

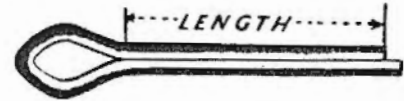
### STANDARD STEEL COTTER PINS

- Extended Prong Type for easy insertion and locking. The length is measured under the head to the end of the shortest leg.
- Packages of 100

**PACKAGE / PLATING CODE**

QB - Bare      SP - Plated

Diameter	1/16	3/32	1/8	5/32	3/16
<b>Length</b>					
1/2"	298-006	•298-014	•298-025	—	—
3/4"	298-007	298-016	•298-026	—	—
1"	298-008	298-017	298-028	298-037	•298-047
1-1/4"	298-009	298-018	•298-029	•298-038	•298-048
1-1/2"	298-010	•298-019	298-030	298-039	•298-049
1-3/4"	•298-011	•298-020	•298-032	•298-040	—
2"	298-012	298-021	298-033	298-041	298-051
2-1/2"	—	298-022	298-034	298-043	298-053
3"	—	—	•298-035	•298-045	298-054



• Not available plated



### MACHINERY BUSHINGS

- Used on agricultural implements such as Road Machinery, Mine and Mill equipment, Cars, Trucks and Tractors
- 25 pcs. per package

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

(L) 18 gauge — 0.050"

(M) 14 gauge — 0.083"

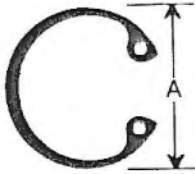
(H) 10 gauge — 0.134"

# Special Fasteners

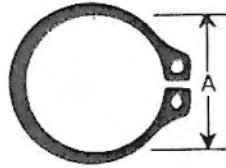


## SNAP RINGS (RETAINING RINGS)

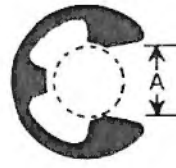
- Manufactured from high carbon S.A.E. 1060-1090 Steel and heat treated for resiliency and maximum performance.
- Used as retainers on automotive, agricultural industrial appliance and heavy duty equipment.



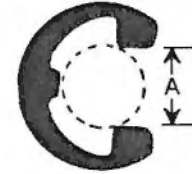
**1300 SERIES  
INTERNAL**



**1400 SERIES  
EXTERNAL**



**1500 SERIES  
EXTERNAL**



**1540 SERIES  
EXTERNAL**

	Part No.	Ring Size	Free Dia. 'A'		Part No.	Ring Size	Free Dia. 'A'
1300-25	482-025	1/4	.280	1400-68	482-368	11/16	.635
1300-31	482-031	5/16	.346	1400-75	482-375	3/4	.693
1300-37	482-037	3/8	.415	1400-81	482-381	13/16	.751
1300-43	482-043	7/16	.482	1400-87	482-387	7/8	.810
1300-50	482-050	1/2	.548	1400-93	482-393	15/16	.867
1300-56	482-056	9/16	.620	1400-100	482-400	1	.925
1300-62	482-062	5/8	.694	1400-112	482-412	1- 1/8	1.041
1300-68	482-068	11/16	.763	1400-125	482-425	1- 1/4	1.156
1300-75	482-075	3/4	.831	1400-131	482-431	1- 5/16	1.214
1300-81	482-081	13/16	.901	1400-137	482-437	1- 3/8	1.272
1300-87	482-087	7/8	.971	1400-150	482-450	1- 1/2	1.387
1300-93	482-093	15/16	1.041	1400-175	482-475	1- 3/4	1.618
1300-100	482-100	1	1.111	1400-200	482-500	2	1.850
1300-106	482-106	1-1/16	1.180				
1300-112	482-112	1-1/8	1.249	1500-12	482-612	1/8	.094
1300-125	482-125	1-1/4	1.388	1500-15	482-615	5/32	.114
1300-131	482-131	1-5/16	1.456	1500-X18	482-618	3/16	.122
1300-137	482-137	1-3/8	1.526	1500-18	482-619	3/16	.145
1300-150	482-150	1-1/2	1.660	1500-25	482-625	1/4	.207
1300-175	482-175	1-3/4	1.942	1500-X31	482-631	5/16	.243
1300-200	482-200	2	2.210	1500-37	482-637	3/8	.300
				1500-43	482-643	7/16	.337
1400-25	482-325	1/4	.225	1500-50	482-650	1/2	.392
1400-31	482-331	5/16	.281				
1400-37	482-337	3/8	.338	1540-15	482-715	5/32	.113
1400-43	482-343	7/16	.395	1540-18	482-718	3/16	.143
1400-50	482-350	1/2	.461	1540-25	482-725	1/4	.204
1400-56	482-356	9/16	.521	1540-31	482-731	5/16	.242
1400-62	482-362	5/8	.579	1540-37	482-737	3/8	.292
				1540-56	482-756	1/2	.385

SEE NEXT PAGE FOR ACTUAL SIZE ILLUSTRATIONS

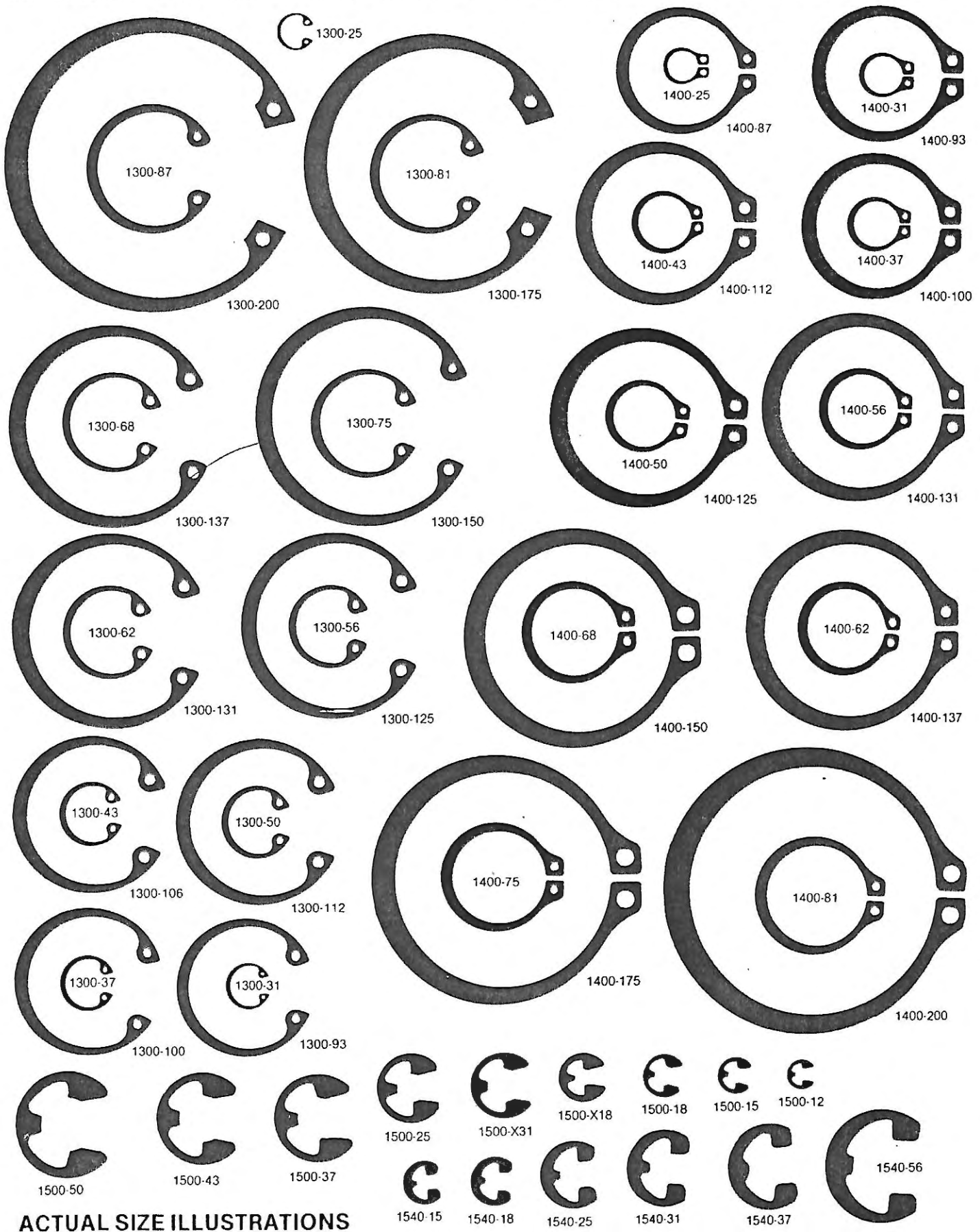


### SNAP RING ASSORTMENT

- Contains 480 Rings
- 34 Popular Sizes
- Packed in Metal Drawer
- Easy Identification Label in Lid
- 561A Pliers Included

SRA-34

Part No.  
**482-834**



ACTUAL SIZE ILLUSTRATIONS

## GREASE FITTINGS

- Extra strength, made of top quality steel, case hardened and plated to resist corrosion and fitted with surface ball check.
- Conforms to S.A.E. and military standard specifications.

### STANDARD PACKAGES OF 25

	Part Number	Size & Description	Illustration		Part Number	Size & Description	Illustration
GF 610	506-610	1/8" Pipe Thread, Long Straight Type with Ball Check		GF 636	506-636	1/4"-28 Taper Thread, 45° Angle Long Type with Ball Check	
GF 611	506-611	1/8" Pipe Thread, 30° Angle Type with Ball Check		GF-637	506-637	1/4"-28 Taper Thread, 45° Angle Short Type with Ball Check	
GF 612	506-612	1/8" Pipe Thread, 67-1/2° Angle Type with Ball Check		GF 911	506-911	1/4"-28 Taper Thread, 90° Angle Short Type with Ball Check	
GF 613	506-613	1/8" Pipe Thread, 90° Angle Type with Ball Check		GF 641	506-641	1/4"-28" Thread, Very Short Straight with Ball Check	
GF 627	506-627	1/4" Pipe Thread, Straight Type with Ball Check		GF 652	506-652	1/4"-28 Taper Thread, Long Straight Type with Ball Check	
GF 629	506-629	1/4" Pipe Thread, 67-1/2° Angle Type with Ball Check		GF 688	506-688	1/8" Pipe Thread, 45° Angle Short Type with Ball Check	
				GF 711	506-711	5/16"-24 Straight Type with Ball Check	
				GF 710	506-710	3/8"-24 Straight Type with Ball Check	

## DRIVE FIT GREASE FITTINGS



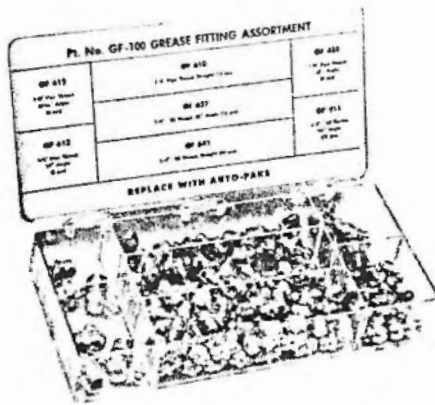
- For medium pressure applications

**Note:** Angle type drive fit nipples are not recommended since the sideways forces involved in coupling/uncoupling the grease gun will cause nipple to become dislodged.

	Part No.	Description	Illustration
GF 1728	506-991	3/16" drive with check valve	
GF 1743	506-992	1/4" drive with check valve	
GF 1608	506-993	5/16" drive with check valve	

## METRIC GREASE FITTINGS

# Automotive Replacement



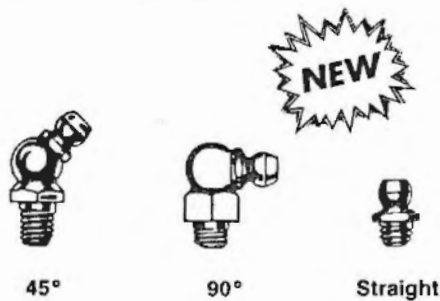
## GREASE FITTING ASSORTMENT

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

Part No.  
GF 100 506-100

### CONTENTS OF ASSORTMENT

	Part Number	Quantity
GF 612	506-612	3
GF 613	506-613	3
GF 637	506-637	15
GF 641	506-641	50
GF 688	506-688	4
GF 911	506-911	10
GF 610	506-610	15



## METRIC GREASE FITTINGS

Size	45°		90°		Straight	
		Part Number		Part Number		Part Number
6 mm×1	GF 7045	506-745	GF 7090	506-790	GF 8701	506-871
8 mm×1	GF 7445	506-845	GF 7490	506-890	GF 8901	506-891
10 mm×1	GF 9345	506-945	GF 9390	506-990	GF 9301	506-931

## METRIC GREASE FITTING ASSORTMENT

- Contains 100 metric grease fittings in compartmentized box.

Part No.  
GFM 100 506-101



### CONTENTS OF ASSORTMENT

	Part Number	Quantity
GF 8701	506-871	50
GF 7045	506-745	25
GF 7090	506-790	25

**UNIVERSAL O-RINGS****MADE FROM A SPECIAL NITRILE COMPOUND — BUNA-N RUBBER**

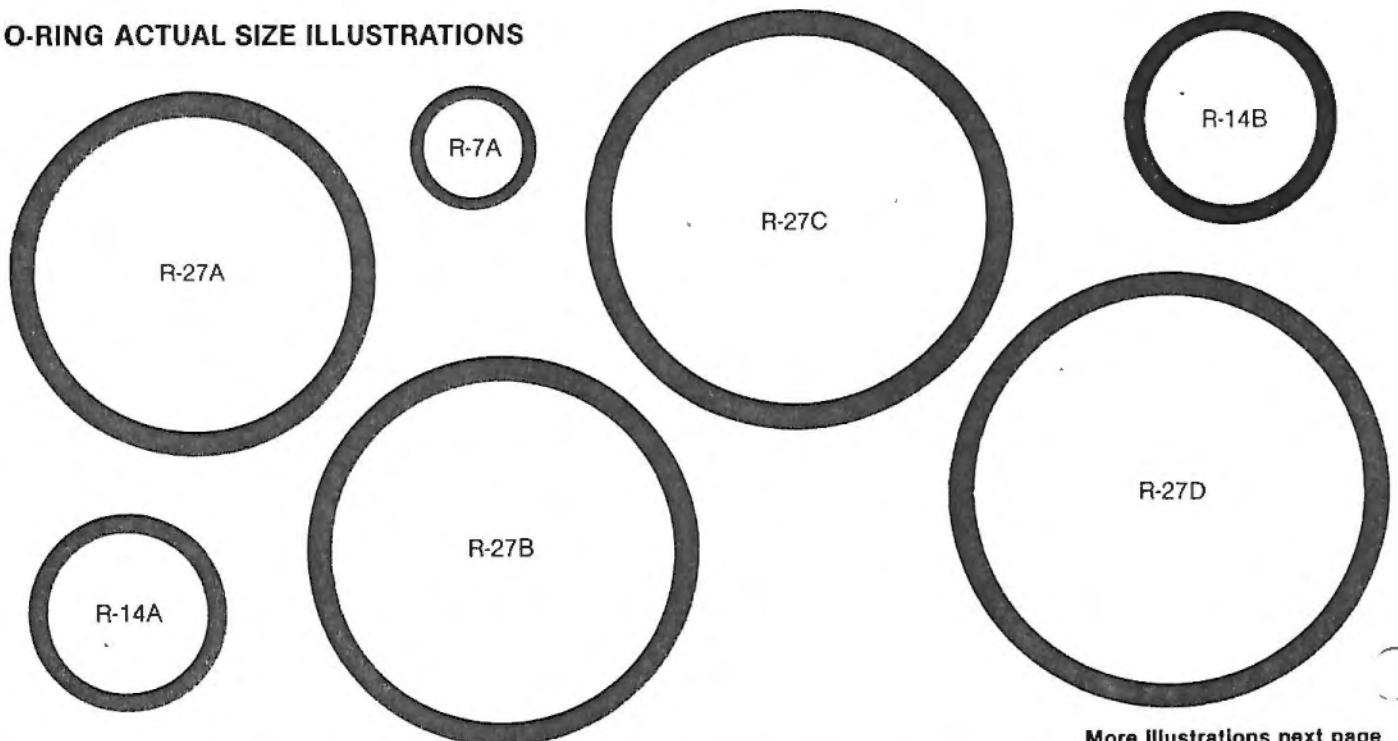
- DOCAP Universal O-Rings are made from a special nitrile compound — Buna-N Rubber especially for use in automotive, agricultural, and, industrial equipment maintenance where petroleum oils, greases, automotive gasoline, alcohols, glycols, fuel oil, propane, and many other fluids are encountered.

**Assembly Instructions:**

1. Make sure all parts are perfectly clean.
2. Lubricate O-Ring.
3. For external groove — Stretch Ring over shaft.
4. For internal groove — fold Ring into groove.
5. Avoid excessive twisting.

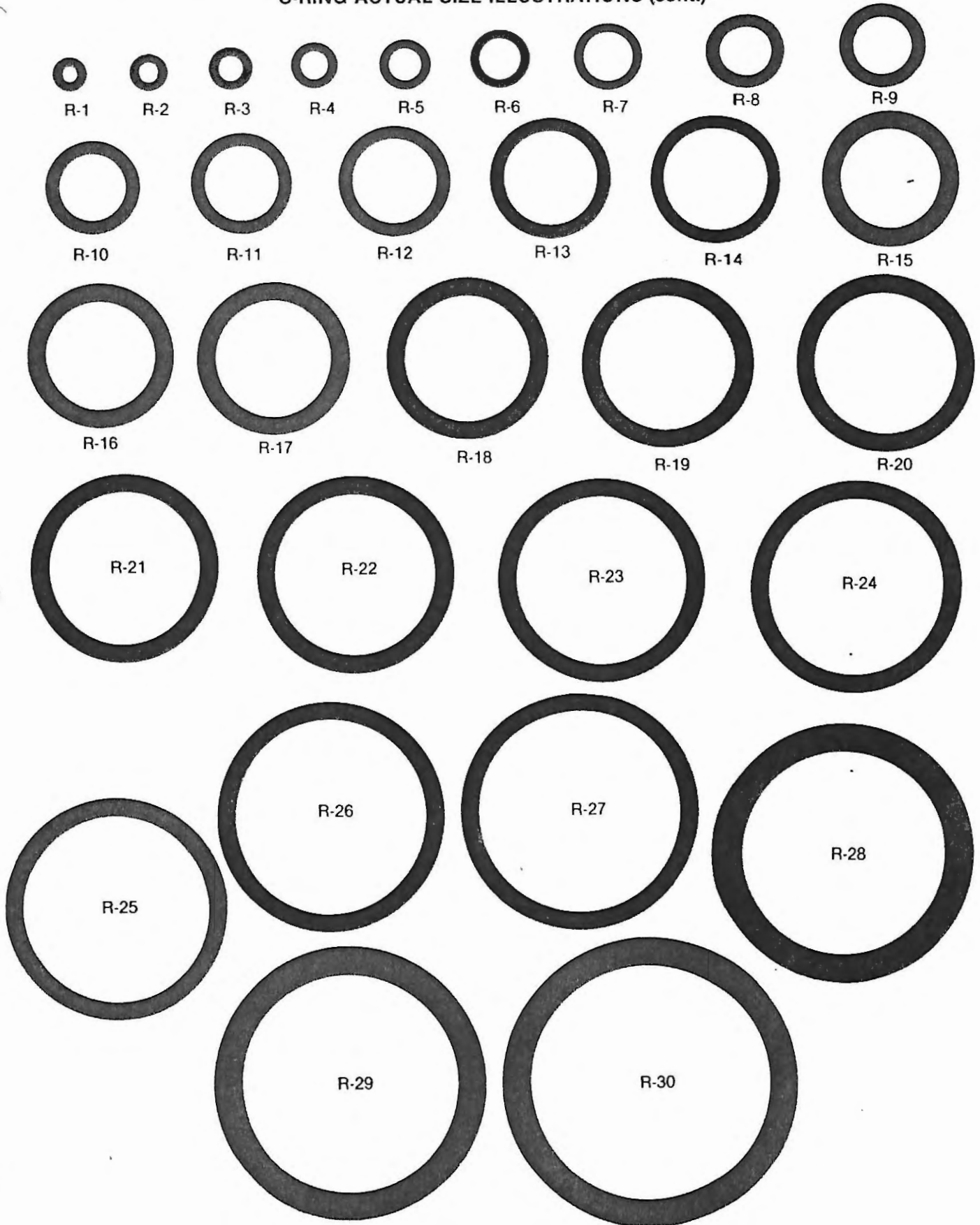
**STANDARD PACKAGE — 25 PIECES**

	Part No.	Nominal Size				Part No.	Nominal Size		
		I.D.	O.D.	Section			I.D.	O.D.	Section
R-1	519-001	1/8	1/4	1/16	R-20	519-020	1-1/16	1-5/16	1/8
R-2	519-002	5/32	9/32	1/16	R-21	519-021	1-1/8	1-3/8	1/8
R-3	519-003	3/16	5/16	1/16	R-22	519-022	1-3/16	1-7/16	1/8
R-4	519-004	7/32	11/32	1/16	R-23	519-023	1-1/4	1-1/2	1/8
R-5	519-005	1/4	3/8	1/16	R-24	519-024	1-5/16	1-9/16	1/8
R-6	519-006	5/16	7/16	1/16	R-25	519-025	1-3/8	1-5/8	1/8
R-7	519-007	3/8	1/2	1/16	R-26	519-026	1-7/16	1-11/16	1/8
R-8	519-008	3/8	9/16	3/32	R-27	519-027	1-1/2	1-3/4	1/8
R-9	519-009	7/16	5/8	3/32	R-28	519-028	1-1/2	1-7/8	3/16
R-10	519-010	1/2	11/16	3/32	R-29	519-029	1-5/8	2	3/16
R-11	519-011	9/16	3/4	3/32	R-30	519-030	1-3/4	2-1/8	3/16
R-12	519-012	5/8	13/16	3/32	R-7A	519-070	1/2	5/8	1/16
R-13	519-013	11/16	7/8	3/32	R-14A	519-140	13/16	1	3/32
R-14	519-014	3/4	15/16	3/32	R-14B	519-141	7/8	1-1/16	3/32
R-15	519-015	3/4	1	1/8	R-27A	519-270	1-5/8	1-7/8	1/8
R-16	519-016	13/16	1-1/16	1/8	R-27B	519-271	1-3/4	2	1/8
R-17	519-017	7/8	1-1/8	1/8	R-27C	519-272	1-7/8	2-1/8	1/8
R-18	519-018	15/16	1-3/16	1/8	R-27D	519-273	2	2-1/4	1/8
R-19	519-019	1	1-1/4	1/8					

**O-RING ACTUAL SIZE ILLUSTRATIONS**

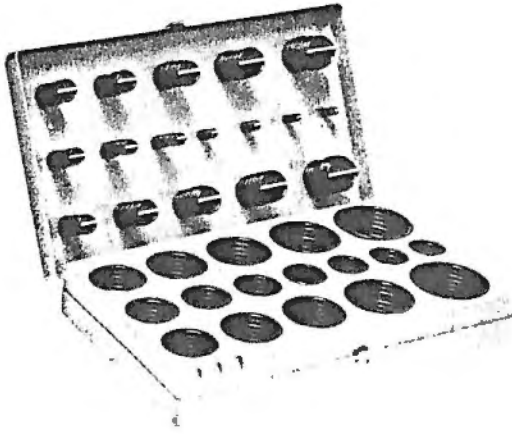
More illustrations next page

## O-RING ACTUAL SIZE ILLUSTRATIONS (cont.)



**DOCAP****Automotive Replacement****"O"-RING ASSORTMENT**

- Contains 407 pieces
- 32 Popular Sizes
- Packed in Durable Plastic Box
- Sizes listed on cover

**CONTENTS OF ASSORTMENT**
 Part/Computer No.  
 519-382 Imperial

	Part No.	Quantity		Part No.	Quantity
R-1	519-001	20	R-16	519-016	10
R-3	519-003	20	R-17	519-017	10
R-5	519-005	20	R-18	519-018	10
R-6	519-006	20	R-19	519-019	10
R-7	519-007	20	R-20	519-020	10
R-7A	519-070	20	R-21	519-021	10
R-8	519-008	13	R-22	519-022	10
R-9	519-009	13	R-23	519-023	10
R-10	519-010	13	R-24	519-024	10
R-11	519-011	13	R-25	519-025	10
R-12	519-012	13	R-26	519-026	10
R-13	519-013	13	R-27	519-027	10
R-14	519-014	13	R-27A	519-270	10
R-14A	519-140	13	R-27B	519-271	10
R-14B	519-141	13	R-27C	519-272	10
R-15	519-015	10	R-27C	519-273	10

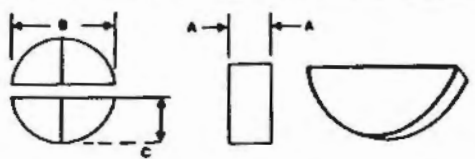




# Industrial Fasteners

## STEEL WOODRUFF KEYS

- S.A.E. 1035 Carbon Steel
- Tensile Strength of 165,000 p.s.i.
- Package Quantity = 25



Product Code		Dimensions			Product Code		Dimensions		
		A	B	C			A	B	C
201	346-201	1/16	1/4	.117	D	346-904	5/16	1.1/4	.537
206	346-206	1/16	5/16	.140	E	346-905	3/8	1.1/4	.537
207	346-207	3/32	5/16	.140	22	346-022	1/4	1.3/8	.584
211	346-211	1/16	3/8	.172	23	346-023	5/16	1.3/8	.584
212	346-212	3/32	3/8	.172	F	346-906	3/8	1.3/8	.584
213	346-213	1/8	3/8	.172	24	346-024	1/4	1.1/2	.631
1	346-001	1/16	1/2	.194	25	346-025	5/16	1.1/2	.631
2	346-002	3/32	1/2	.194	G	346-907	3/8	1.1/2	.631
3	346-003	1/8	1/2	.194	126	346-126	3/16	2.1/8	.396
4	346-004	3/32	5/8	.240	127	346-127	1/4	2.1/8	.396
5	346-005	1/8	5/8	.240	128	346-128	5/16	2.1/8	.396
6	346-006	5/32	5/8	.240	129	346-129	3/8	2.1/8	.396
61	346-061	3/16	5/8	.240	26	346-026	3/16	2.1/8	.521
7	346-007	1/8	3/4	.303	27	346-027	1/4	2.1/8	.521
8	346-008	5/32	3/4	.303	28	346-028	5/16	2.1/8	.521
9	346-009	3/16	3/4	.303	29	346-029	3/8	2.1/8	.521
91	346-091	1/4	3/4	.303	RX	346-913	1/4	2.3/4	.594
10	346-010	5/32	7/8	.365	SX	346-914	5/16	2.3/4	.594
11	346-011	3/16	7/8	.365	TX	346-915	3/8	2.3/4	.594
12	346-012	7/32	7/8	.365	UX	346-916	7/16	2.3/4	.594
A	346-901	1/4	7/8	.365	VX	346-917	1/2	2.3/4	.594
13	346-013	3/16	1	.428	R	346-908	1/4	2.3/4	.750
14	346-014	7/32	1	.428	S	346-909	5/16	2.3/4	.750
15	346-015	1/4	1	.428	T	346-910	3/8	2.3/4	.750
B	346-902	5/16	1	.428	U	346-911	7/16	2.3/4	.750
152	346-152	3/8	1	.428	V	346-912	1/2	2.3/4	.750
16	346-016	3/16	1.1/8	.475	30	346-030	3/8	3.1/2	.938
17	346-017	7/32	1.1/8	.475	31	346-031	7/16	3.1/2	.938
18	346-018	1/4	1.1/8	.475	32	346-032	1/2	3.1/2	.938
C	346-903	5/16	1.1/8	.475	33	346-033	9/16	3.1/2	.938
19	346-019	3/16	1.1/4	.537	34	346-034	5/8	3.1/2	.938
20	346-020	7/32	1.1/4	.537	35	346-035	11/16	3.1/2	.938
21	346-021	1/4	1.1/4	.537	36	346-036	3/4	3.1/2	.938

## KEY STOCK

- 12" Length Square Bar
- Cold Drawn Steel AISI-C-1018
- Hardness 140/188 Grinnell
- Yield Strength 43,000/55,000 PSI
- Tensile Strength 70,000/85,000 PSI



Size	Packaged Quantity	Product Code		Size	Packaged Quantity	Product Code	
1/8	6	457-006	KS22	1/2	6	457-013	KS88
3/16	6	457-007	KS33	9/16	6	457-014	KS99
1/4	6	457-009	KS44	5/8	6	457-015	KS110
5/16	6	457-010	KS55	3/4	6	457-016	KS112
3/8	6	457-011	KS66	7/8	6	457-017	KS114
7/16	6	457-012	KS77	1	6	457-018	KS116

**DOCAP**

# Industrial Fasteners

## SPRING PINS - SLOTTED

- High Carbon Steel (1070 - 1095)      Package Quantity = 50
- Chamfered ends simplify insertion
- Spring Action Locks Each Pin Tightly, Easily removed with a punch
- Conform to MIL-P-10971, MS171401 to MS171900, MS9047-48, MS16562, NAS 561 and SAE Std J496



Nominal Diameter X Length	Product Code		Nominal Diameter X Length	Product Code	
* 1/16x3/16	476-001	SP1	* 3/16x1.3/4	476-045	SP45
* 1/16x5/16	476-002	SP2	* 3/16x2	476-046	SP46
* 1/16x1/2	476-003	SP3	* 3/16x2.1/4	476-047	SP47
* 1/16x5/8	476-004	SP4	* 7/32x5/8	476-048	SP48
* 1/16x3/4	476-005	SP5	* 7/32x1.1/4	476-049	SP49
* 1/16x7/8	476-006	SP6	* 7/32x1.3/8	476-050	SP50
* 1/16x1	476-007	SP7	* 7/32x1.1/2	476-051	SP51
* 5/64x1/4	476-008	SP8	* 7/32x1.3/4	476-052	SP52
* 5/64x1/2	476-009	SP9	* 1/4 x5/8	476-053	SP53
* 5/64x9/16	476-010	SP10	* 1/4 x3/4	476-054	SP54
* 5/64x3/4	476-011	SP11	* 1/4 x7/8	476-055	SP55
* 5/64x1	476-012	SP12	* + 1/4 x1	476-056	SP56
* 5/64x1.1/4	476-013	SP13	* 1/4 x1.1/4	476-057	SP57
* 5/64x1.1/2	476-014	SP14	* + 1/4 x1.1/2	476-058	SP58
* 3/32x5/16	476-015	SP15	* 1/4 x1.3/4	476-059	SP59
* + 3/32x1/2	476-016	SP16	* 1/4 x2	476-060	SP60
* 3/32x5/8	476-017	SP17	* 1/4 x2.1/4	476-061	SP61
* + 3/32x3/4	476-018	SP18	* 1/4 x2.1/2	476-062	SP62
* 3/32x7/8	476-019	SP19	* 5/16x3/4	476-063	SP63
* + 3/32x1	476-020	SP20	* 5/16x7/8	476-064	SP64
* 3/32x1.1/4	476-021	SP21	* + 5/16x1	476-065	SP65
* 3/32x1.1/2	476-022	SP22	* + 5/16x1.1/2	476-066	SP66
* 1/8 x3/8	476-023	SP23	* 5/16x1.3/4	476-067	SP67
* + 1/8 x1/2	476-024	SP24	* 5/16x2	476-068	SP68
* 1/8 x5/8	476-025	SP25	* 5/16x2.1/2	476-069	SP69
* 1/8 x3/4	476-026	SP26	* 3/8 x3/4	476-070	SP70
* 1/8 x7/8	476-027	SP27	* 3/8 x1	476-071	SP71
* + 1/8 x1	476-028	SP28	* 3/8 x1.1/2	476-072	SP72
* 1/8 x1.1/4	476-029	SP29	* 3/8 x2	476-073	SP73
* 1/8 x1.1/2	476-030	SP30	* 3/8 x2.1/2	476-074	SP74
* 1/8 x1.3/4	476-031	SP31	* 3/8 x3	476-075	SP75
* 1/8 x2	476-032	SP32	* 7/16x1	476-076	SP76
* 5/32x1/2	476-033	SP33	* 7/16x1.1/4	476-077	SP77
* 5/32x5/8	476-034	SP34	* 7/16x1.1/2	476-078	SP78
* + 5/32x3/4	476-035	SP35	* 7/16x2	476-079	SP79
* + 5/32x1	476-036	SP36	* 7/16x2.1/2	476-080	SP80
* 5/32x1.1/4	476-037	SP37	* 7/16x3	476-081	SP81
* + 5/32x1.1/2	476-038	SP38	* 1/2 x1.1/4	476-082	SP82
* 3/16x1/2	476-039	SP39	* 1/2 x1.1/2	476-083	SP83
* 3/16x5/8	476-040	SP40	* 1/2 x1.3/4	476-084	SP84
* + 3/16x3/4	476-041	SP41	* 1/2 x2	476-085	SP85
* + 3/16x1	476-042	SP42	* 1/2 x2.1/2	476-086	SP86
* + 3/16x1.1/4	476-043	SP43	* 1/2 x3	476-087	SP87
* 3/16x1.1/2	476-044	SP44			

**PLATED-INTERNAL HITCH PINS (HAIR PIN) CLIPS**  
MADE FROM OIL TEMPERED SPRING WIRE FOR AGRICULTURAL IMPLEMENTS

SHOWN ACTUAL SIZE

