
5/8	3/32	31/32	1-1/4	7/16	A2497
5/8	3/32	1-3/16	1-1/2	5/8	A10051
5/8	1/8	7/8	1-1/8	3/8	A2864
5/8	1/8	29/32	1-1/8	7/16	A0501
5/8	1/8	1-1/32	1-1/4	11/16	A2413
5/8	1/8	1-1/4	1-1/2	5/16	A2865
5/8	1/8	1-3/8	1-5/8	3/8	AF10043
5/8	5/32	1-3/16	1-1/2	5/8	A10292
5/8	3/16	7/8	1-1/8	7/16	A2764
5/8	3/16	1-1/4	1-1/2	3/8	A2765
5/8	1/4	7/8	1-1/8	1/2	A2564
5/8	1/4	1-1/4	1-1/2	7/16	A2565
5/8	9/32	27/32	1-1/16	1/2	A2246
5/8	5/16	29/32	1-1/8	5/8	A0494
5/8	5/8	7/8	1-1/16	7/8	A0559

MOLDED GROMMETS

PLAIN BORE ROUNDED

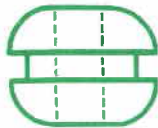
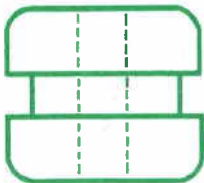
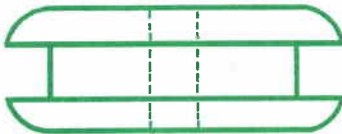
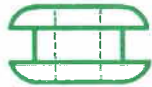


A Bore Diameter	B Groove Width	C Groove Diameter	D Outside Diameter	E Overall Thickness	PART NO.
41/64	1/16	31/32	1-3/16	5/16	A1418
41/64	7/64	57/64	1-1/16	23/64	A0873
11/16	1/16	1	1-5/16	3/8	A2273
11/16	1/8	1	1-5/16	7/16	A2866
11/16	3/16	1	1-5/16	1/2	A2331
11/16	3/16	1	1-5/16	1/2	A2766
11/16	1/4	1	1-5/16	9/16	A2566
3/4	1/32	7/8	1-1/4	1/4	A10128
3/4	1/32	1-1/4	1-5/8	1/4	A10160
3/4	1/16	15/16	1-1/8	1/4	A2196
3/4	1/16	1-1/16	1-3/8	3/8	A0804
3/4	1/16	1-1/4	1-5/8	1/4	A2274
3/4	1/16	1-7/16	1-13/16	3/8	A2275
3/4	1/16	1-5/8	2	3/8	A10204
3/4	1/8	1-1/16	1-3/8	7/16	A2867
3/4	1/8	1-1/4	1-5/8	5/16	A2868
3/4	1/8	1-7/16	1-13/16	7/16	A2869
3/4	3/16	7/8	1-1/8	3/8	A10013
3/4	3/16	1-1/16	1-3/8	1/2	A2767
3/4	3/16	1-1/4	1-5/8	3/8	A2768
3/4	3/16	1-7/16	1-13/16	1/2	A2769
3/4	1/4	1-1/16	1-3/8	9/16	A2567
3/4	1/4	1-1/4	1-5/8	7/16	A2568
3/4	1/4	1-7/16	1-13/16	9/16	A2569
3/4	1/4	1-7/8	2-1/4	5/8	A10332
13/16	9/16	15/16	1-1/4	7/8	A5632
7/8	1/16	1-1/4	1-5/8	7/16	A2276
7/8	1/16	1-5/8	2	7/16	A2300
7/8	5/64	1-3/16	1-3/8	15/32	A1626
7/8	1/8	1-1/4	1-5/8	1/2	A2870
7/8	1/8	1-5/8	2	1/2	A2871
7/8	9/64	1-3/16	1-5/16	3/8	A1626A
7/8	3/16	1-1/4	1-5/8	9/16	A2770
7/8	3/16	1-5/8	2	9/16	A2771
7/8	3/16	1-15/64	1-9/16	3/4	A2595
7/8	1/4	1-5/32	2	1/2	A0219
7/8	1/4	1-1/4	1-5/8	5/8	A2570
7/8	1/4	1-5/8	2	5/8	A2571
1	1/32	1-1/4	1-1/2	5/16	A10029
1	3/8	1-1/4	1-5/8	5/8	A10024
1	1/16	1-3/8	1-3/4	7/16	A10053
1	1/16	1-3/8	1-3/4	7/16	A2277
1	1/16	1-13/32	1-13/16	7/16	A10258
1	1/16	1-7/8	2-1/4	7/16	A2301
1	1/8	1-3/8	1-3/4	1/2	A2872
1	1/8	1-7/8	2-1/4	1/2	A2873
1	1/8	1-1/2	2	7/16	AF2300
1	3/16	1-1/4	1-1/2	7/16	A2735
1	3/16	1-3/8	1-3/4	9/16	A2772
1	3/16	1-7/8	2-1/4	9/16	A2773
1	1/4	1-1/4	1-1/2	1/2	A2035
1	1/4	1-3/8	1-3/4	5/8	A2572
1	1/4	1-7/8	2-1/4	5/8	A2573
1	3/8	1-1/4	1-5/8	5/8	A10052
1	3/8	1-1/4	1-3/4	3/4	A10099
1-1/64	1/8	1-17/64	1-33/64	3/8	A1919
1-1/8	1/16	1-1/2	1-7/8	3/8	A2092
1-1/8	3/16	1-1/2	1-7/8	1/2	A2792
1-1/8	3/16	1-5/8	1-7/8	1/2	A10062

MOLDED

MOLDED GROMMETS

PLAIN BORE ROUNDED

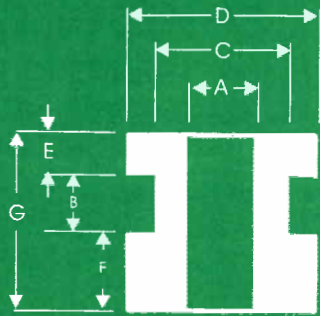


A Bore Diameter	B Groove Width	C Groove Diameter	D Outside Diameter	E Overall Thickness	PART NO.
1-3/16 1-3/16	3/16 1/4	1-1/2 1-1/2	1-3/4 1-3/4	7/16 1/2	A10004 A10076
1-1/4 1-1/4 1-1/4 1-1/4 1-1/4	1/16 1/8 3/16 1/4 1/4	2-3/8 2-3/8 2-3/8 1-7/8 2-3/8	2-3/4 2-3/4 2-3/4 2-1/4 2-3/4	7/16 1/2 9/16 5/8 5/8	A2302 A2874 A2774 A10016 A2574
1-5/16 1-5/16	1/16 1/8	1-5/8 1-5/8	2 2	3/8 7/16	A2803 A2802
1-3/8	3/32	1-3/4	2	3/8	A8301
1-1/2 1-1/2 1-1/2 1-1/2 1-1/2 1-1/2 1-1/2 1-1/2 1-1/2 1-1/2	1/16 1/16 3/32 1/8 1/8 3/16 3/16 1/4 1/4 1/4 1/2	1-3/4 2-3/4 2 1-3/4 2-3/4 1-3/4 2-3/4 1-3/4 1-3/4 2-3/4 1-3/4	2-1/8 3-1/4 2-3/8 2-1/8 3-1/4 2-1/8 3-1/4 2-1/8 3-1/4 2-1/8 2-1/8	7/16 7/16 3/8 1/2 1/2 9/16 9/16 1/2 5/8 5/8 3/4	A2278 A3995 A10232 A2875 A3996 A2775 A3997 A2034 A2575 A3998 A5075
1-5/8	1/16	1-11/16	1-7/8	3/8	A1139
1-23/32	5/64	1-15/16	2-1/2	5/16	A10151
1-3/4 1-3/4 1-3/4 1-3/4	1/16 9/64 1/4 .4	2 2 2 2	2-3/8 2-1/4 2-1/2 2-1/2	7/16 7/16 9/16 3/4	A8722 A10082 A10273 A10054
1-15/16 1-15/16	1/16 1/4	2-7/16 2-1/4	2-3/4 2-5/8	1/2 1/2	A10036 A10045
2 2 2	1/32 1/16 3/32	2-1/2 4-5/8 3-5/32	3 5-3/4 3-5/8	9/32 1/4 9/32	A0561 A2681 A2704
2-1/8 2-1/8 2-1/8	1/16 1/8 3/16	2-1/2 2-1/2 2-1/2	2-7/8 2-7/8 2-7/8	7/16 7/16 7/16	A2805 A2804 AF2804
2-3/16	1/16	2-1/2	2-7/8	7/16	AF2805
2-3/8	1/16	2-7/8	4-3/8	3/8	A10083
2-9/16	7/8	3	3-5/16	1-3/8	A1401
2-11/16	1/16	3	3-3/8	7/16	A10198
2-3/4 2-3/4	1/16 3/32	3-1/8 3-1/8	3-5/8 3-5/8	5/16 9/32	A10055 A10047
5-1/16	3/16	5-9/32	6-7/32	3/8	A10118

MOLDED

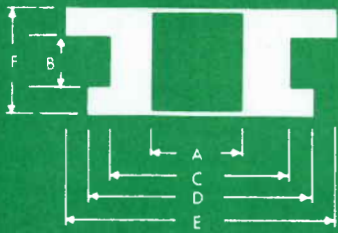
GROMMETS

SHOULDERS UNEQUAL WIDTH



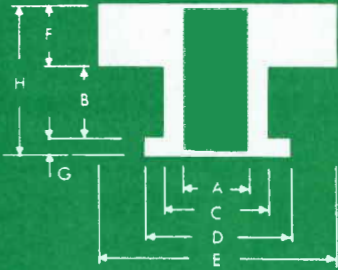
A Bore Diameter	B Groove Width	C Groove Diameter	D Outside Diameter	E Shoulder Small Width	F Shoulder Large Width	G Overall Thickness	PART NO.
5/32	1/16	9/32	15/32	7/64	1/8	19/64	A1783
13/64	3/64	23/64	37/64	1/16	9/64	1/4	A1277
7/32	1/16	7/16	11/16	3/32	9/32	7/16	A1300
7/32	1/4	5/8	7/8	3/16	11/32	25/32	A1303
1/4	1/16	1	1-13/32	23/64	3/8	51/64	A1282
1/4	3/32	15/32	49/64	3/32	7/64	19/64	A1784
9/32	1/16	13/32	21/32	5/64	3/32	15/64	A1373
5/16	1/16	15/32	45/64	1/16	3/8	1/2	A2102
21/64	1/16	5/8	7/8	5/32	1/4	15/32	A1371
1/4	1/16	11/32	19/32	3/32	1/8	9/32	A2610
1/4	1/16	9/16	3/4	3/64	1/16	11/64	A1086
1/4	3/32	7/16	5/8	3/32	3/16	3/8	A0680

UNEQUAL SHOULDER DIAMETER



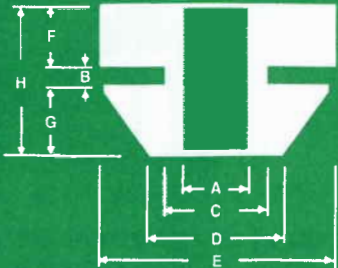
A Bore Diameter	B Groove Width	C Groove Diameter	D Shoulder Small Diameter	E Shoulder Large Diameter	F Overall Thickness	PART NO.
1/4	3/32	3/4	7/8	1	5/16	A0888
3/8	3/32	1-3/8	1-5/8	1-7/8	1/4	A1128-D
3/8	1/8	1/2	5/8	13/16	3/8	A0091
1/2	3/32	1-3/8	1-5/8	1-7/8	1/4	A1128-B
5/8	3/32	1-3/8	1-5/8	1-7/8	1/4	A1128-A
3/4	3/32	1-3/8	1-5/8	1-7/8	1/4	A1128-C
1-1/8	3/32	1-3/8	1-5/8	1-7/8	1/4	A1128-S

UNEQUAL SHOULDER DIAMETER & WIDTH



A Bore Diameter	B Groove Width	C Groove Diameter	D Shoulder Diameter	E Shoulder Diameter	F Shoulder Large Width	G Shoulder Small Width	H Overall Thick- ness	PART NO.
1/4	1/16	5/16	3/8	9/16	1/8	1/16	1/4	A0770
5/16	3/16	7/16	5/8	1	1/4	1/16	1/2	A1896
5/16	3/16	7/16	5/8	1	7/16	1/16	11/16	A2215
21/64	3/32	7/16	5/8	1	1/4	1/16	13/32	A1512
1-7/16	3/32	2-5/16	2-5/8	2-7/8	1/8	1/16	9/32	A0272

UNEQUAL SHOULDER DIAMETER & WIDTH

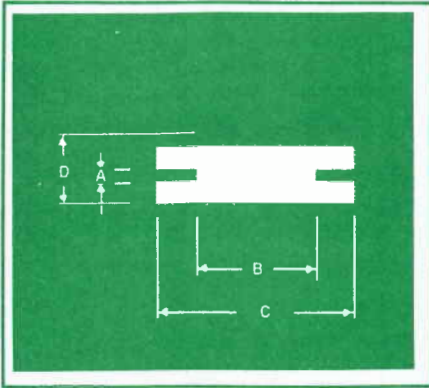


A Bore Diameter	B Groove Width	C Groove Diameter	D Shoulder Diameter Small End	E Shoulder Diameter	F Large Shoulder Width	G Small Shoulder Width	H Overall Thickness	PART NO.
21/64	9/64	5/8	5/8	29/32	15/64	15/64	39/64	A10217
11/32	5/32	11/16	11/16	29/32	19/64	19/64	3/4	A10213
3/8	11/64	9/16	9/16	27/32	21/64	27/64	59/64	A10218
3/8*	9/64	21/32	9/16	7/8	1/4	31/64	7/8	A10003
9/16*	9/64	29/32	13/16	1-1/8	1/4	31/64	7/8	A10014
9/16*	9/64	1-1/32	7/8	1-5/16**	1/4	31/64	7/8	A10001

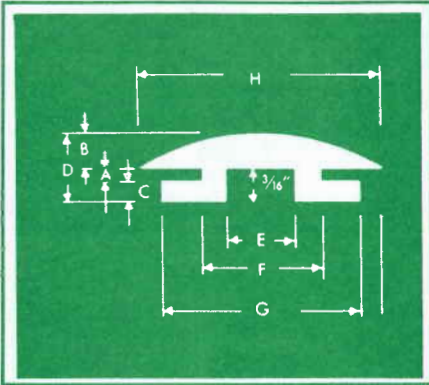
*These parts are standard with a partial center web and a split

**Flat on one side at 1-1/4"

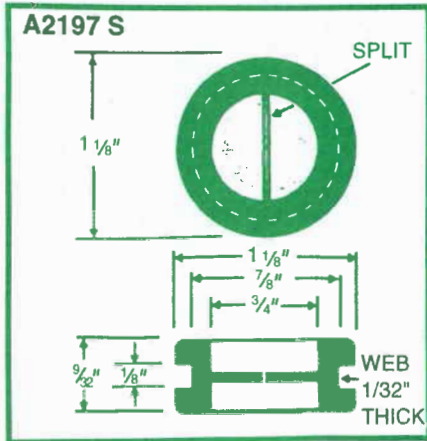
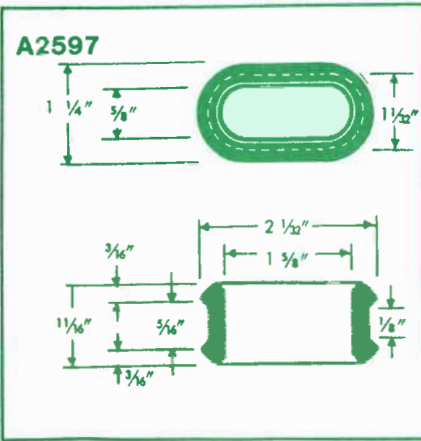
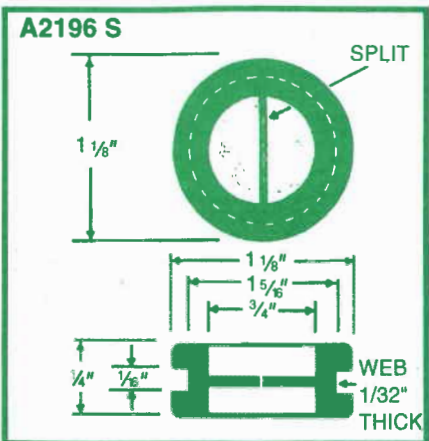
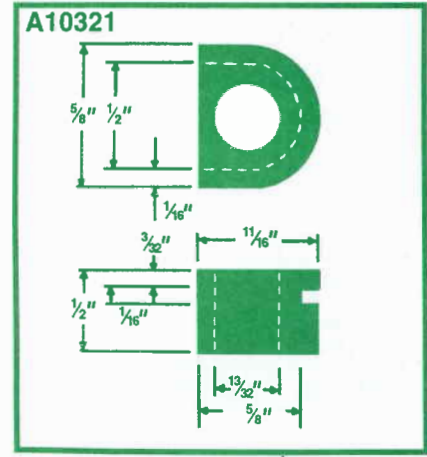
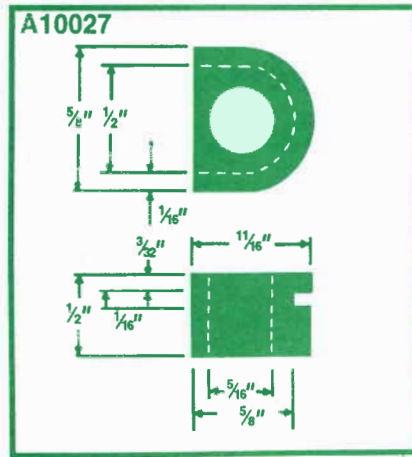
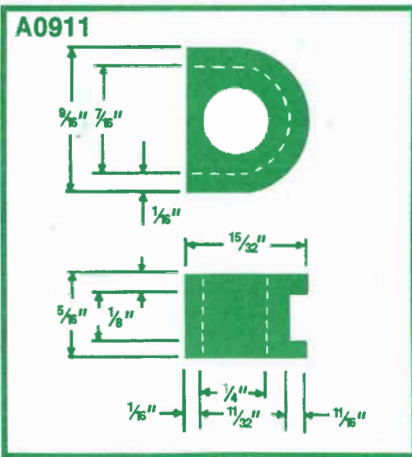
BLIND GROMMETS



A Groove Width	B Groove Diameter	C Outside Diameter	D Thickness	PART NO.
1/32	7/16	5/8	3/16	A10125
1/32	5/8	7/8	3/16	A10126
1/32	1	1-1/4	1/4	A10129
5/32	41/64	1-1/4	25/64	A10108
5/32	15/16	1-9/32	25/64	A10107



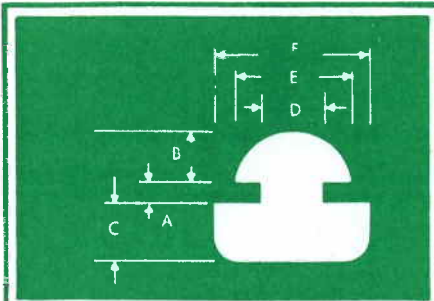
A Groove Width	B Head Height	C Shoulder Width	D Overall Height	E Recess Diameter	F Groove Diameter	G Shoulder Diameter	H Head Diameter	PART NO.
.047	11/64	3/32	5/16	1/2	25/32	1-5/16	1-1/2	A2374
.047	11/64	3/32	5/16	1/2	1-1/32	1-5/16	1-1/2	A2376
.065	3/16	3/32	11/32	3/4	1-9/32	1-5/8	2	A0963
.078	11/64	3/32	11/16	1/2	25/32	1-5/16	1-1/2	A2375
1/16	1/16	3/32	7/32	1/4	3/8	7/16	5/8	A10030
1/16	3/32	3/32	1/4	Solid	17/32	19/32	3/4	A10032
1/8	3/16	1/8	7/16	Solid	1/2	5/8	1	A0693
1/8	5/32	1/16	11/32	Solid	7/8	1-1/16	1-1/8	A10311



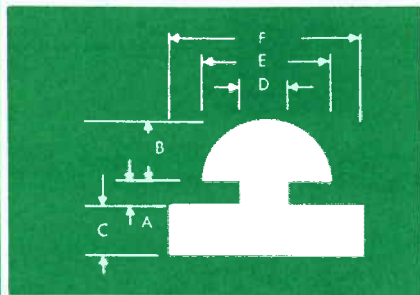
GROMMET BUMPERS

MOLDED

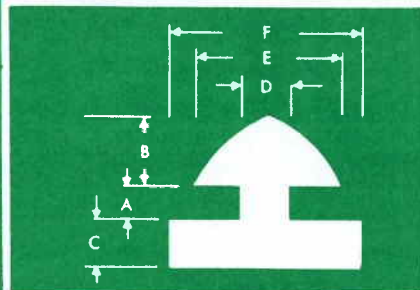
GROMMETS



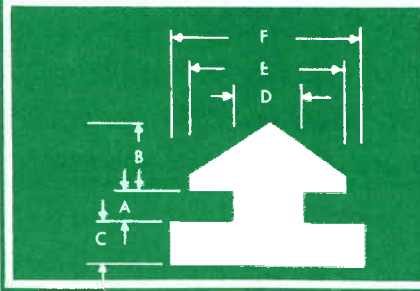
A Groove Width	B Head Height	C Bumper Height	D Groove Diameter	E Head Diameter	F Bumper Diameter	PART NO.
1/16	1/8	5/32	1/4	5/16	1/2	A1561
1/32	1/8	1/8	1/8	3/16	5/16	A0284
1/8	11/64	11/32	9/32	7/16	5/8	A1422
1/16	3/32	5/8	11/32	13/32	9/16	A1725



3/64	5/64	1/4	1/4	3/8	9/16	A6156
1/16	7/64	3/64	1/8	3/16	5/16	A0829
1/16	7/64	3/32	5/32	7/32	3/8	A1257
1/16	1/8	5/32	1/4	5/16	1/2	A3987
1/16	1/8	1/4	1/4	5/16	1/2	A0734
1/8	1/8	1/8	1/4	11/32	9/16	A0711
5/64	5/32	1/8	9/32	3/8	9/16	A1138
1/16	3/32	5/32	11/32	13/32	9/16	A0740
1/16	3/32	5/16	11/32	13/32	9/16	A0740-B
3/16	3/16	5/16	1/2	11/16	1	A2250



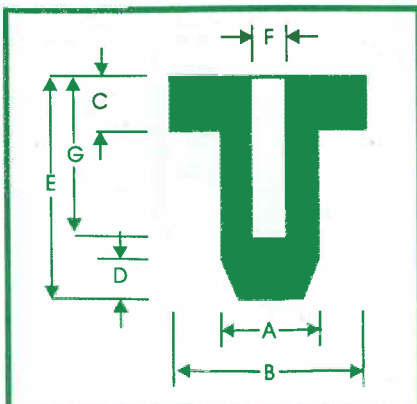
1/32	7/64	3/64	1/8	3/16	5/16	A0521
1/16	3/16	3/32	3/16	1/4	1/2	A1178-1
1/16	3/16	5/32	3/16	1/4	1/2	A1178-2
1/16	3/16	13/32	3/16	1/4	1/2	A1178-3



7/64	5/64	1/16	5/32	1/4	1/2	A1792
3/64	3/32	1/8	3/16	1/4	5/16	A0785
1/16	1/16	1/8	3/16	1/4	5/16	A0862
3/64	1/8	3/32	1/4	5/16	7/16	A0716
3/64	1/8	3/16	1/4	5/16	7/16	A0759
3/32	1/8	1/4	5/16	3/8	5/8	A0778

MOLDED

STOPPERS/BUMPERS

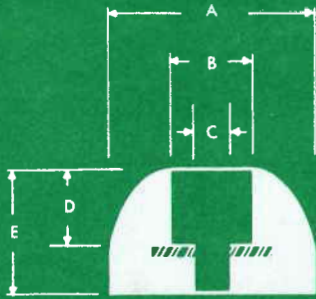


A Stem Diameter	B Cap Diameter	C Cap Height	D Chamfered Height	E Total Height	F Recess Diameter	G Recess Height	PART NO.
11/32	5/8	3/16	1/4	1	1/8	13/16	A1149
3/8	3/4	7/32	5/16	1-1/8	5/32	7/8	A1580
1/2	7/8	1/4	5/16	1-1/4	3/16	1	A0854
19/32	1	15/64	29/64	1-9/16	1/4	1-3/8	A1026
5/8	1	1/4	7/16	1-1/2	1/4	1-5/16	A0835
21/32	1-1/16	15/64	29/64	1-1/4	1/4	1-1/16	A1027
3/4	1	1/4	9/16	1-1/2	1/4	1-5/16	A1148

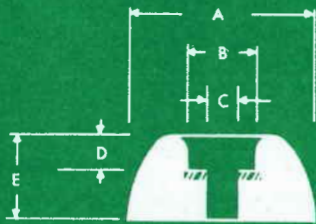
MANY PARTS ARE AVAILABLE FROM STOCK

RECESSED BUMPERS

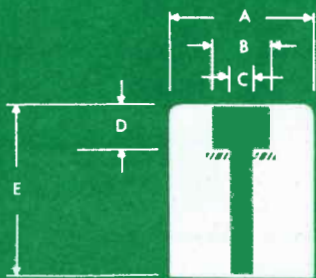
ROUNDED TOP



DOUGHNUT TOP



FLAT TOP

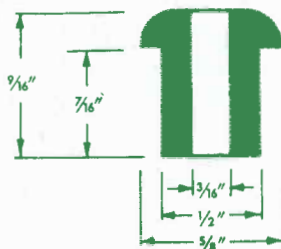


A Outside Diameter	B Recess Diameter	C Bore Diameter	D Recess Depth	E Total Height	PART NO.
7/16	1/4	1/8	5/32	1/4	A1925
1/2	1/4	3/32	5/32	1/4	A0366
1/2	1/4	1/8	7/32	7/16	A0832
1/2	1/4	1/8	7/32	9/16	A1605
1/2	1/4	1/8	3/16	11/32	A1670
1/2	1/4	1/8	5/32	1/4	A1308
5/8	15/64	11/64	3/16	5/16	A5493
5/8	1/4	3/32	3/16	3/8	A0381
5/8	5/16	5/32	5/32	7/16	A1343
5/8	1/4	1/16	5/32	9/32	A1392
23/32	1/4	1/8	7/32	7/16	A0015
3/4	3/8	3/16	1/4	9/16	A0018
13/16	1/4	3/32	3/8	1/2	A3709
1	1/4	1/8	7/16	13/16	A0197
1	17/32	9/32	5/16	9/16	A0059
1	9/32	5/32	9/32	1/2	A0638
1	5/16	5/32	5/8	1	A0023
1-3/32	7/16	3/16	13/32	5/8	A0068
1-1/2	3/4	5/16	11/32	5/8	A1019-2
1-1/2	1/2	3/16	11/32	5/8	A1019
1-1/2	3/4	5/16	11/32	3/4	A1020

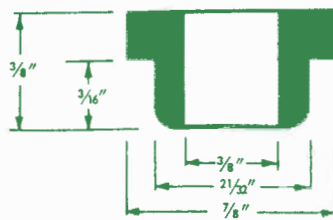
1/2	9/32	1/8	3/32	3/16	A1059
5/8	5/16	.150	5/32	7/16	A4952
3/4	1/4	1/8	5/32	7/32	A1322
15/16	3/8	3/16	7/32	3/8	A0253
1	3/8	3/16	3/16	7/16	A0698
2-1/2	1-1/8	3/8	1/2	1	A0613

1/2	1/4	3/32	5/32	1/4	A0852
1/2	5/16	5/32	3/16	3/8	A6115
9/16	3/8	15/32	7/8	1	A0030
5/8	5/16	Solid	7/32	9/16	A1166
3/4	5/16	1/8	1/4	3/4	A1743
3/4	3/8	3/16	1/4	1/2	A1599
3/4	3/8	1/8	5/32	3/8	A1388
13/16	15/32	1/4	7/16	13/16	A0021
1	1/4	Solid	1/8	1/2	A1161
1	1/2	7/32	1/4	1/2	A0425
1-1/4	3/8	1/4	3/4	1-1/4	A1326
1-1/4	1/4	1/4	3/4	1-7/8	A1487
1-1/2	15/32	1/4	1/2	3/4	A1102
1-3/4	1-1/8	5/16	1/4	9/16	A1008
*1-7/8	1-1/4	1	3/16	3/8	A1427
2-1/8	1-1/4	3/4	1/2	3/4	A0573

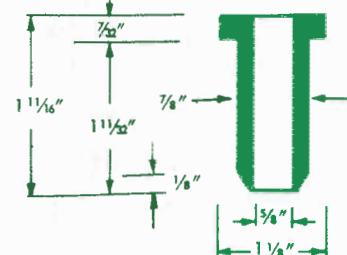
A0014



A0256



A1154

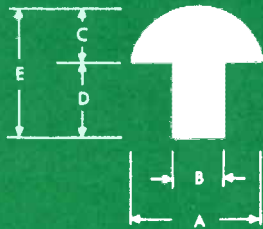


* Chamfer edge

MANY PARTS ARE AVAILABLE FROM STOCK

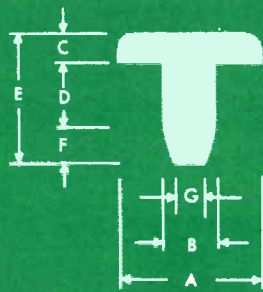
STEM BUMPERS

ROUND HEAD



A Head Diameter	B Stem Diameter	C Head Height	D Stem Length	E Overall Thickness	PART NO.
1/4	3/16	3/16	3/16	3/8	A1107
5/16	3/16	1/8	3/16	5/16	A0713
3/8	3/16	1/8	3/16	5/16	A0012
7/16	1/4	1/8	1/4	3/8	A0709
5/8	5/16	5/16	1/4	9/16	A0868
5/8	5/16	11/32	9/32	5/8	A1114
3/4	3/8	3/8	3/8	3/4	A1111
5/8	7/16	5/16	5/16	5/8	A1005
7/8	1/2	3/8	15/32	27/32	A1006
15/16	19/32	19/32	15/32	1-1/16	A1112
1-3/16	5/8	11/16	3/4	1-7/16	A1113

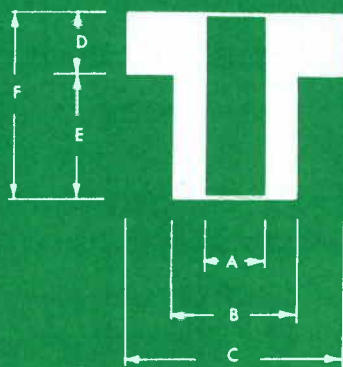
CHAMFERED STEM



A Head Diameter	B Stem Diameter	C Head Height	D Stem Length	E Overall Thick- ness	F Chamfer Height	G Chamfer Diameter	PART NO.
1/2	3/16	.025	1/4	.275		3/32	A4521
1/2	3/16	1/16	1/4	5/16			A0011F
3/4	1/2	21/32	1/2	1-5/32			A0160
7/8	5/8	1/4	3/8	5/8	1/16	9/16	A1647
1-5/8	57/64	5/16	7/8	1-3/16			A1134

BUSHINGS

FLANGE PLAIN BORE

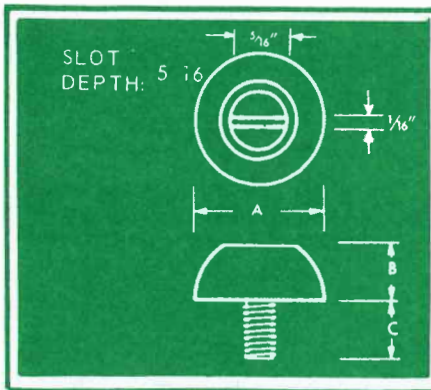


A Inside Diameter	B Stem Diameter	C Flange Diameter	D Flange Height	E Stem Height	F Total Height	PART NO.
1/8	1/4	3/8	7/64	17/64	3/8	A0962
1/8	7/16	1/2	1/4	3/8	5/8	A0380
9/64	1/2	3/4	1/8	1/4	3/8	A1015
11/64	9/32	1/2	3/32	7/64	13/64	A0795
3/16	7/16	3/4	1/16	5/16	3/8	A0723
3/16	7/16	3/4	1/16	7/16	1/2	A0724
3/16	7/16	3/4	1/16	11/16	3/4	A0722
3/16	1/2	11/16	1/4	3/16	7/16	A0378
3/16	1/2	3/4	1/8	1/4	3/8	A1761
7/32	13/32	1/2	1/16	3/16	1/4	A0557
7/32	7/16	1	3/16	1/8	5/16	A0232
7/32	1/2	3/4	1/8	1/4	3/8	A0767
7/32	1/2	3/4	3/16	27/32	1-1/32	A1222
*1/4	3/8	3/4	1/8	3/8	1/2	A0174
1/4	13/32	5/8	3/32	5/16	13/32	A1681
1/4	7/16	5/8	3/64	13/64	1/4	A0748
1/4	1/2	1	1/8	3/8	1/2	A0643
*1/4	19/32	3/4	1/8	3/8	1/2	A0579
1/4	5/8	1-1/2	1/16	5/8	11/16	A0718-1
5/16	15/32	1-1/4	3/16	3/16	3/8	A1544
*5/16	1/2	3/4	1/8	9/32	13/32	A0646
5/16	1/2	1-1/4	3/16	13/32	19/32	A1185
5/16	5/8	1	1/4	3/8	5/8	A0029
3/8	5/8	1-1/2	1/16	5/8	11/16	A7182
5/8	7/8	1-1/8	3/16	3/16	3/8	A10034

* = Rounded edge

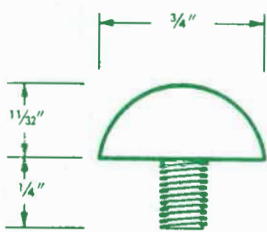
SCREW BUMPERS

MALE



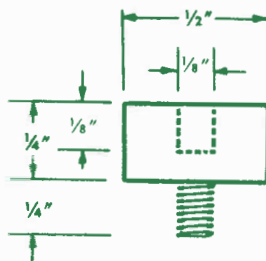
A Head Diameter	B Head Height	C Screw Length	Sheet Metal Screw Number	PART NO.	Machine Screw Size	PART NO.
3/4	7/16	5/8	8	A0165	8.32	A0165-A
3/4	7/16	3/8				
7/8	1/2	3/4	10	A0513	8.32	A0513-A
7/8	1/2	3/8				
1	1/2	3/4	10	A0422	10.32	A0422-A
1	1/2	3/8				
1-1/8	1/2	3/4	10	A0276	10.32	A0276-A
1-1/8	1/2	3/8				

A0255



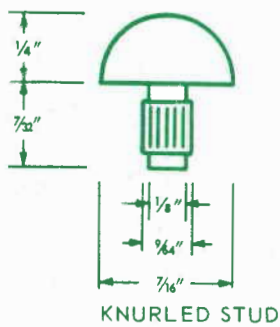
8/32 MACHINE SCREW

A0016



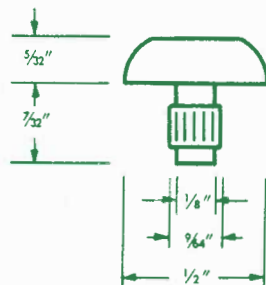
6/32 MACHINE SCREW

A0827



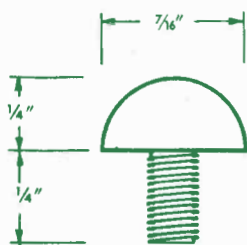
KNURLED STUD

A1155



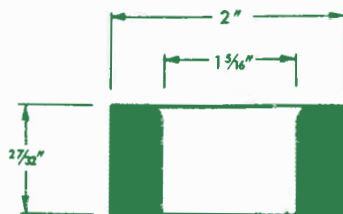
KNURLED STUD

A0827-S

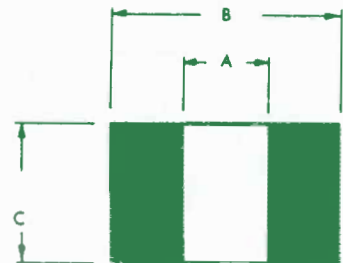


6/32 MACHINE SCREW

A0244

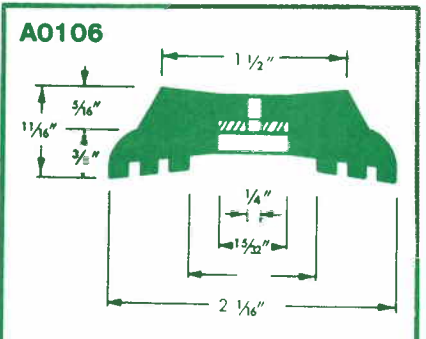
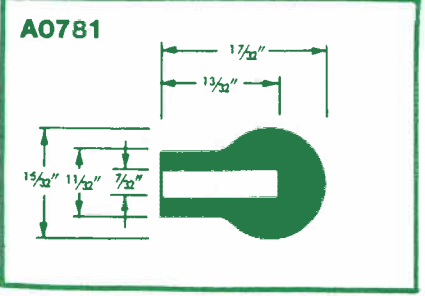
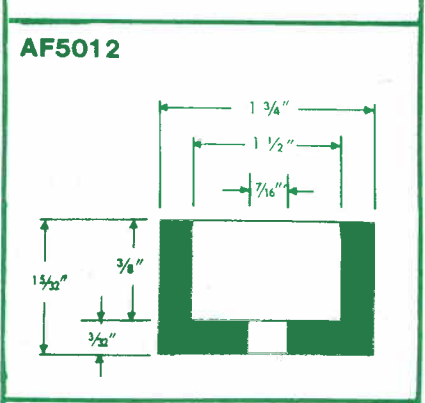
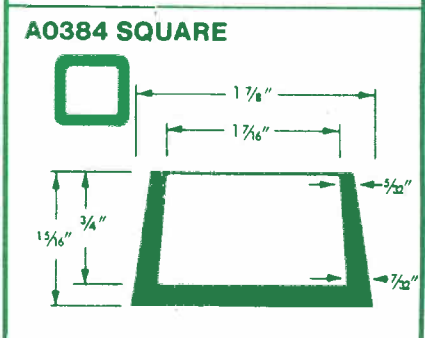
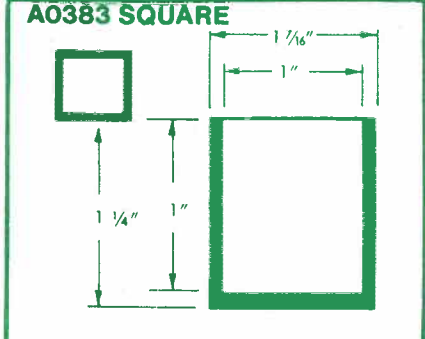
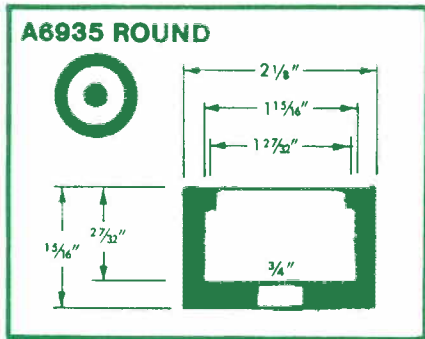


BUSHINGS

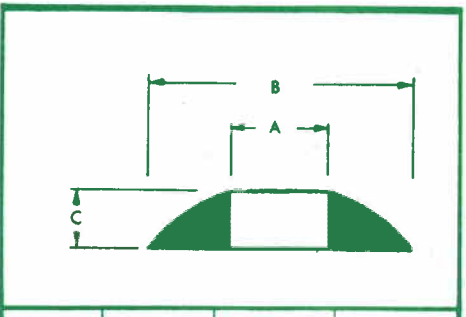
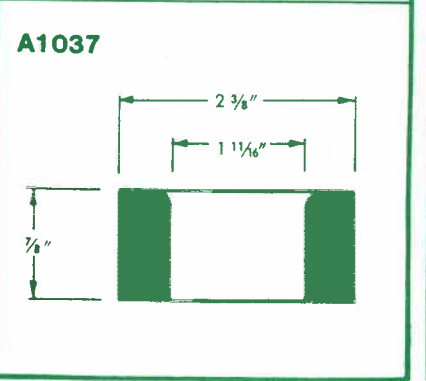
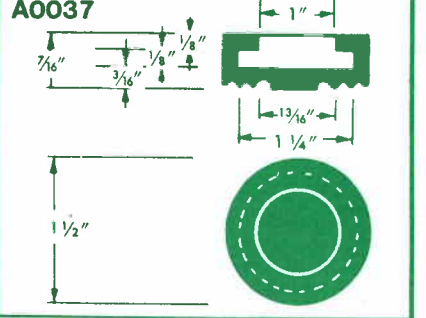
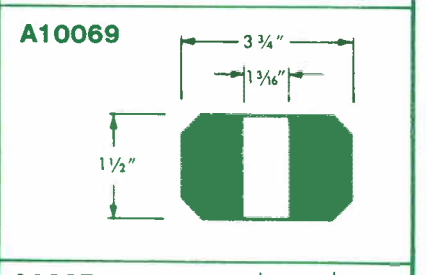
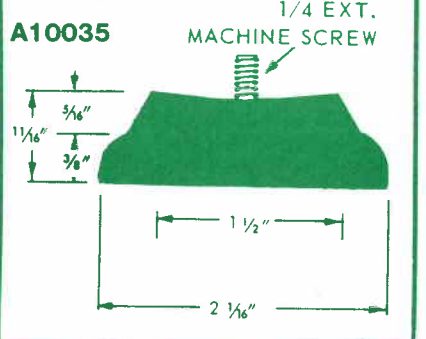


A Inside Diameter	B Outside Diameter	C Total Height	PART NO.
5/64	13/32	3/16	A1016
9/64	3/8	1/4	A0985
5/32	1/2	5/32	A1129
3/16	17/32	3/4	A1546
1/4	5/8	5/8	A1069
1/4	7/8	1-3/4	A0731
5/16	1-1/2	23/64	A1531
5/16	1-1/2	17/32	A1550
3/8	31/32	3/4	A0699
3/8	1	1-1/4	A0958
7/16	1-1/8	1	A0659
15/32	1-1/4	47/64	A0700
1/2	5-3/4	5/16	A1064
1/2	6-3/4	5/16	A1064-2
11/16	1-1/4	9/32	A1273
1	7-1/4	3/4	A1000
1-1/16	2-3/32	11/32	A1274
1-1/2	2-39/64	3/8	A1275
1-11/16	2-5/16	7/8	A1037

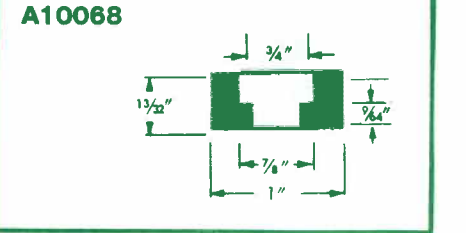
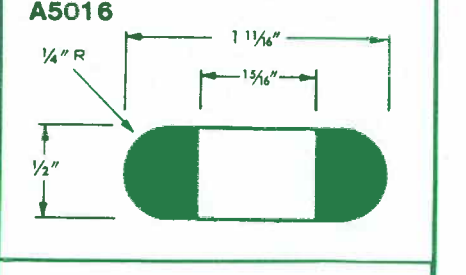
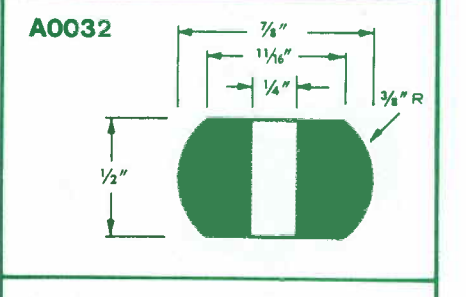
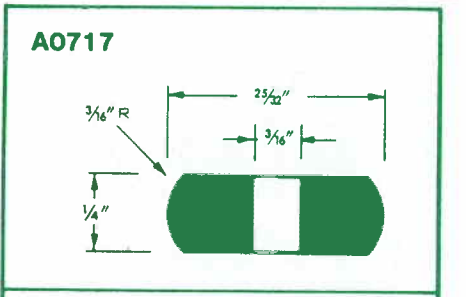
MOLDED



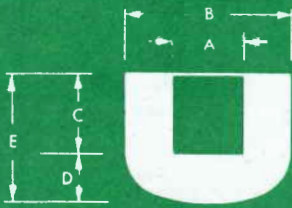
SPECIFY: WITH OR WITHOUT WASHER



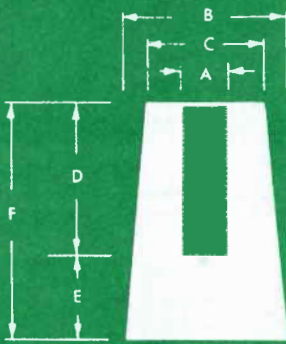
3/16	7/16	3/16	A0869
5/16	7/8	3/8	A0079
3/8	1-3/16	5/16	A1146
9/16	1-1/4	1/4	A0300
1	1-3/4	1/4	A1957
1-5/16	2-1/4	1/4	A0301
1-3/8	2-1/4	1/4	A0299
1-1/2	2-7/16	1/4	A1609
1-1/2	2-1/2	1/4	A1488



TIPS

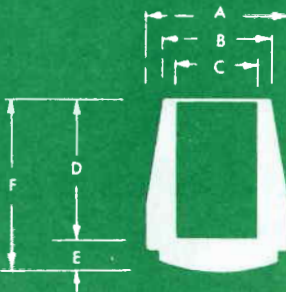


A	B	C	D	E	PART NO.
Inside Diameter	Outside Diameter	Inside Height	End Thickness	Total Height	
9/64	11/32	5/32	3/32	1/4	A1391
5/32	23/64	7/16	1/8	9/16	A1235
7/32	1/2	1/4	7/64	23/64	A1262
1/4	17/32	11/32	1/4	19/32	A1684
5/16	17/32	11/32	1/4	19/32	A1993

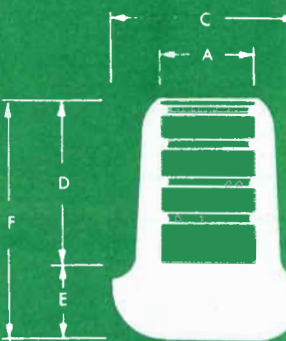


A	B	C	D	E	F	PART NO.
Inside Diameter	Outside Diameter	Neck Diameter	Inside Height	End Thickness	Total Height	
7/64	3/8	5/16	3/8	1/4	5/8	A0389
7/64	7/16	5/16	7/16	1/4	11/16	A0390
7/64	25/64	11/32	1/2	1/4	3/4	A0389-1
*15/64	27/64	23/64	3/8	3/32	15/32	A4603
*23/64	9/16	15/32	9/16	3/16	3/4	A4320
*15/32	11/16	19/32	9/16	3/16	3/4	A4381

* Curved Surface



7/32	15/32	3/8	11/16	7/32	29/32	A1873
19/64	15/32	3/8	11/16	7/32	29/32	A1872
13/32	9/16	15/32	11/16	7/32	29/32	A1875
9/16	13/16	5/8	13/16	11/64	63/64	A1876



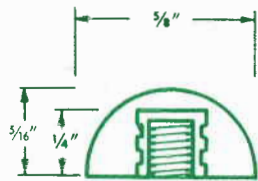
A	B	C	D	E	F	PART NO.
Inside Diameter	Crutch Tip #	Outside Diameter	Inside Height	Base Thickness	Overall Thickness	
3/8	15	3/4	15/16	1/4	1-3/16	A0510
1/2	16	7/8	5/16	7/8	1-3/16	A0492
5/8	17	1-1/16	1-1/8	5/16	1-7/16	A0500
3/4	18	1-3/8	1-1/8	3/8	1-1/2	A0067
7/8	19	1-3/8	1-1/8	3/8	1-1/2	A0066
1	20	1-1/2	1-3/16	3/8	1-9/16	A0064
1-1/8	21	1-5/8	1-3/16	3/8	1-9/16	A0065
1-1/4	22	1-3/4	1-3/16	3/8	1-9/16	A0581

MANY PARTS ARE AVAILABLE FROM STOCK

SCREW BUMPERS

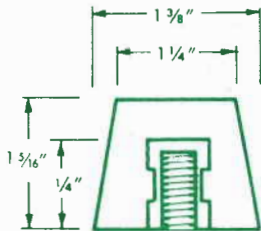
FEMALE

A0868-2



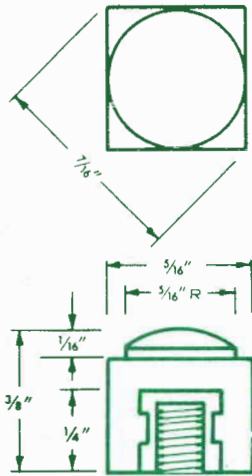
8/32 BRASS
PLATED STEEL INSERT

A5524



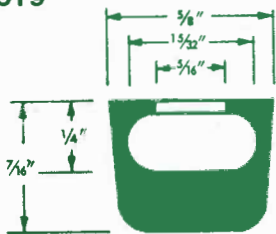
1/4" 20 THREAD INSERT

A1831



8/32 BRASS
PLATED STEEL INSERT

A0519



SOLID
RUBBER
BALLS



A

Diameter

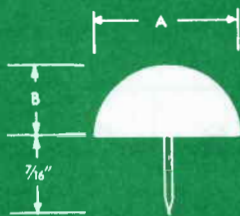
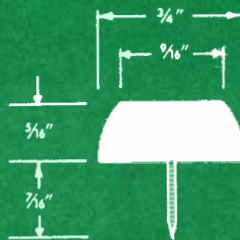
3/8
7/16
1/2
7/8
1
1-1/8
1-3/8
1-1/2
2
2-1/2

Part
No.

A2234
A1732
A1651
A3454
A1541
A1542
A2628
A1543
A1399
A1861

TACK BUMPERS

A1045

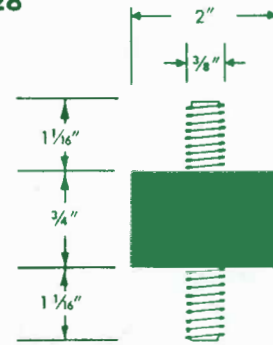


A Head Diameter	B Head Height	PART NO.
3/8	1/4	A6511
1/2	1/4	A6512
5/8	5/16	A6513
3/4	3/8	A6514

MOLDED

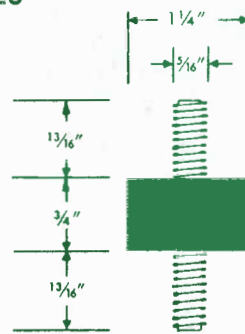
MOTOR MOUNTS

A1628



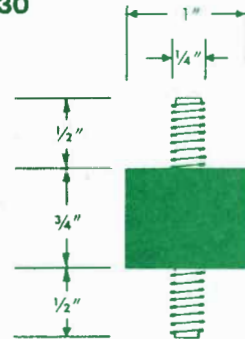
16 THREAD

A1629



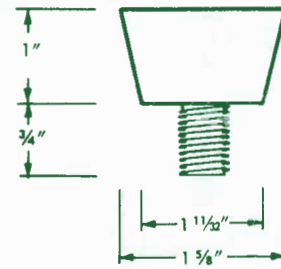
18 THREAD

A1630



20 THREAD

A6070



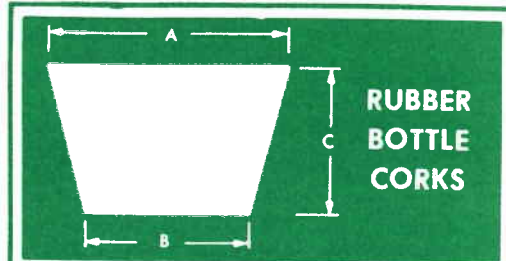
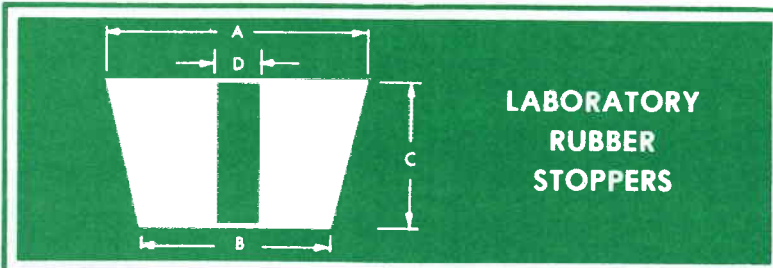
5/16-18 THREAD

BUMPERS

MOLDED

"STOPPERS"

Our fabricating department can drill one or several holes, in any diameter, in any size stopper.



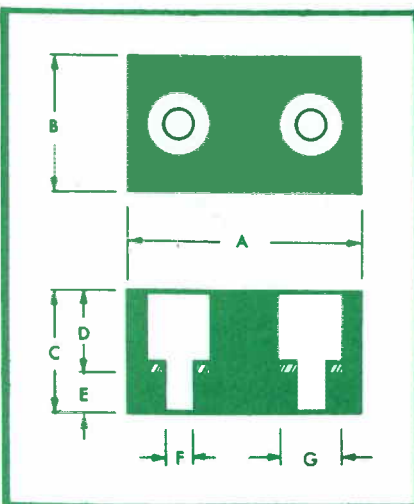
CORKS/BUMPERS

M O J O W D

Size No.	A Top	B Bottom	C Height	D Hole(s) Diam.	PART NO.		
					Solid	1 Hole	2 Hole
00	9/16	3/8	1	1/8	A0670	A0670-1	A0670-2
0	5/8	1/2	1	1/8	A1093	A1093-1	A1093-2
1	3/4	9/16	1	5/32	A1137	A1137-1	A1137-2
2	25/32	5/8	1	5/32	A1231	A1231-1	A1231-2
3	29/32	23/32	1	3/16	A1058	A1058-1	A1058-2
4	1	3/4	1	3/16	A1122	A1122-1	A1122-2
5	1-1/8	27/32	15/16	7/32	A0750	A0750-1	A0750-2
5-1/2	1-3/16	15/16	15/16	7/32	A2363	A2363-1	A2363-2
6	1-1/4	1	1	7/32	A0749	A0749-1	A0749-2
6-1/2	1-5/16	1-3/64	61/64	7/32	A2364	A2364-1	A2364-2
7	1-3/8	1-3/32	1	7/32	A1227	A1227-1	A1227-2
8	1-5/8	1-9/32	1	7/32	A1228	A1228-1	A1228-2
9	1-3/4	1-7/16	1	7/32	A1226	A1226-1	A1226-2
10	2	1-5/8	1-1/16	7/32	A1225	A1225-1	A1225-2
11	2-3/16	1-15/16	1	1/4	A0777	A0777-1	A0777-2
12	2-9/16	2-1/4	1	1/4	A1092	A1092-1	A1092-2
13	2-11/16	2-5/16	1-1/8	1/4	A0252	A0252-1	A0252-2
14	3	2-5/8	1	1/4	A0589	A0589-1	A0589-2
15	3-1/4	2-7/8	1	1/4	A0575	A0575-1	A0575-2

Size No.	A Top	B Bottom	C Height	PART NO.
1	7/16	5/16	11/16	A0390
2	1/2	3/8	3/4	A0775
3	9/16	13/32	13/16	A0776
	9/16	1/2	5/8	A0630
3-1/2	19/32	7/16	27/32	A1004
4	5/8	15/32	7/8	A0580
5	11/16	1/2	15/16	A1470
6	3/4	9/16	1	A1137
	3/4	11/16	5/8	A0057
7	13/16	5/8	1	A1136
8	7/8	21/32	1-1/8	A0375
9	15/16	11/16	1-1/4	A1471
10	1	3/4	1-5/16	A0364
	1-3/16	1/2	1-3/4	A0979
	2-1/2	1-1/2	5	A0987
	3-1/8	1-3/8	2-7/8	A1012
	3-1/2	3	1-1/2	A2003
	4	3-1/4	1-1/2	A2002
	4-1/2	3-7/8	1-1/2	A1833
	5-3/8	3-1/2	3-1/2	A1100

BUMPER PADS

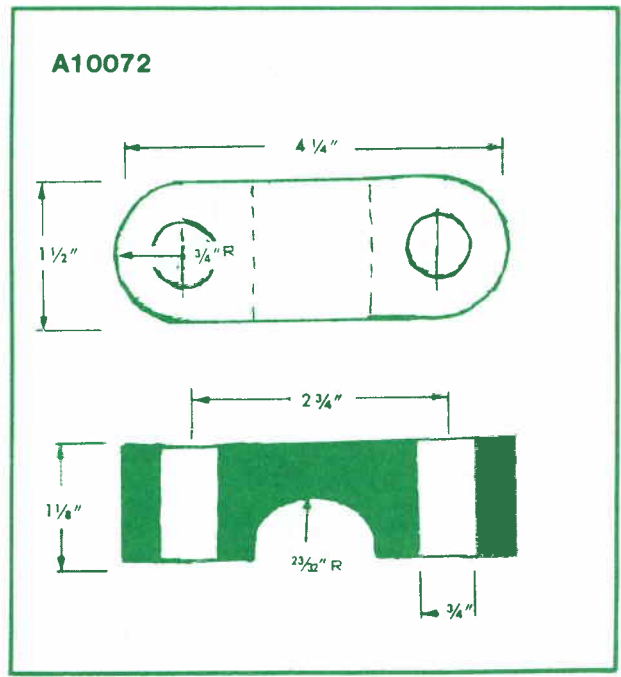
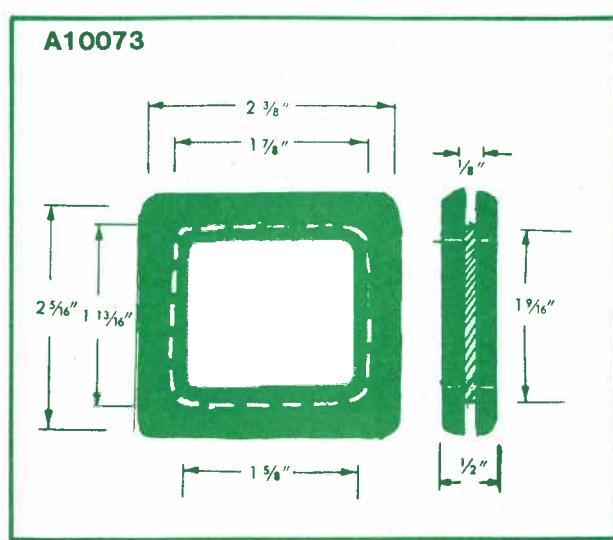
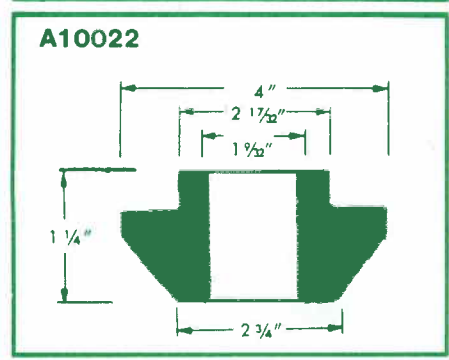
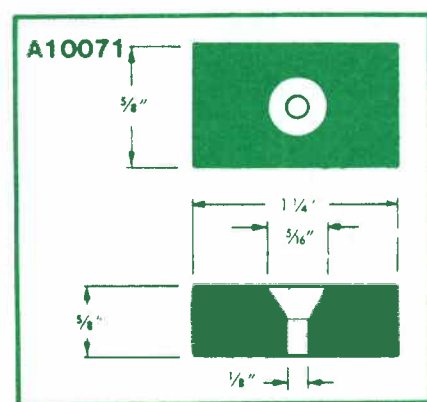
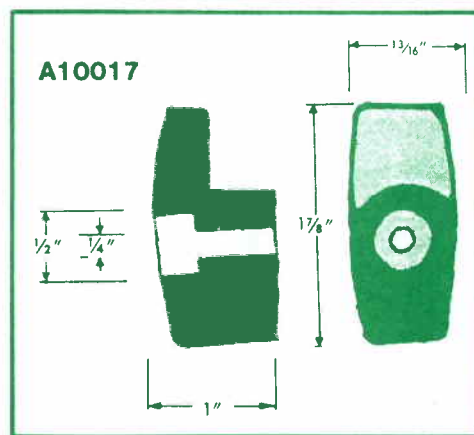
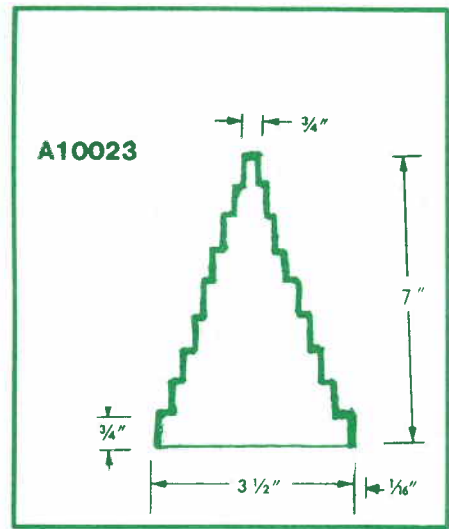
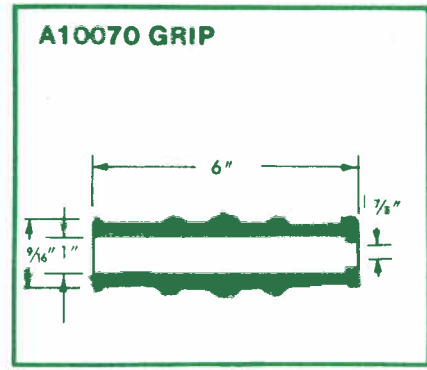
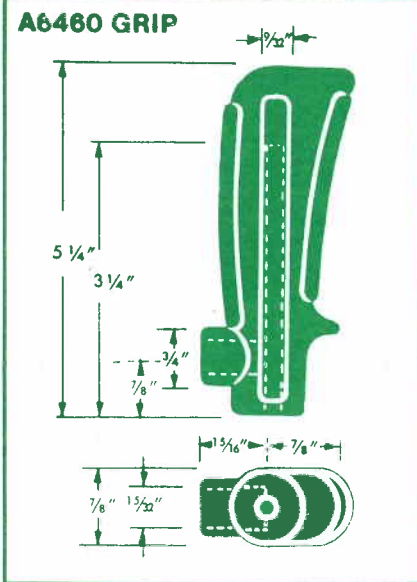


A Length	B Width	C Height	D Recess Height	E Bore Height	F Bore Diameter	G Recess Diameter	PART NO.
1	5/8	1/2	3/16	5/16	9/64	5/16	A0805
1-3/4	5/8	1/2	1/4	1/4	1/8	1/4	A0246
2	1	7/16	3/16	1/4	3/16	1/2	A1409
2-1/2	2	1/2	3/16	5/16	3/16	1/2	A0812
2-3/4	1	1	5/8	3/8	1/4	7/16	A1472
4	1-1/4	3/4	7/16	5/16	5/16	1/2	A1473
4	1-1/4	1-1/4	7/16	13/16	5/16	1/2	A1474

Most items available with steel washer and or fabric back. Add suffix 'W' to part number for washer insert. If fabric back is desired, please specify.

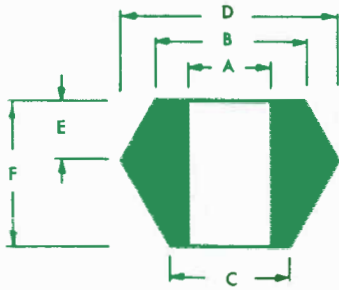
MOLDED

MISCELLANY



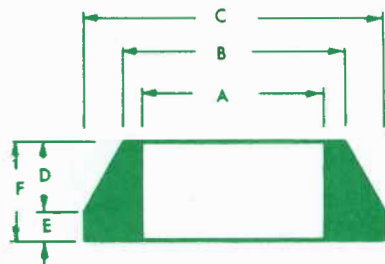
WASHERS/SUCTION CUPS

BEVELED SIDE & HEAD



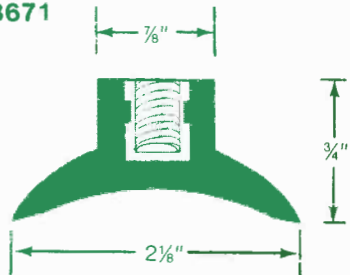
A Inside Diameter	B Head Diameter	C Base Diameter	D Outside Diameter	E Head Height	F Overall Height	G Center Width	PART NO.
3/32	7/16	7/16	11/16	1/8	35/64	SPLIT	A10320
1/4	29/32	11/16	1-1/16	30°	3/4	—	A1456-2
3/8	29/32	11/16	1-1/16	30°	3/4	—	A1456-3
3/8	1/2	1/2	25/32	3/16	5/8	—	A0762
3/8	1	45°	1-1/4	5/16	1	1/2	A10319
1/2	29/32	11/16	1-1/16	30°	3/4	—	A1456
35/64	1	45°	1-1/4	5/16	1	1/2	A10266
5/8	1-1/16	1	1-3/16	1/4	3/4	—	A10043
23/32	1	45°	1-1/4	5/16	1	1/2	A10265
51/64	1	45°	1-1/4	5/16	1	1/2	A10264
59/64	1	45°	1-1/4	5/16	1	1/2	A10263
2-13/16	—	3-5/16	3-3/4	1/8	27/32	5/16	A10010
4-7/16	—	5-3/16	5-15/16	13/64	1-17/64	5/16	A10067

BEVELED HEAD STRAIGHT SIDE

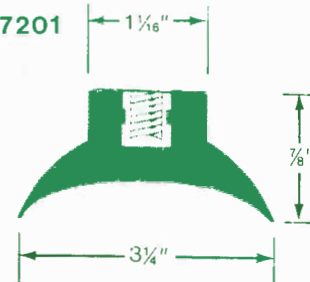


A Inside Diameter	B Head Diameter	C Outside Diameter	D Head Height	E Base Height	F Overall Height	PART NO.
.115		15/32	1/4	1/16	5/16	A5573
3/16		9/16			1/4	A0394
7/32	7/16	7/8	1/8	1/16	3/16	A1152
1/4	9/16	21/32	1/8	1/16	3/16	A0712
5/16		19/32	3/32	7/32	5/16	A0914
5/16	21/32	27/32	3/16	1/8	5/16	A0914-2
3/8	9/16	21/32	1/8	1/16	3/16	A0712-2
1-5/16	1-7/16	1-7/8	1/2	1/8	5/8	A0572
2-17/32		3-17/32	1/2	1/2	1	A1270
4-1/2	4-3/4	5-1/2	3/8	1/8	1/2	A10007
6-5/8	6-7/8	7-5/8	3/8	1/8	1/2	A10008
8-5/8	8-7/8	9-7/8	1/2	1/8	5/8	A10009

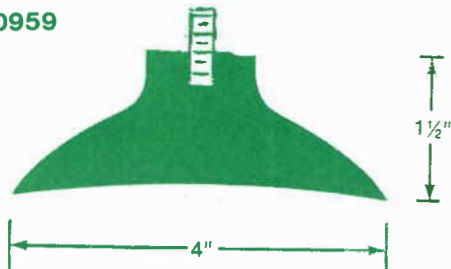
AL-3671



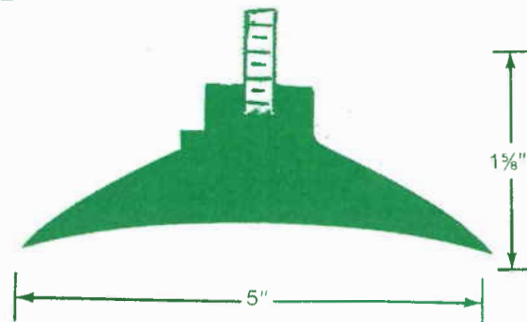
AL-7201



AL-0959



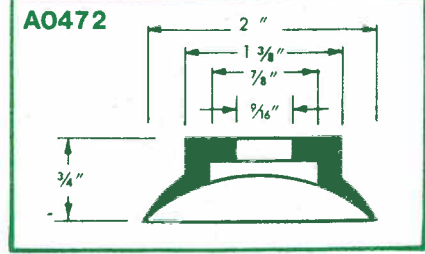
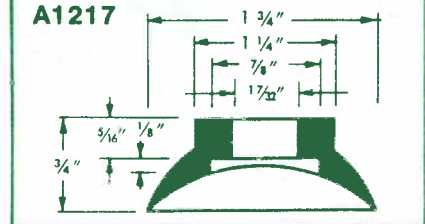
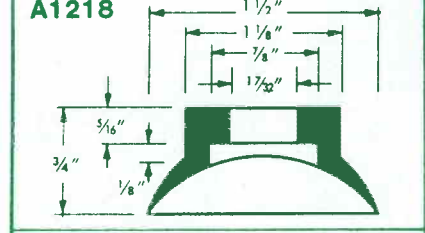
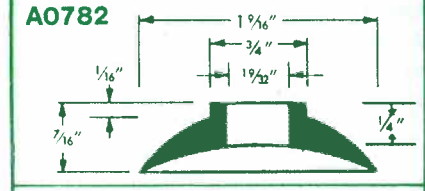
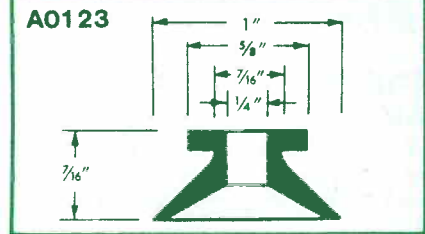
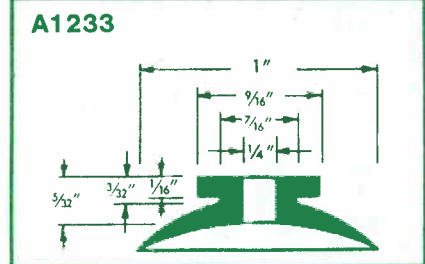
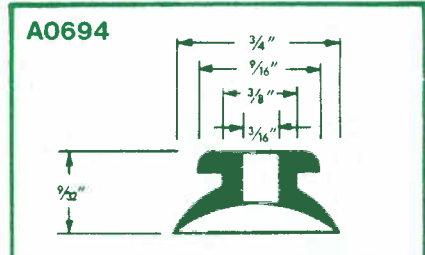
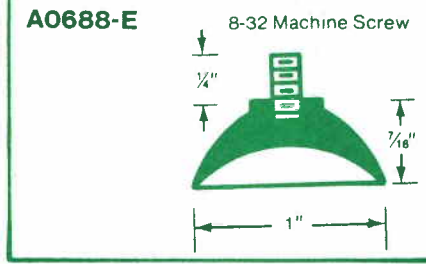
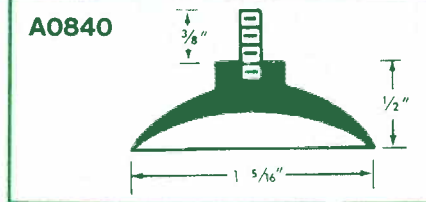
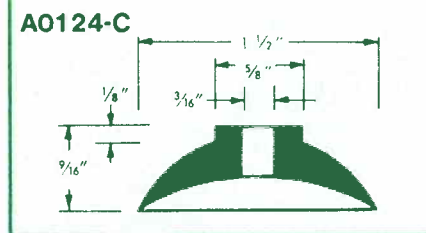
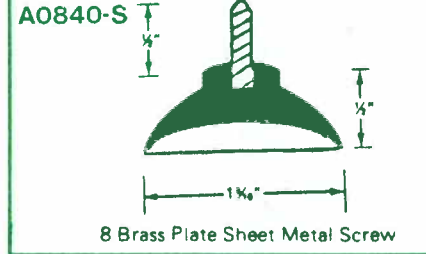
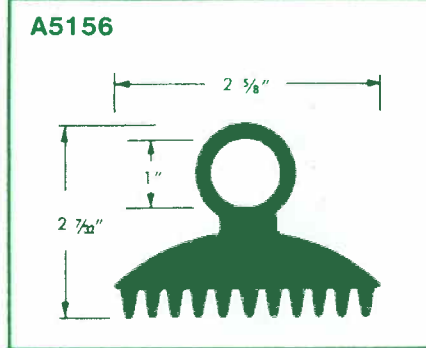
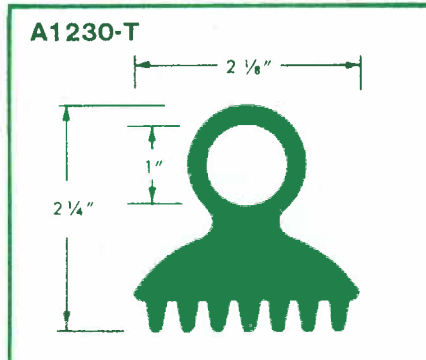
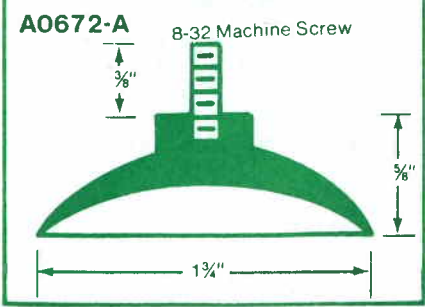
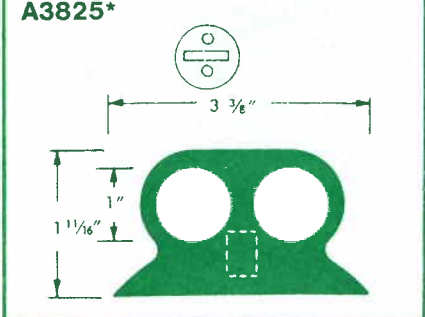
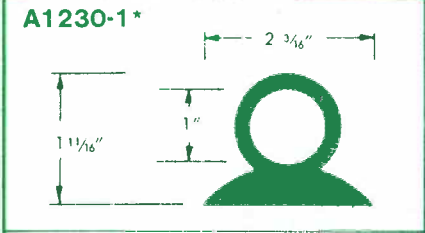
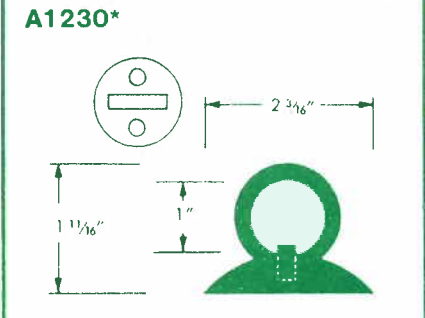
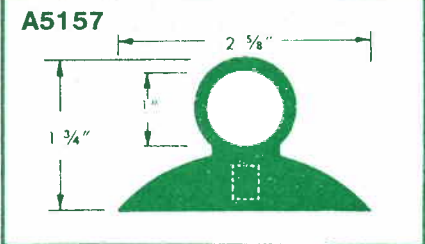
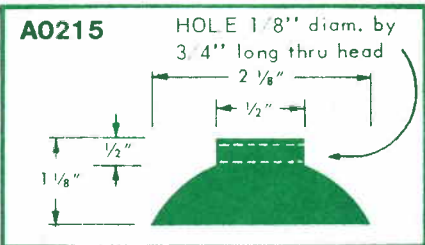
AL-1867



MOLDED

SUCTION & VACUUM CUPS

MOLDED



ALLSTATES RUBBER & TOOL CORP.



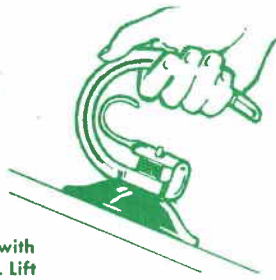
Powerful suction grips and holds with bulldog tenacity. Lift heavy loads with perfect safety.



THE LITTLE GRABBER

One-finger tool for lifting light objects or raising corners. Always ready. Leaves hand free for other work. Easy-release tabs.

- No. A5157 2 5/8" Cup
- No. A1230 2 1/8" Cup
- No. A1230-1 2 1/8" Cup without release tabs

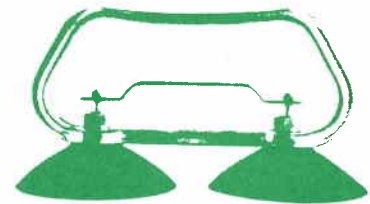
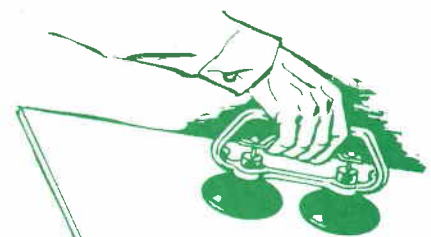


Press release button to disengage Vacuum Lifter instantly from load.

HEAVY DUTY (SHEET METAL HANDLING TOOL)

Lifts heavy loads safely. Powerful suction grips material and holds until released by hand trigger. Use for loading, unloading, piling and shifting sheet metal.

- No. A1859 4" Cup
- No. A1912 5" Cup



HEAVY DUTY DOUBLE CUP (SHEET METAL HANDLING TOOL)

Versatile one or two hand lifting. The 5" cups safely lift weights far beyond operator's normal capacity. Simultaneous trigger release.

- No. A0140 2 Cups 4" ea.
- No. A0141 2 Cups 5" ea.



THE KNUCKLE SAVER

Two-finger grip and larger cup for heavier loads. Breaks oil adhesions easily. Release tabs.

- No. A3825 3 1/4" Cup



MEDIUM DUTY HANDLING TOOL

Full hand grip for extra strength and fingertip pushbutton release speeds handling of smooth materials safely.

- No. A2260 3 1/4" Cup

TWO MAN "EXTRA HEAVY DUTY" HANDLING TOOL

Extra safety for both men and materials. Two men can lift and carry much greater loads. Ideal for moving heavy gauge metal, marble slabs, heavy plate glass. Distance between cups can be custom fitted.

- No. A3700 2 Cups 4" ea.
- No. A3750 2 Cups 5" ea.



ALLSTATES RUBBER & TOOL CORP.

FLOOR PANEL LIFTERS

#A0164 — 12" handle with 2 1/8" cup

#A0165 — 15" handle with 2 1/8" cup

#A0166 — 18" handle with 2 1/8" cup

#A0167 — 12" handle with 3 1/4" cup

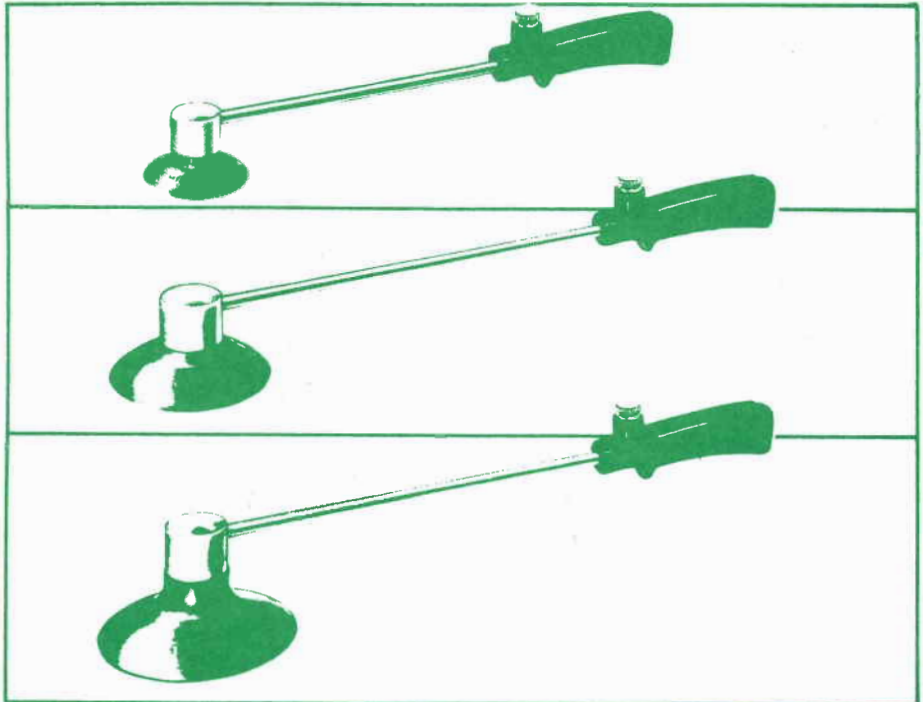
#A0168 — 15" handle with 3 1/4" cup

#A0169 — 18" handle with 3 1/4" cup

#A0170 — 12" handle with 4" cup

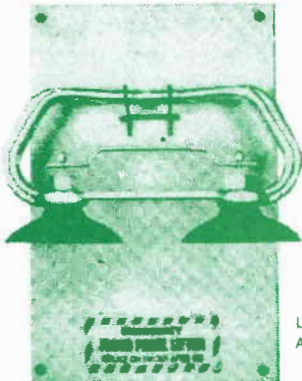
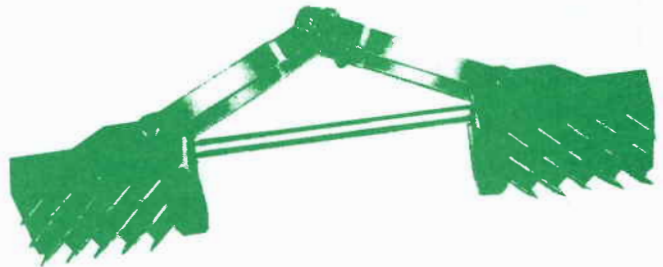
#A0171 — 15" handle with 4" cup

#A0172 — 18" handle with 4" cup



Revolutionary NEW LIFTER FOR CARPETED PANELS

This revolutionary handling model has removed the "if" from carpeted panel lifters. The positive lifting action is provided by a series of steel prongs, which grip the carpet backing with maximum efficiency. The lifter is equipped with a positive lock and release unit for safe removal or carrying of carpeted panels. Style No. A0180



Left - Bracket w/No. A0140
Above - Bracket w/No. A0180

ATTRACTIVE WALL BRACKET . . . Accommodates Any Style Shown

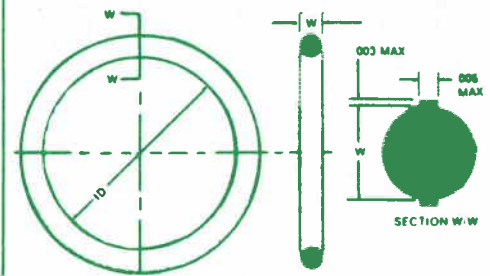
This versatile wall bracket holds any floor lifter shown above. The bracket allows easy removal of the lifter, and can be attached to any type of wall surface. The bright safety yellow color provides maximum visibility in case of emergency. The bracket comes complete with mounting hardware.

O-rings

In addition to those available as uniform system sizes, Allstates offers a broad selection of non-standard size rings. We can also fabricate any off size O-ring you may need. Whatever your O-ring size may be, we can make it for you.

PART NO.	ACTUAL SIZE				PART NO.	ACTUAL SIZE				PART NO.	ACTUAL SIZE			
	I.D.	±	W.	±		I.D.	±	W.	±		I.D.	±	W.	±
OR-001	.029	.003	.040	.003	OR-120	.987	.006	.103	.003	OR-211	.796	.006	.139	.004
OR-002	.042	.003	.050	.003	OR-121	1.049	.006	.103	.003	OR-212	.859	.006	.139	.004
OR-003	.056	.003	.060	.003	OR-122	1.112	.006	.103	.003	OR-213	.921	.006	.139	.004
OR-004	.070	.005	.070	.003	OR-123	1.174	.006	.103	.003	OR-214	.984	.006	.139	.004
OR-005	.101	.005	.070	.003	OR-124	1.237	.006	.103	.003	OR-215	1.046	.006	.139	.004
OR-006	.114	.005	.070	.003	OR-125	1.299	.006	.103	.003	OR-216	1.109	.006	.139	.004
OR-007	.145	.005	.070	.003	OR-126	1.362	.006	.103	.003	OR-217	1.171	.006	.139	.004
OR-008	.176	.005	.070	.003	OR-127	1.424	.006	.103	.003	OR-218	1.234	.006	.139	.004
OR-009	.208	.005	.070	.003	OR-128	1.487	.006	.103	.003	OR-219	1.296	.006	.139	.004
OR-010	.239	.005	.070	.003	OR-129	1.549	.010	.103	.003	OR-220	1.359	.006	.139	.004
OR-011	.301	.005	.070	.003	OR-130	1.612	.010	.103	.003	OR-221	1.421	.006	.139	.004
OR-012	.364	.005	.070	.003	OR-131	1.674	.010	.103	.003	OR-222	1.484	.006	.139	.004
OR-013	.426	.005	.070	.003	OR-132	1.737	.010	.103	.003	OR-223	1.609	.010	.139	.004
OR-014	.489	.005	.070	.003	OR-133	1.799	.010	.103	.003	OR-224	1.734	.010	.139	.004
OR-015	.551	.005	.070	.003	OR-134	1.862	.010	.103	.003	OR-225	1.859	.010	.139	.004
OR-016	.614	.005	.070	.003	OR-135	1.925	.010	.103	.003	OR-226	1.984	.010	.139	.004
OR-017	.676	.005	.070	.003	OR-136	1.987	.010	.103	.003	OR-227	2.109	.010	.139	.004
OR-018	.739	.005	.070	.003	OR-137	2.050	.010	.103	.003	OR-228	2.234	.010	.139	.004
OR-019	.801	.005	.070	.003	OR-138	2.112	.010	.103	.003	OR-229	2.359	.010	.139	.004
OR-020	.864	.006	.070	.003	OR-139	2.175	.010	.103	.003	OR-230	2.484	.010	.139	.004
OR-021	.926	.006	.070	.003	OR-140	2.237	.010	.103	.003	OR-231	2.609	.010	.139	.004
OR-022	.989	.006	.070	.003	OR-141	2.300	.010	.103	.003	OR-232	2.734	.015	.139	.004
OR-023	1.051	.006	.070	.003	OR-142	2.362	.010	.103	.003	OR-233	2.859	.015	.139	.004
OR-024	1.114	.006	.070	.003	OR-143	2.425	.010	.103	.003	OR-234	2.984	.015	.139	.004
OR-025	1.176	.006	.070	.003	OR-144	2.487	.010	.103	.003	OR-235	3.109	.015	.139	.004
OR-026	1.239	.006	.070	.003	OR-145	2.550	.010	.103	.003	OR-236	3.234	.015	.139	.004
OR-027	1.301	.006	.070	.003	OR-146	2.612	.010	.103	.003	OR-237	3.359	.015	.139	.004
OR-028	1.364	.006	.070	.003	OR-147	2.675	.015	.103	.003	OR-238	3.484	.015	.139	.004
OR-029	1.489	.010	.070	.003	OR-148	2.737	.015	.103	.003	OR-239	3.609	.015	.139	.004
OR-030	1.614	.010	.070	.003	OR-149	2.800	.015	.103	.003	OR-240	3.734	.015	.139	.004
OR-031	1.739	.010	.070	.003	OR-150	2.862	.015	.103	.003	OR-241	3.859	.015	.139	.004
OR-032	1.864	.010	.070	.003	OR-151	2.987	.015	.103	.003	OR-242	3.984	.015	.139	.004
OR-033	1.989	.010	.070	.003	OR-152	3.237	.015	.103	.003	OR-243	4.109	.015	.139	.004
OR-034	2.114	.010	.070	.003	OR-153	3.487	.015	.103	.003	OR-244	4.234	.015	.139	.004
OR-035	2.239	.010	.070	.003	OR-154	3.737	.015	.103	.003	OR-245	4.359	.015	.139	.004
OR-036	2.364	.010	.070	.003	OR-155	3.987	.015	.103	.003	OR-246	4.484	.015	.139	.004
OR-037	2.489	.010	.070	.003	OR-156	4.237	.015	.103	.003	OR-247	4.609	.015	.139	.004
OR-038	2.614	.010	.070	.003	OR-157	4.487	.015	.103	.003	OR-248	4.734	.015	.139	.004
OR-039	2.739	.015	.070	.003	OR-158	4.737	.015	.103	.003	OR-249	4.859	.015	.139	.004
OR-040	2.864	.015	.070	.003	OR-159	4.987	.015	.103	.003	OR-250	4.984	.015	.139	.004
OR-041	2.989	.015	.070	.003	OR-160	5.237	.023	.103	.003	OR-251	5.109	.023	.139	.004
OR-042	3.239	.015	.070	.003	OR-161	5.487	.023	.103	.003	OR-252	5.234	.023	.139	.004
OR-043	3.489	.015	.070	.003	OR-162	5.737	.023	.103	.003	OR-253	5.359	.023	.139	.004
OR-044	3.739	.015	.070	.003	OR-163	5.987	.023	.103	.003	OR-254	5.484	.023	.139	.004
OR-045	3.989	.015	.070	.003	OR-164	6.237	.023	.103	.003	OR-255	5.609	.023	.139	.004
OR-046	4.239	.015	.070	.003	OR-165	6.487	.023	.103	.003	OR-256	5.734	.023	.139	.004
OR-047	4.489	.015	.070	.003	OR-166	6.737	.023	.103	.003	OR-257	5.859	.023	.139	.004
OR-048	4.739	.015	.070	.003	OR-167	6.987	.023	.103	.003	OR-258	5.984	.023	.139	.004
OR-049	4.989	.023	.070	.003	OR-168	7.237	.030	.103	.003	OR-259	6.234	.023	.139	.004
OR-050	5.239	.023	.070	.003	OR-169	7.487	.030	.103	.003	OR-260	6.484	.023	.139	.004
OR-110	.362	.005	.103	.003	OR-170	7.737	.030	.103	.003	OR-261	6.734	.023	.139	.004
OR-111	.424	.005	.103	.003	OR-171	7.987	.030	.103	.003	OR-262	6.984	.023	.139	.004
OR-112	.487	.005	.103	.003	OR-172	8.237	.030	.103	.003	OR-263	7.234	.030	.139	.004
OR-113	.549	.005	.103	.003	OR-173	8.487	.030	.103	.003	OR-264	7.484	.030	.139	.004
OR-114	.612	.005	.103	.003	OR-174	8.737	.030	.103	.003	OR-265	7.734	.030	.139	.004
OR-115	.674	.005	.103	.003	OR-175	8.987	.030	.103	.003	OR-266	7.984	.030	.139	.004
OR-116	.737	.005	.103	.003	OR-176	9.237	.030	.103	.003	OR-267	8.234	.030	.139	.004
OR-117	.799	.006	.103	.003	OR-177	9.487	.030	.103	.003	OR-268	8.484	.030	.139	.004
OR-118	.862	.006	.103	.003	OR-178	9.737	.030	.103	.003	OR-269	8.734	.030	.139	.004
OR-119	.924	.006	.103	.003	OR-210	.734	.006	.139	.004	OR-270	8.984	.030	.139	.004

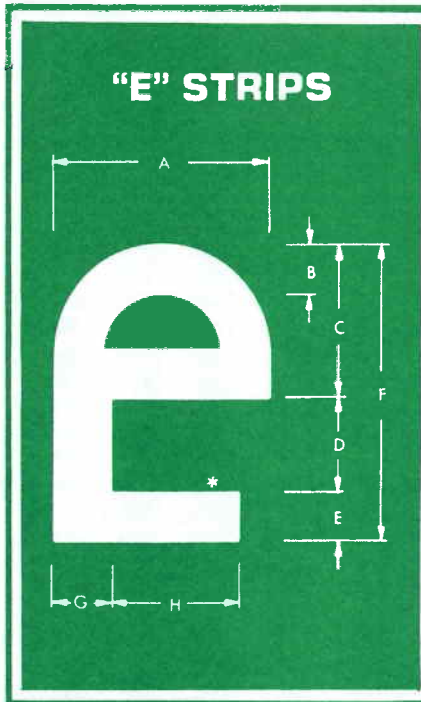
ACTUAL SIZE					ACTUAL SIZE					ACTUAL SIZE				
PART NO.	I.D.	±	W.	±	PART NO.	I.D.	±	W.	±	PART NO.	I.D.	±	W.	±
OR-271	9.234	.030	.139	.004	OR-371	8.475	.030	.210	.005	OR-460	15.475	.030	.275	.006
OR-272	9.484	.030	.139	.004	OR-372	8.725	.030	.210	.005	OR-461	15.955	.045	.275	.006
OR-273	9.734	.030	.139	.004	OR-373	8.975	.030	.210	.005	OR-462	16.455	.045	.275	.006
OR-274	9.984	.030	.139	.004	OR-374	9.225	.030	.210	.005	OR-463	16.955	.045	.275	.006
OR-275	10.484	.030	.139	.004	OR-375	9.475	.030	.210	.005	OR-464	17.455	.045	.275	.006
OR-276	10.984	.030	.139	.004	OR-376	9.725	.030	.210	.005	OR-465	17.955	.045	.275	.006
OR-277	11.484	.030	.139	.004	OR-377	9.975	.030	.210	.005	OR-466	18.455	.045	.275	.006
OR-278	11.984	.030	.139	.004	OR-378	10.475	.030	.210	.005	OR-467	18.955	.045	.275	.006
OR-279	12.984	.030	.139	.004	OR-379	10.975	.030	.210	.005	OR-468	19.455	.045	.275	.006
OR-280	13.984	.030	.139	.004	OR-380	11.475	.030	.210	.005	OR-469	19.955	.045	.275	.006
OR-281	14.984	.030	.139	.004	OR-381	11.975	.030	.210	.005	OR-470	20.955	.045	.275	.006
OR-282	15.955	.045	.139	.004	OR-382	12.975	.030	.210	.005	OR-471	21.955	.045	.275	.006
OR-283	16.955	.045	.139	.004	OR-383	13.975	.010	.210	.005	OR-472	22.940	.060	.275	.006
OR-284	17.955	.045	.139	.004	OR-384	14.975	.030	.210	.005	OR-473	23.940	.060	.275	.006
OR-325	1.475	.010	.210	.005	OR-385	15.955	.045	.210	.005	OR-474	24.940	.060	.275	.006
OR-326	1.600	.010	.210	.005	OR-386	16.955	.045	.210	.005	OR-475	25.940	.060	.275	.006
OR-327	1.725	.010	.210	.005	OR-387	17.955	.045	.210	.005	OR-901	.185	.005	.056	.003
OR-328	1.850	.010	.210	.005	OR-388	18.953	.047	.210	.005	OR-902	.239	.005	.064	.003
OR-329	1.975	.010	.210	.005	OR-389	19.953	.047	.210	.005	OR-903	.301	.005	.064	.003
OR-330	2.100	.010	.210	.005	OR-390	20.953	.047	.210	.005	OR-904	.351	.005	.072	.003
OR-331	2.225	.010	.210	.005	OR-391	21.953	.047	.210	.005	OR-905	.414	.005	.072	.003
OR-332	2.350	.010	.210	.005	OR-392	22.940	.060	.210	.005	OR-906	.468	.005	.078	.003
OR-333	2.475	.010	.210	.005	OR-393	23.940	.060	.210	.005	OR-907	.468	.005	.082	.003
OR-334	2.600	.010	.210	.005	OR-394	24.940	.060	.210	.005	OR-908	.644	.005	.087	.003
OR-335	2.725	.015	.210	.005	OR-395	25.940	.060	.210	.005	OR-909	.706	.005	.097	.003
OR-336	2.850	.015	.210	.005	OR-425	4.475	.015	.275	.006	OR-910	.755	.005	.097	.003
OR-337	2.975	.015	.210	.005	OR-426	4.600	.015	.275	.006	OR-911	.863	.005	.116	.004
OR-338	3.100	.015	.210	.005	OR-427	4.725	.015	.275	.006	OR-912	.924	.006	.116	.004
OR-339	3.225	.015	.210	.005	OR-428	4.850	.015	.275	.006	OR-913	.986	.006	.116	.004
OR-340	3.350	.015	.210	.005	OR-429	4.975	.015	.275	.006	OR-914	1.047	.006	.116	.004
OR-341	3.475	.015	.210	.005	OR-430	5.100	.023	.275	.006	OR-916	1.171	.006	.116	.004
OR-342	3.600	.015	.210	.005	OR-431	5.225	.023	.275	.006	OR-918	1.355	.006	.116	.004
OR-343	3.725	.015	.210	.005	OR-432	5.350	.023	.275	.006	OR-920	1.475	.010	.118	.004
OR-344	3.850	.015	.210	.005	OR-433	5.475	.023	.275	.006	OR-924	1.720	.010	.118	.004
OR-345	3.975	.015	.210	.005	OR-434	5.600	.023	.275	.006	OR-928	2.090	.010	.118	.004
OR-346	4.100	.015	.210	.005	OR-435	5.725	.023	.275	.006	OR-932	2.337	.010	.118	.004
OR-347	4.225	.015	.210	.005	OR-436	5.850	.023	.275	.006					
OR-348	4.350	.015	.210	.005	OR-437	5.975	.023	.275	.006					
OR-349	4.475	.015	.210	.005	OR-438	6.225	.023	.275	.006					
OR-350	4.600	.015	.210	.005	OR-439	6.475	.023	.275	.006					
OR-351	4.725	.015	.210	.005	OR-440	6.725	.023	.275	.006					
OR-352	4.850	.015	.210	.005	OR-441	6.975	.023	.275	.006					
OR-353	4.975	.015	.210	.005	OR-442	7.225	.030	.275	.006					
OR-354	5.100	.023	.210	.005	OR-443	7.475	.030	.275	.006					
OR-355	5.225	.023	.210	.005	OR-444	7.725	.030	.275	.006					
OR-356	5.350	.023	.210	.005	OR-445	7.975	.030	.275	.006					
OR-357	5.475	.023	.210	.005	OR-446	8.475	.030	.275	.006					
OR-358	5.600	.023	.210	.005	OR-447	8.975	.030	.275	.006					
OR-359	5.725	.023	.210	.005	OR-448	9.475	.030	.275	.006					
OR-360	5.850	.023	.210	.005	OR-449	9.975	.030	.275	.006					
OR-361	5.975	.023	.210	.005	OR-450	10.475	.030	.275	.006					
OR-362	6.225	.023	.210	.005	OR-451	10.975	.030	.275	.006					
OR-363	6.475	.023	.210	.005	OR-452	11.475	.030	.275	.006					
OR-364	6.725	.023	.210	.005	OR-453	11.975	.030	.275	.006					
OR-365	6.975	.023	.210	.005	OR-454	12.475	.030	.275	.006					
OR-366	7.225	.030	.210	.005	OR-455	12.975	.030	.275	.006					
OR-367	7.475	.030	.210	.005	OR-456	13.475	.030	.275	.006					
OR-368	7.725	.030	.210	.005	OR-457	13.975	.030	.275	.006					
OR-369	7.975	.030	.210	.005	OR-458	14.475	.030	.275	.006					
OR-370	8.225	.030	.210	.005	OR-459	14.975	.030	.275	.006					



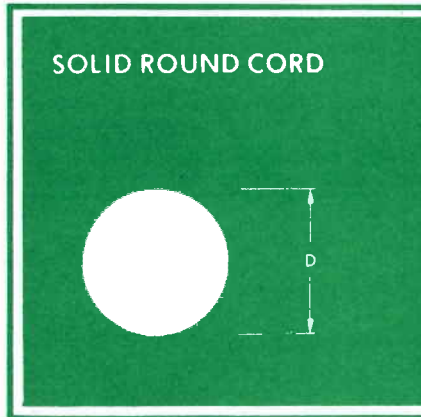
O-RINGS ARE MEASURED BY CROSS SECTION WIDTH (W) AND INSIDE DIAMETER (D). DIMENSIONS ARE GIVEN IN INCHES, AND MILLIMETERS.

EXTRUDED

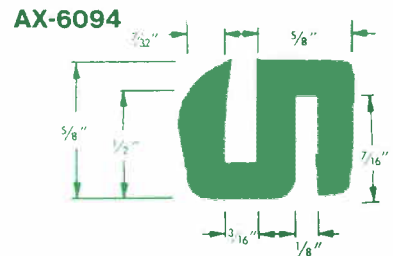
WEATHERSTRIPS



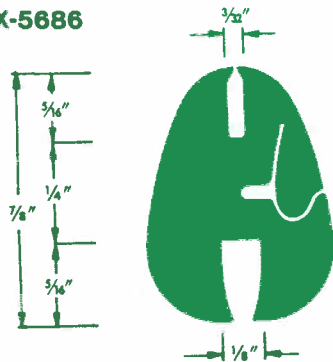
A Bulb Width	B Wall Thick- ness	C Bulb Height	D Slot Width	E Base	F Total Height	G	H	PART NO.
9/64	1/32	9/64	7/64	1/16	5/16	1/16	7/64	AX-2769
1/4	1/32	1/8	1/16	1/16	1/4	1/16	3/16	AX-5088
11/32	3/64	1/8	5/64	29/64	21/32	5/16	*	AX-4977
3/8	1/16	1/4	1/16	1/16	3/8	1/16	5/16	AX-5143
3/8	3/64	1/4	3/32	1/16	13/32	3/32	9/16	AX-1651
3/8	3/64	1/4	1/16	1/16	3/8	1/16	5/16	AX-4435
15/32	3/64	1/4	1/8	5/64	29/64	1/16	5/16	AX-4962
15/32	3/64	5/16	3/64	5/64	7/16	1/16	5/16	AX-3782
15/32	3/64	5/16	1/16	5/64	29/64	1/16	5/16	AX-407
15/32	3/64	5/16	1/16	5/64	29/64	1/16	5/16	AX-2715
15/32	1/16	5/16	1/16	5/64	29/64	1/16	5/16	AX-1669
15/32	3/64	5/16	1/8	5/64	33/64	1/16	5/16	AX-5357
15/32	3/64	5/16	1/8	5/64	33/64	1/16	5/16	AX-5117
1/2	1/16	1/4	9/64	1/16	29/64	3/32	5/16	AX-3487
1/2	3/32	9/32	1/16	1/16	13/32	3/32	5/16	AX-2982
1/2	3/32	11/32	1/16	1/16	15/32	3/32	5/16	AX-637
1/2	3/32	11/32	1/8	1/16	17/32	3/32	5/16	AX-1255
1/2	3/32	3/8	1/8	1/16	9/16	1/8	9/32	AX-2914
1/2	3/32	3/8	1/16	1/16	1/2	3/32	5/16	AX-3281
5/8	1/16	5/16	3/32	1/16	15/32	1/16	9/16	AX-5365
3/4	1/16	5/16	1/16	1/16	7/16	1/16	5/16	AX-1881
15/16	3/32	5/8	1/8	5/32	29/32	1/8	5/8	AX-3352



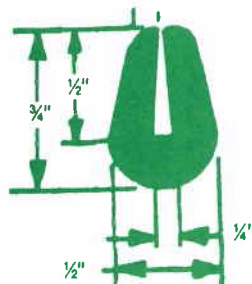
Diameter	Diameter
.070	1/2
.090	9/16
1/8	5/8
3/16	11/16
1/4	3/4
5/16	7/8
3/8	1
7/16	1-15/16



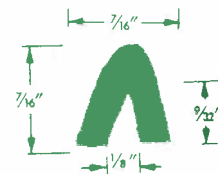
AX-5686



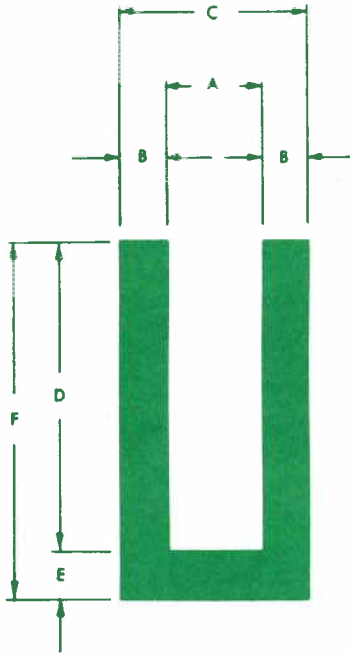
AX-3099



AX-10003



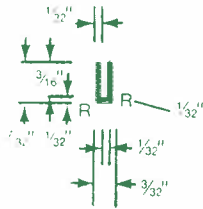
"U" CHANNELS



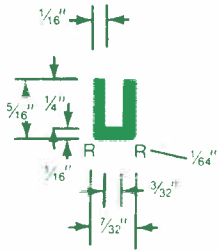
A Slot Width	B Leg Width	C Overall Width	D Slot Depth	E Base Depth	F Overall Depth	Part No.
1/32	1/32	3/32	3/16	1/32	7/32	AX-0892
1/32	1/16	5/32	5/32	1/32	3/16	AX-0142
1/32	1/8	9/32	9/32	3/32	3/8	AX-1035
1/32	5/32	11/32	1/2	3/16	11/16	AX-0270
3/64	1/32	7/64	1/8	1/32	5/32	AX-0661
3/64	1/32	7/64	1/8	1/32	5/32	AX-1142
3/64	1/16	11/64	5/16	1/16	3/8	AX-0200
3/64	1/16	13/64	19/64	5/64	3/8	AX-1174
3/64	7/64	17/64	9/32	3/32	3/8	AX-0591
1/16	1/32	1/8	5/32	1/32	3/16	AX-0538
1/16	1/32	1/8	13/64	1/16	17/64	AX-0945
1/16	1/32	1/8	21/64	3/64	3/8	AX-1277
1/16	3/64	5/32	5/32	5/64	15/64	AX-0650
1/16	1/16	3/16	1/8	1/8	1/4	AX-0195
1/16	1/16	3/16	5/16	1/16	3/8	AX-0172
1/16	1/16	3/16	5/16	1/16	3/8	AX-0218
1/16	1/8	5/16	3/8	5/32	17/32	AX-1274
5/64	1/16	13/64	5/16	1/16	3/8	AX-0396
3/32	3/64	3/16	17/64	3/64	5/16	AX-0379
3/32	1/16	7/32	1/8	1/16	3/16	AX-0566
3/32	1/16	7/32	1/4	1/16	5/16	AX-1054
3/32	1/16	7/32	1/4	1/16	5/16	AX-0541
3/32	5/64	1/4	7/16	3/16	5/8	AX-0129
7/64	1/16	15/64	17/64	*	27/64	AX-1048
1/8	1/32	3/16	7/16	1/16	1/2	AX-0830
1/8	3/64	7/32	11/64	3/64	7/32	AX-0693
1/8	3/64	7/32	13/64	3/64	1/4	AX-0299
1/8	1/16	1/4	1/4	1/16	5/16	AX-0102
1/8	1/16	1/4	1/4	1/16	5/16	AX-0540
1/8	1/16	1/4	1/2	1/16	9/16	AX-1015
1/8	1/16	1/4	9/16	1/16	5/8	AX-0874
1/8	1/16	1/2	1/2	1/8	5/8	AX-0972
1/8	3/32	5/16	9/32	3/32	3/8	AX-0526
1/8	3/32	5/16	3/8	1/8	1/2	AX-0688
1/8	3/32	5/16	13/32	3/32	1/2	AX-0533
1/8	1/8	3/8	3/8	1/8	1/2	AX-0758
1/8	7/32	9/16	23/32	9/32	1	AX-0923
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3/16	1/16	5/16	3/8	1/16	7/16	AX-0341
3/16	3/32	3/8	1/2	*	3/4	AX-1055
3/16	1/8	7/16	3/8	1/8	1/2	AX-0211
1/4	1/16	3/8	7/32	1/16	9/32	AX-0770
1/4	1/16	3/8	5/16	1/16	3/8	AX-0836
1/4	1/16	3/8	3/8	1/8	1/2	AX-0190
1/4	1/8	1/2	1/2	1/8	5/8	AX-0982

"U" CHANNELS/"P" STRIPS

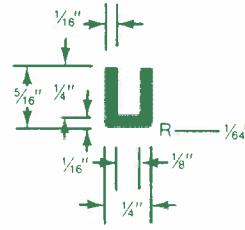
AX-0892



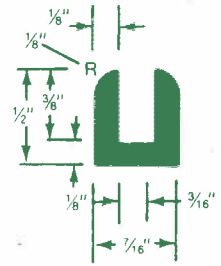
AX-0541



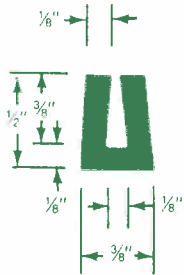
AX-0540



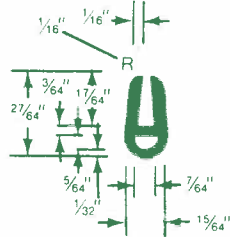
AX-0211



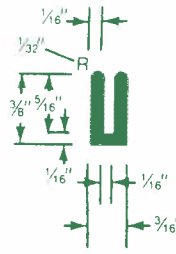
AX-0758



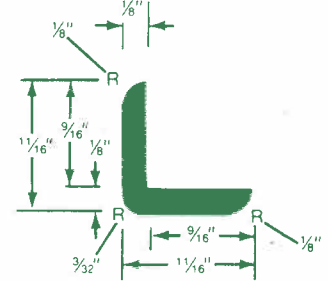
AX-1048



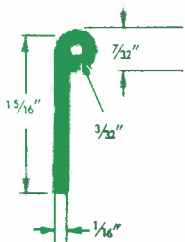
AX-0218



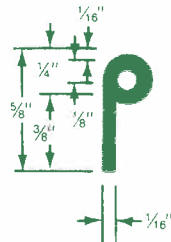
AX-0181



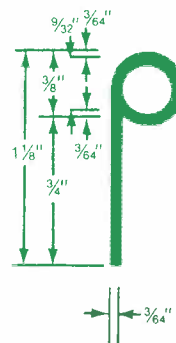
AX-10002



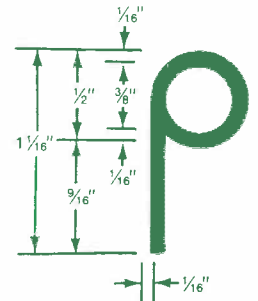
AX-0301



AX-0843

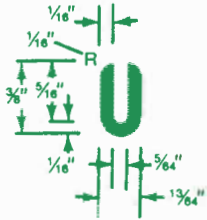


AX-0553

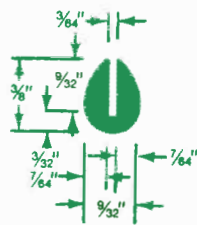


"U" CHANNELS

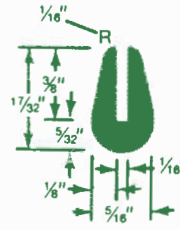
AX-0396



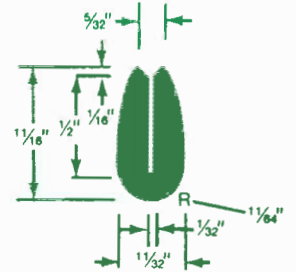
AX-0591



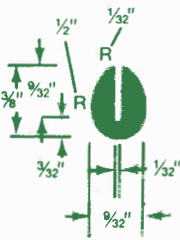
AX-1274



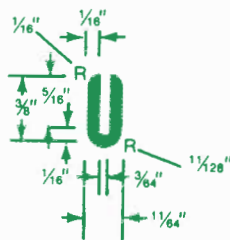
AX-0270



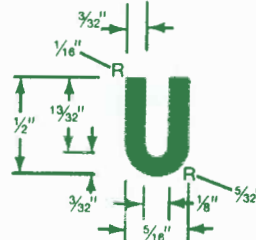
AX-1035



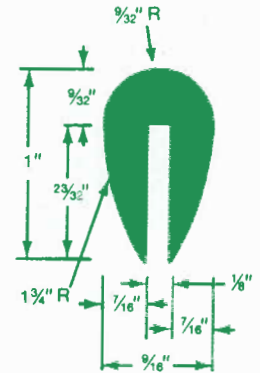
AX-0200



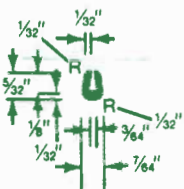
AX-0533



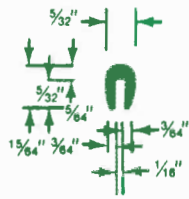
AX-0923



AX-1142

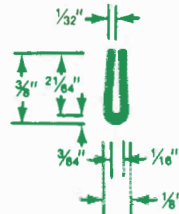


AX-0650



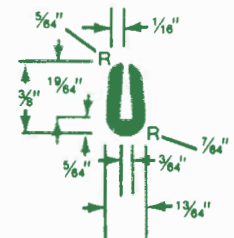
Leg
End
Square

AX-1277

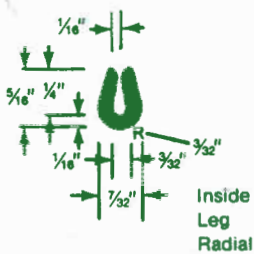


Outside
Leg
Radial

AX-1174

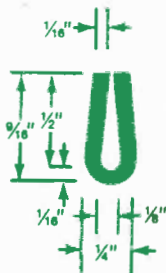


AX-1054



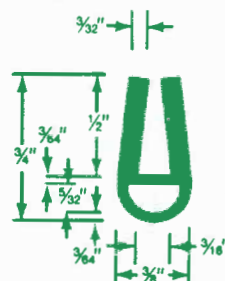
Inside
Leg
Radial

AX-1015



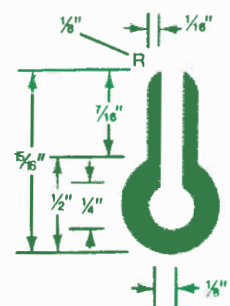
Inside &
Outside
Leg
Radial

AX-1055



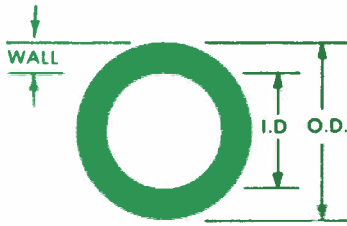
Outside
Leg
Corners
Square

AX-0972



TUBING & CORD EXTRUDED

PURE GUM RUBBER TUBING



Amber machine made furnished in random 25-100 lengths.

PURE GUM Standard Sizes

I.D.	WALL	O.D.	I.D.	WALL	O.D.
1/8	1/16	1/4	5/16	3/32	1/2
1/8	1/8	3/8	5/16	1/8	9/16
3/16	1/16	5/16	3/8	1/16	1/2
3/16	3/32	3/8	3/8	3/32	9/16
3/16	1/8	7/16	3/8	1/8	5/8
1/4	1/16	3/8	1/2	1/8	3/4
1/4	3/32	7/16	3/4	1/8	1
1/4	1/8	1/2	1	1/8	1-1/4
5/16	1/16	7/16			



BLACK RUBBER TUBING



We can furnish sizes not listed to your specifications. We solicit your inquiries.

BLACK Standard Sizes

I.D.	WALL	O.D.	I.D.	WALL	O.D.
1/8	1/32	3/16	5/16	3/64	13/32
1/8	3/64	7/32	5/16	1/16	7/16
1/8	1/16	1/4	5/16	3/32	1/2
1/8	3/32	5/16	5/16	1/8	9/16
1/8	1/8	3/8	3/8	3/64	15/32
1/8	3/16	1/2	3/8	1/16	1/2
9/64	3/64	15/64	3/8	3/32	9/16
5/32	1/32	7/32	3/8	1/8	5/8
5/32	3/64	1/4	7/16	1/16	9/16
5/32	1/16	9/32	1/2	1/16	5/8
3/16	3/64	9/32	1/2	5/64	21/32
3/16	1/16	5/16	1/2	3/32	11/16
3/16	5/64	11/32	1/2	1/8	3/4
3/16	3/32	3/8	5/8	3/32	13/16
3/16	1/8	7/16	5/8	1/8	7/8
1/4	3/64	11/32	3/4	1/8	1
1/4	1/16	3/8	1	1/8	1-1/4
1/4	5/64	13/32	5/16	1/32	3/8
1/4	3/32	7/16	3/8	5/64	17/32
1/4	1/8	1/2	5/16	5/64	15/32
1/4	1/8	1/2			
1/4	5/32	9/16			
9/32	1/16	13/32			



GASKETS CUT FROM TUBING

- Commercial Tolerances
- Standard Tolerances
- Close Tolerances
- Square Cut
- Special Cut
- Ground O.D.

Gaskets, washers, bushings can economically be fabricated from extruded rubber tubing. This process of fabrication eliminates any necessity for molds or dies. For critical requirements, the use of mandrels for cutting and grinding is recommended. For non-critical tolerances, center-less cutting and grinding is available. Our engineers are trained to recommend the proper method when they are familiarized with your requirements.

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TECHNICAL DATA

RUBBER MANUFACTURERS' ASSOCIATION STANDARD TOLERANCE TABLES

Rubber Manufacturers' Association Standard Tolerance Tables

These tables are helpful from the economic standpoint as well as engineering standpoint, since we classify by commercial versus precision groupings. A precision part, in the general sense of the word, tends to cost more. This is due to the

higher expense of close weight control on rubber stock, more expensive trimming methods, fewer cavities per mold, and similar considerations. Molds to make close-tolerance parts usually cost more to build than those with broader tolerances. There are exceptions to the standards compiled herein. This data should, however, serve as a useful guide.

STANDARDS FOR CROSS SECTIONAL TOLERANCE TABLES

Tolerances for outside (O.D.) diameters, inside (I.D.) diameters, wall thickness, width, height and general cross sectional dimensions or extrusions. See Figures 17 and 18, Page 22.

Table 13 Schedule 1
Cross Sectional Tolerances for Group 1 — Compounds Only

HIGH PRECISION RMA — CLASS A — DWG DESIGNATION A1				
Dimension (Inches)	Tolerance	Dimension (Inches)	Dimension (Millimeters)	Tolerance
Above — incl		(Fractions)	Above — incl	
0.00-0.10*	± 0.08	(0-1/32)	0.0- 2.5*	± 0.20
0.10-0.16	0.010	(3/32-1/2)	2.5- 4.0	0.25
0.16-0.25	0.013	(1/2-3/4)	4.0- 6.3	0.32
0.25-0.40	0.016	(3/4-1)	6.3-10.0	0.40
0.40-0.63	0.020	(1-1 1/2)	10.0-16.0	0.50
0.63-1.00	0.025	(1 1/2-1)	16.0-25.0	0.63
Use ± 2-1/4% for dimensions over 1.00 inch.				
PRECISION RMA — CLASS 1 — DWG DESIGNATION A1				
0.00-0.10*	± 0.10	(0-1/32)	0.0- 2.5*	± 0.25
0.10-0.16	0.013	(3/32-1/2)	2.5- 4.0	0.32
0.16-0.25	0.016	(1/2-3/4)	4.0- 6.3	0.40
0.25-0.40	0.020	(3/4-1)	6.3-10.0	0.50
0.40-0.63	0.025	(1-1 1/2)	10.0-16.0	0.63
0.63-1.00	0.032	(1 1/2-1)	16.0-25.0	0.80
Use ± 2-3/4% for dimensions over 1.00 inch.				
COMMERCIAL RMA — CLASS 2 — DWG DESIGNATION A2				
0.00-0.10*	± 0.13	(0-1/32)	0.0- 2.5*	± 0.32
0.10-0.16	0.016	(3/32-1/2)	2.5- 4.0	0.40
0.16-0.25	0.020	(1/2-3/4)	4.0- 6.3	0.50
0.25-0.40	0.025	(3/4-1)	6.3-10.0	0.63
0.40-0.63	0.032	(1-1 1/2)	10.0-16.0	0.80
0.63-1.00	0.040	(1 1/2-1)	16.0-25.0	1.00
Use ± 3-1/2% for dimensions over 1.00 inch.				
NON CRITICAL RMA — CLASS 3 — DWG DESIGNATION A3				
0.00-0.10*	± 0.16	(0-1/32)	0.0- 2.5*	± 0.40
0.10-0.16	0.020	(3/32-1/2)	2.5- 4.0	0.50
0.16-0.25	0.025	(1/2-3/4)	4.0- 6.3	0.63
0.25-0.40	0.032	(3/4-1)	6.3-10.0	0.80
0.40-0.63	0.040	(1-1 1/2)	10.0-16.0	1.00
0.63-1.00	0.050	(1 1/2-1)	16.0-25.0	1.25
Use ± 4-1/2% for dimensions over 1.00 inch.				

*General cross sectional dimensions below 0.040" (1 mm) are impractical.

Table 14 Schedule 2
Cross Sectional Tolerances for Group 2 — Compounds Only

HIGH PRECISION RMA — CLASS A — DWG DESIGNATION A1				
Dimension (Inches)	Tolerance	Dimension (Inches)	Dimension (Millimeters)	Tolerance
Above — incl		(Fractions)	Above — incl	
0.00-0.10*	± 0.10	(0-1/32)	0.0- 2.5*	± 0.25
0.10-0.16	0.013	(3/32-1/2)	2.5- 4.0	0.32
0.16-0.25	0.016	(1/2-3/4)	4.0- 6.3	0.40
0.25-0.40	0.020	(3/4-1)	6.3-10.0	0.50
0.40-0.63	0.025	(1-1 1/2)	10.0-16.0	0.63
0.63-1.00	0.032	(1 1/2-1)	16.0-25.0	0.80
Use ± 2-3/4% for dimensions over 1.00 inch.				
PRECISION RMA — CLASS 1 — DWG DESIGNATION A1				
0.00-0.10*	± 0.13	(0-1/32)	0.0- 2.5*	± 0.32
0.10-0.16	0.016	(3/32-1/2)	2.5- 4.0	0.40
0.16-0.25	0.020	(1/2-3/4)	4.0- 6.3	0.50
0.25-0.40	0.025	(3/4-1)	6.3-10.0	0.63
0.40-0.63	0.030	(1-1 1/2)	10.0-16.0	0.80
0.63-1.00	0.040	(1 1/2-1)	16.0-25.0	1.00
Use ± 3-1/2% for dimensions over 1.00 inch.				
COMMERCIAL RMA — CLASS 2 — DWG DESIGNATION A2				
0.00-0.10*	± 0.16	(0-1/32)	0.0- 2.5*	± 0.40
0.10-0.16	0.020	(3/32-1/2)	2.5- 4.0	0.50
0.16-0.25	0.025	(1/2-3/4)	4.0- 6.3	0.63
0.25-0.40	0.030	(3/4-1)	6.3-10.0	0.80
0.40-0.63	0.040	(1-1 1/2)	10.0-16.0	1.00
0.63-1.00	0.050	(1 1/2-1)	16.0-25.0	1.25
Use ± 4-1/2% for dimensions over 1.00 inch.				
NON CRITICAL RMA — CLASS 3 — DWG DESIGNATION A3				
0.00-0.10*	± 0.20	(0-1/32)	0.0- 2.5*	± 0.50
0.10-0.16	0.025	(3/32-1/2)	2.5- 4.0	0.63
0.16-0.25	0.030	(1/2-3/4)	4.0- 6.3	0.80
0.25-0.40	0.040	(3/4-1)	6.3-10.0	1.00
0.40-0.63	0.050	(1-1 1/2)	10.0-16.0	1.25
0.63-1.00	0.063	(1 1/2-1)	16.0-25.0	1.80
Use ± 5-1/2% for dimensions over 1.00 inch.				

Table 1
STANDARD DIMENSIONAL TOLERANCE TABLE — MOLDED RUBBER PRODUCTS
DRAWING DESIGNATION: A1 — HIGH PRECISION

Size (Inches)	Fixed	Closure	Size (Millimeters)	Fixed	Closure
Above Incl			Above Incl		
0 - .40	± .004	± .005	0 - 10	± 10	± 13
.40 - .63	.005	.006	10 - 16	13	16
.63 - 1.00	.006	.008	16 - 25	16	20
1.00 - 1.80	.008	.010	25 - 40	20	25
1.80 - 2.50	.010	.013	40 - 63	25	32
2.50 - 4.00	.013	.016	63 - 100	32	40
4.00 - 6.30	.016	.020	100 - 160	40	50

Drawing Designation "A1" is the tightest tolerance classification and indicates a high precision rubber product. Such products require expensive molds, fewer cavities per mold, costly in-process controls and inspection procedures. It is desirable that the exact method of measurement be agreed upon between rubber manufacturer and customer, as errors in measurement may be large in relation to the tolerance.

Some materials, particularly those requiring post curing, do not lend themselves to Drawing Designation "A1" tolerances.

Table 2
STANDARD DIMENSIONAL TOLERANCE TABLE — MOLDED RUBBER PRODUCTS
DRAWING DESIGNATION: A2 — PRECISION

Size (Inches)	Fixed	Closure	Size (Millimeters)	Fixed	Closure
Above Incl			Above Incl		
0 - .40	± .006	± .008	0 - 10	± 16	± 20
.40 - .63	.008	.010	10 - 16	20	25
.63 - 1.00	.010	.013	16 - 25	25	32
1.00 - 1.80	.013	.016	25 - 40	32	40
1.80 - 2.50	.016	.020	40 - 63	40	50
2.50 - 4.00	.020	.025	63 - 100	50	63
4.00 - 6.30	.025	.032	100 - 160	63	80
6.30 & over — To find fixed dimensional tolerances multiply by 0.4%			160 & over — To find fixed dimensional tolerances multiply by 0.4%		

Drawing Designation "A2" tolerances indicate a precision product. Molds must be precision machined and kept in good repair. While measurement methods may be simpler than with Drawing Designation "A1," careful inspection will usually be required.

Table 3
STANDARD DIMENSIONAL TOLERANCE TABLE — MOLDED RUBBER PRODUCTS
DRAWING DESIGNATION: A3 — COMMERCIAL

Size (Inches)	Fixed	Closure	Size (Millimeters)	Fixed	Closure
Above Incl			Above Incl		
0 - .40	± .008	± .013	0 - 10	± 20	± 32
.40 - .63	.010	.016	10 - 16	25	40
.63 - 1.00	.013	.020	16 - 25	32	50
1.00 - 1.80	.016	.025	25 - 40	40	63
1.80 - 2.50	.020	.032	40 - 63	50	80
2.50 - 4.00	.025	.040	63 - 100	63	1.00
4.00 - 6.30	.032	.050	100 - 160	80	1.25
6.30 & over — To find fixed dimensional tolerances multiply by 0.5%			160 & over — To find fixed dimensional tolerances multiply by 0.5%		

Drawing Designation "A3" tolerances indicate a "commercial" product and will normally be used for most products.

Table 4
STANDARD DIMENSIONAL TOLERANCE TABLE — MOLDED RUBBER PRODUCTS
DRAWING DESIGNATION: A4 — NON CRITICAL

Size (Inches)	Fixed	Closure	Size (Millimeters)	Fixed	Closure
Above Incl			Above Incl		
0 - .40	± .013	± .032	0 - 10	± 32	± 80
.40 - .63	.016	.036	10 - 16	40	90
.63 - 1.00	.020	.040	16 - 25	50	1.00
1.00 - 1.80	.025	.045	25 - 40	63	1.12
1.80 - 2.50	.032	.050	40 - 63	80	1.25
2.50 - 4.00	.040	.056	63 - 100	1.00	1.40
4.00 - 6.30	.050	.063	100 - 160	1.25	1.60
6.30 & over — To find fixed dimensional tolerances multiply by 0.8%			160 & over — To find fixed dimensional tolerances multiply by 0.8%		

Drawing Designation "A4" tolerances apply to products where dimensional control is non-critical and secondary to cost.

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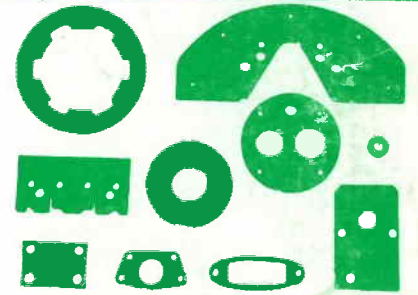
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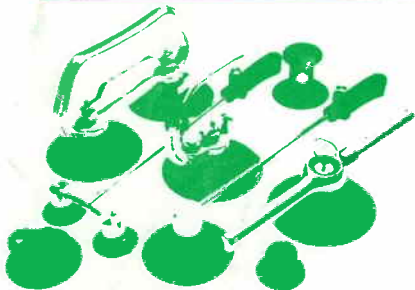
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