

## Part 3 Rings & Pins

**3.1** **Pins\***

**3.2** **Keys & Key Stock**

**3.3** **Snap & Retaining Rings**

**3.4** **O-Rings**

\*Includes "Rue Rings."

# 3.1 PINS

## Cotter Pins

Assortment Avail.

	95402	
	95409	
	96409	

- Features
- Chisel point ends for easy installation.
- Extended prongs simplify securing in place.
- Zinc plated steel for strength and corrosion resistance.
- Ideal for all retaining applications requiring cotter pin type fasteners



Length	1/32	Qty	3/64	Qty	1/16	Qty	5/64	Qty	3/32	Qty	7/64	Qty	1/8	Qty
1/2"	36000	100	36012	100	36024	100	36038	100	36048	100	-	-	36074	100
3/4"	36002	100	36014	100	36026	100	36040	100	36050	100	36064	100	36076	100
1"	36004	100	36016	100	36028	100	36042	100	36052	100	36066	100	36078	100
1-1/4"	-	-	-	-	36030	100	-	-	36054	100	36068	100	36080	100
1-1/2"	36006	100	36018	100	36032	50	36044	100	36056	100	36070	50	36082	50
1-3/4"	-	-	-	-	36034	50	-	-	36055	50	-	-	36084	50
2"	-	-	-	-	36036	50	36046	100	36058	50	36072	50	36086	50
2-1/2"	-	-	-	-	-	-	-	-	-	-	-	-	36088	50
3"	-	-	-	-	-	-	-	-	36060	50	-	-	36090	50

Length	9/64	Qty	5/32	Qty	3/16	Qty	7/32	Qty	1/4	Qty	5/16	Qty	3/8	Qty
3/4"	-		36100	50	36122	50	-	-	-	-	-		-	
1"	36094	100	36102	50	36124	50	-	-	36152	25	-		-	
1-1/4"	-		36104	50	36126	50	-	-	36154	25	-		-	
1-1/2"	36096	100	36106	50	36128	50	-	-	36156	10	-		-	
1-3/4"	-		36108	50	36130	50	-	-	-	-	-		-	
2"	36098	50	36110	50	36132	25	36142	10	36158	10	36174	5	36188	10
2-1/2"	-		36112	50	36134	25	36144	10	36160	10	36176	5	36190	5
3"	-		36114	50	36136	10	36146	10	36162	10	36178	5	36192	5
3-1/2"	-		-		36138	10	36148	10	36164	10	36180	5	36194	5
4"	-		-		36140	10	36150	10	36166	10	36182	5	36196	5
5"	-		-		-	-	-	-	36168	5	36184	5	36198	5
6"	-		-		-	-	-	-	36170	5	36186	10	36200	5

Length	7/16	Qty	1/2	Qty
2"	-	-	36214	5
2-1/2"	36202	5	36216	5
3"	36204	5	36218	5
3-1/2"	36206	5	36220	5
4"	36208	5	36222	5
5"	36210	5	36224	5
6"	36212	5	36226	5

# 3.1 PINS

## Stainless Steel Cotter Pins

Assortment Avail.

95402-SS								

### Features

- Chisel point ends for easy installation.
- Extended prongs simplify securing in place.
- Stainless steel for corrosion resistance.
- Ideal for all retaining applications requiring cotter pin type fasteners.



Length	1/16	Qty	3/32	Qty	1/8	Qty	5/32	Qty
1"	36028-SS	100	36052-SS	100	36078-SS	100	36102-SS	50
1-1/2"	36032-SS	50	36056-SS	100	36082-SS	50	36106-SS	50
2"	36036-SS	50	36058-SS	50	36086-SS	50	36110-SS	25
3"	-	-	-	-	36090-SS		36114-SS	25

Length	3/16	Qty	1/4	Qty	5/16	Qty	3/8	Qty
1"	36124-SS	25	-		-		-	
1-1/2"	36128-SS	25	36156-SS	10	-		-	
2"	36132-SS	25	36158-SS	10	36174-SS	5	36188-SS	5
3"	36136-SS	10	36162-SS	10	-		36192-SS	5

# 3.1 PINS

## Roll Pins

Assortment Avail.

										95413			



### Features

- Carbon spring steel construction for superior strength and durability.
- Zinc plated for rust and corrosion resistance.
- Ideal for all applications in machinery and equipment requiring fast and easy installation of retaining pins.

Length	1/16	Qty	5/64	Qty	3/32	Qty	1/8	Qty	5/32	Qty	3/16	Qty
1/4"	36240	50	36258	50	–	50	–		–	–	–	–
3/8"	36242	50	–	–	36276	50	36294	50	–	–	–	–
1/2"	36244	50	36260	50	36278	50	–	25	36312		36330	25
5/8"	–	–	–	–	36280	50	–	25	–	–	36332	25
3/4"	36246	50	36262	50	36282	50	36296	25	36314	25	36334	25
1"	36248	50	36264	50	36284	50	36298	25	36316	25	36336	25
1-1/4"	–	–	–	–	36286	50	36300	25	36318	25	36338	25
1-1/2"	–	–	36266	50	36288	25	36302	25	36320	25	36342	25
1-3/4"	–	–	–	–	–	–	36304	25	–	–	–	–
2"	–	–	–	–	–	–	36306	25	36322	25	36344	25

Length	7/32	Qty	1/4	Qty	5/16	Qty	3/8	1/2	Qty
3/4"	36348	25	36366	25	36386	25	36402	–	5
1"	36350	25	36368	10	36388	25	36404	–	5
1-1/4"	36352	10	36370	10	36390	5	36406	–	5
1-1/2"	36354	5	36372	5	36392	5	36408	36420	5
1-3/4"	36356	5	36374	5	36394	5	36410	36422	5
2"	36358	5	36376	5	36396	5	36412	36424	5
2-1/4"	–	–	36378	5	–	–	36414	–	–
2-1/2"	–	–	36380	5	–	–	36416	36426	5
3"	–	–	36382	5	–	–	–	36428	5

# 3.1 PINS

## Coiled Spring Pins

*"Spirol" Pins*

Assortment Avail.

		95418			



### Features

- The only spring pin with uniform flexibility after insertion and one where the direction of the applied load is immaterial.
- Designed to overcome the disadvantages of solid & slotted pins.
- Standard duty carbon steel coiled spring pins.
- Heat treated to RC 46-53.
- Plain finish
- Ideal for use as hinge pins.
- Can be used in all steels as well as softer materials such as aluminum, plastic, etc.

No.	Size	Qty
36440	1/16 x 1/4	25
36442	1/16 x 1/2	25
36444	1/16 x 3/4	25
36452	5/64 x 3/8	25
36454	5/64 x 1/2	25
36456	5/64 x 3/4	25
36464	3/32 x 3/8	25
36466	3/32 x 3/4	25
36468	3/32 x 1	25
36476	1/8 x 3/8	25
36478	1/8 x 1	25
36480	1/8 x 1-1/4	25

No.	Size	Qty
36500	3/16 x 5/8	25
36502	3/16 x 1	10
36504	3/16 x 2	10
36512	7/32 x 3/4	10
36514	7/32 x 1-1/2	10
36516	7/32 x 1-3/4	5
36524	1/4 x 1	10
36526	1/4 x 1-1/4	5
36528	1/4 x 2	5
36530	1/4 x 3	5

# 3.1 PINS

## Clevis Pins

### Features

- For temporary or permanent fastening of all kinds
- Universal pins have a series of holes which make them adaptable to varying lengths.
- Excess length may be trimmed if desired.
- Manufactured with 1010, 1018 and 1022 spring steel for strength and durability.
- Use with standard hair pin cotters



Assortment Avail.

		95404		

### Standard Clevis Pins

No.	Size	Qty	No.	Size	Qty
36572	7/16 x 3	10	36636	3/8 x 2-1/2	10
36588	3/16 x 3/4	10	<b>366361</b>	3/8 x 3	10
36590	3/16 x 1/4	10	<b>366364</b>	3/8 x 4	10
365901	3/16 x 1-1/4	<b>10</b>	36638	7/16 x 1	10
36592	3/16 x 1-1/2	10	36640	7/16 x 1-1/4	10
36594	3/16 x 1-3/4	10	36642	7/16 x 1-1/2	10
<b>365999</b>	1/4 x 1/2	10	36644	7/16 x 1-3/4	10
36600	1/4 x 3/4	10	36646	7/16 x 2	10
36602	1/4 x 1	10	<b>366470</b>	7/16 x 2-1/4	10
36604	1/4 x 1-1/8	10	36648	7/16 x 4	10
36606	1/4 x 1-1/4	10	36650	1/2 x 1	10
36608	1/4 x 1-1/2	10	36652	1/2 x 1-1/4	10
<b>366082</b>	1/4 x 2	10	36654	1/2 x 1-3/8	10
<b>366084</b>	1/4 x 2-1/2	10	36656	1/2 x 1-1/2	10
<b>366110</b>	5/16 x 3/4	10	36658	1/2 x 1-3/4	10
36612	5/16 x 1	10	36660	1/2 x 2	10
36614	5/16 x 1-1/4	10	36662	1/2 x 2-1/2	10
36616	5/16 x 1-1/2	10	<b>366621</b>	1/2 x 3	10
36618	5/16 x 1-3/4	10	36664	1/2 x 4-1/2	10
36620	5/16 x 2	10	<b>366640</b>	9/16 x 3	10
<b>366210</b>	5/16 x 2-1/2	10	36666	5/8 x 1-1/2	5
36622	5/16 x 3	10	36668	5/8 x 1-3/4	5
<b>366221</b>	5/16 x 3-1/2	10	36670	5/8 x 2	5
36624	3/8 x 1	10	<b>366720</b>	3/4 x 2	5
36626	3/8 x 1-1/4	10	<b>366725</b>	3/4 x 3	5
36628	3/8 x 1-3/8	10	36678	3/4 x 4-1/2	5
36630	3/8 x 1-1/2	10	<b>366785</b>	3/4 x 5	5
36632	3/8 x 1-3/4	10	<b>366800</b>	3/4 x 6	5
36634	3/8 x 2	10	<b>366805</b>	7/8 x 3	5
366350	3/8 x 2-1/4	10			

### Universal Clevis Pins

No.	Size	Qty
36690	1/4 x 2	10
36695	5/16 x 2	10
<b>366960</b>	5/16 x 3	10
<b>366980</b>	3/8 x 1	10
36700	3/8 x 2	10
<b>367005</b>	3/8 x 3	10
36705	7/16 x 2	10
36707	7/16 x 2-1/2	10
<b>367080</b>	7/16 x 3	10
36710	1/2 x 2	5
36712	1/2 x 2-1/2	5
36714	1/2 x 3	5
367149	5/8 x 2	5
36715	5/8 x 3	5
367155	3/4 x 2	5
367160	3/4 x 3	5

## 3.1 PINS

### Stainless Steel Clevis Pins

#### Features

- Manufactured with 300 stainless steel for strength and durability.
- Use with stainless steel hair pin cotters.



Assortment Avail.

95404-SS					

#### Standard Clevis Pins - SS

No.	Size	Qty	No.	Size	Qty
36588-SS	3/16 x 3/4	20	36630-SS	3/8 x 1-1/2	4
36590-SS	3/16 x 1	20	36634-SS	3/8 x 2	4
36592-SS	3/16 x 1-1/2	15	36636-SS	3/8 x 2-1/2	3
36602-SS	1/4 x 1	10	36642-SS	7/16 x 1-1/2	3
36608-SS	1/4 x 1-1/2	10	36646-SS	7/16 x 2	2
36608-SS-G	1/4 x 1-1/2 Grooved	10	36656-SS	1/2 x 1-1/2	3
			36660-SS	1/2 x 2	2
36612-SS	5/16 x 1	5	36662-SS	1/2 x 2-1/2	2
36616-SS	5/16 x 1-1/2	5	36666-SS	5/8 x 1-1/2	1
36620-SS	5/16 x 2	4	36670-SS	5/8 x 2	1

#### Universal Clevis Pins - SS

No.	Size	Qty
36690-SS	1/4 x 2	4
36695-SS	5/16 x 2	2
36700-SS	3/8 x 2	2
36714-SS	1/2 x 3	1

# 3.1 PINS

## Hitch Pins (Hair Pin Cotter)

Assortment Avail.

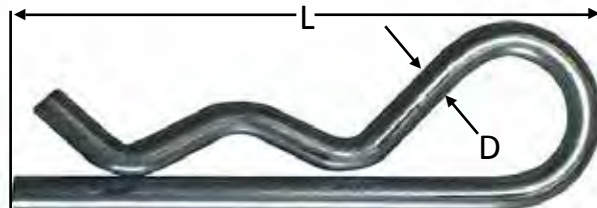
		95417		

### Features

- Reusable, strong, secure and convenient.
- Strong steel construction assures secure locking in place.
- Zinc plated steel for strength and corrosion resistance.
- Ideal where quick assembly and disassembly is required.



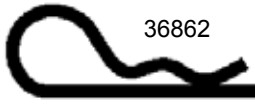
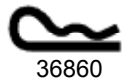
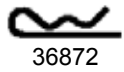
No.	Standard Industry No.	Wire Diameter (D)		Overall Length (L)	Minimum Shaft Diameter	Maximum Shaft Diameter	Pkg Qty
		Fractional	Decimal				
36872	#231	1/32	.028	9/16	1/8	5/32	50
36860	#221	3/64	.047	19/32	1/8	3/16	50
36862	#222	1/16	.062	1-5/16	1/4	1/2	50
36864	#225	5/64	.072	1-3/32	5/16	3/8	50
36848	#213	3/32	.080	1-3/16	1/4	3/8	50
36856	#217	3/32	.080	1-9/16	3/8	1/2	50
36834	#203	7/64	.093	1-5/8	1/4	1/2	25
36838	#207	3/32	.093	2-5/16	1/4	5/8	50
36868	#228	3/32	.093	2	3/8	1/2	15
36850	#214	3/32	.093	2-1/2	3/8	3/4	50
36852	#215	1/8	.125	1-9/16	1/2	3/4	15
36854	#216	1/8	.125	1-15/16	1/2	3/4	15
36846	#211	1/8	.125	2-9/16	7/16	3/4	15
36866	#227	1/8	.125	2-1/2	5/8	7/8	10
36832	#202	1/8	.125	3-1/8	3/4	1-1/8	15
36830	#201	5/32	.148	3	1/2 x 5/8	5/8 x 1	10
36842	#209	5/32	.148	3-5/16	3/4	1-1/8	10
36844	#210	5/32	.148	2-15/16	5/8	1	15
36870	#229	3/16	.177	3-1/2	3/4	1-1/16	5
36836	#206	3/16	.177	3-1/4	5/8	1	10
36840	#208	3/16	.177	3-3/4	7/8	1-1/4	10
36858	#219	1/4	.243	4	3/4	1	5
36874	#212	11/64	.162	3-7/16	1/2 x 1	7/8 x 1	10
36876	#220	5/16	.310	4-1/16	7/8	1	2



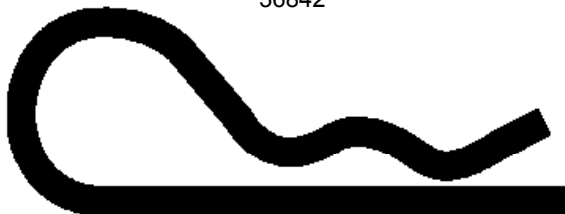


# 3.1 PINS

## Hitch Pin Sizing Chart



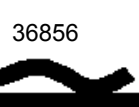
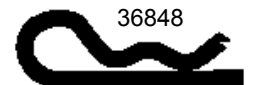
1/8 Clips



5/32 Clips



3/32 Clips



# 3.1 PINS

## Hitch Pin Sizing Chart continued



# 3.1 PINS

## Snapper Pins

*Quick Connect and Disconnect*

Assortment Avail.

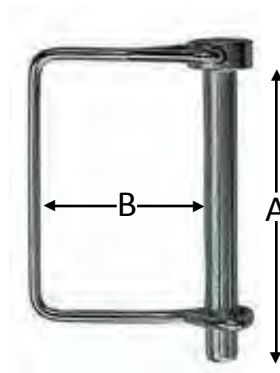
	95423			

### Features

- Retainer wire made from tempered M-B spring wire.
- Shank made from 1010 carbon steel.
- Entire unit is zinc plated.



No.	Shape	Pin Diameter	Shaft Length (A)	Clearance (B)	Pkg Qty
38190	Round	1/4	2	1-5/8	5
381902	Round	1/4	2-1/2	1-5/8	5
38191	Square	1/4	2-3/4	1-5/8	5
38192	Square	5/16	2-3/4	1-3/4	5
38196	Round	3/8	1-3/4	1-1/2	5
38198	Square	3/8	2-1/2	1-1/2	5
381980	Round	3/8	2-1/2	1-1/2	5



## Clinch Pins

### Features

- Large-headed cotter pin designed with one humped prong that automatically springs apart.
- Locks itself into place after insertion.
- Can be used with a front plow pin.



No.	Diameter	Length	Qty
38250	3/8	1-1/2	5

# 3.1 PINS

## Lynch Pins

Assortment Avail.	
95423	

### Features

- Forged to provide maximum strength.
- Zinc plated and dichromate dipped for corrosion resistance.
- Self-locking ring designed for security and easily removal.

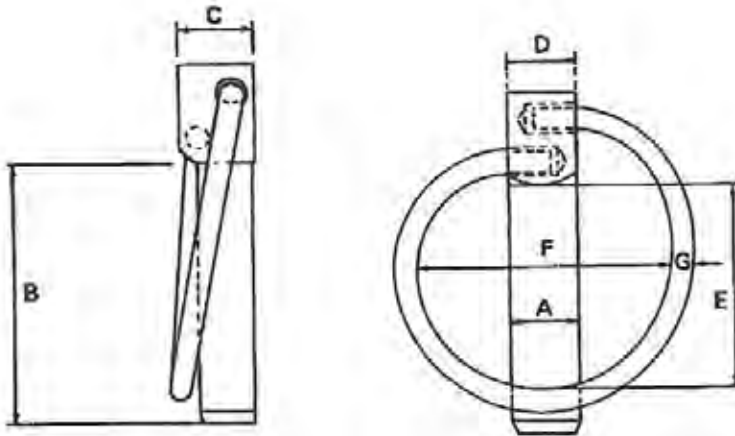
No.	Description	A	B	C	D	E	F	G	Qty
38210	Standard Pin	3/16	1-9/16	33/64	23/64	1-1/4	1-13/32	9/64	5
38212	Standard Pin	1/4	1-9/16	33/64	23/64	1-1/4	1-13/32	9/64	5
38214	Standard Pin	1/4	1-3/4	1/2	1/4	1-5/16	1-9/16	9/64	5
38216	Standard Pin	5/16	1-9/16	33/64	13/32	1-1/4	1-15/32	9/64	5
382161	Standard Pin	5/16	1-3/4	33/64	13/32	1-3/4	1-7/8	9/64	5
38218	Standard Pin	7/16	1-9/16	9/16	29/64	1-23/64	1-17/32	9/64	5
38230	Standard Pin H.D. Ring	7/16	1-9/16	9/16	29/64	1-23/64	1-43/64	0.18	5
38240	Standard Pin Chain & Cotter	7/16	1-9/16	9/16	29/64	1-23/64	1-17/32	9/64	5



P/N 38240



P/N 38210



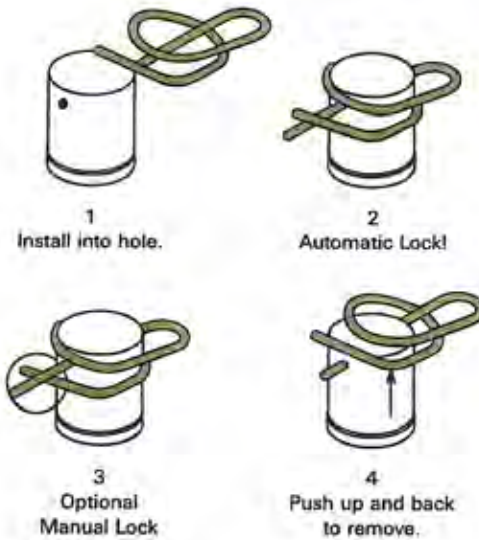
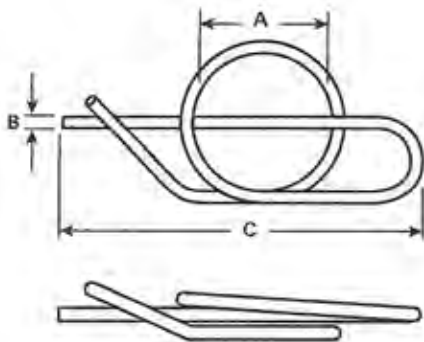
# 3.1 PINS

## Rue™ Rings

### Features

- Rue™ Rings will retro fit most standard applications without design changes.
- Best used on light to medium applications.
- Install fast without tools.
- A manual secondary lock tensions the Rue™ Ring tight and dampens vibration.
- Zinc plated.

No.	Size	Wire Dia.	Qty
38382	1/4	.041	15
38384	1/4 Heavy	.054	15
38340	5/16	.047	15
38346	3/8	.054	15
38352	1/2	.062	15
38354	1/2 Heavy	.072	15
38358	5/8	.072	15
38364	3/4	.080	15
38366	3/4 Heavy	.091	15
38370	7/8	.105	10
38376	1	.105	10



## 3.1 PINS

### Dowel Pins

#### Features

- Precision ground.
- Alloy steel.



No.	Diameter	Length	Qty
38290	1/8	3/4	25
38292	1/8	1	25
38298	3/16	3/4	25
38300	3/16	1	25
38302	3/16	1-1/2	25
38304	3/16	2	25
38306	1/4	1/2	25
38308	1/4	3/4	25
38310	1/4	1	25
38312	1/4	1-1/2	25
38314	1/4	2	25
38316	5/16	1	25
38324	3/8	3/4	15
38326	3/8	1	15
38328	3/8	1-1/2	15
38330	3/8	2	15
38332	1/2	2-1/2	10
38334	1/2	3	10

## 3.2 KEYS & KEY STOCK

### Woodruff Keys

Assortment Avail.

		95408		

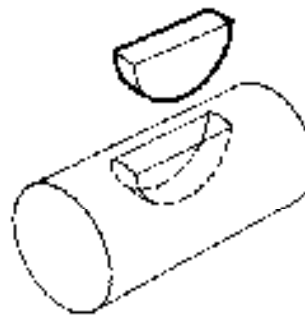
#### Features:

- Precision manufactured to the highest tolerances.
- Provides bearing surface through entire length of the shaft.
- Use to lock pulleys and gears to transmission shafts.

No.	Industry #	Size	Qty	No.	Industry #	Size	Qty
36730	#2	3/32 x 1/2	25	367590	#14	7/32 x 1	10
36732	#3	1/8 x 1/2	25	36760	#15	1/4 x 1	10
36734	#4	3/32 x 5/8	25	36762	B	5/16 x 1	10
36736	#5	1/8 x 5/8	25	36764	#152	3/8 x 1	10
36738	#6	5/32 x 5/8	25	36766	#16	3/16 x 1-1/8	10
36740	#61	3/16 x 5/8	25	367660	#17	7/32 x 1-1/8	10
36742	#7	1/8 x 3/4	25	36768	#18	1/4 x 1-1/8	10
36744	#8	5/32 x 3/4	25	36770	C	5/16 x 1-1/8	10
36746	#9	3/16 x 3/4	10	36772	#19	3/16 x 1-1/4	10
36748	#91	1/4 x 3/4	10	36774	#21	1/4 x 1-1/4	10
36750	#10	5/32 x 7/8	10	36776	#22	1/4 x 1-3/8	10
36752	#11	3/16 x 7/8	10	36778	#126	3/16 x 2-1/8	10
36754	#12	7/32 x 7/8	10	36780	D	5/16 x 1-1/4	10
36756	A	1/4 x 7/8	10	36782	E	3/8 x 1-1/4	10
36758	#13	3/16 x 1	10	36784	G	3/8 x 1-1/2	10

### Stainless Steel Woodruff Keys

No.	Industry #	Size	Qty
36730-SS	#2	3/32 x 1/2	25
36732-SS	#3	1/8 x 1/2	25
36736-SS	#5	1/8 x 5/8	25
36738-SS	#6	5/32 x 5/8	25
36740-SS	#61	3/16 x 5/8	25
36742-SS	#7	1/8 x 3/4	25
36744-SS	#8	5/32 x 3/4	25
36746-SS	#9	3/16 x 3/4	10
36748-SS	#91	1/4 x 3/4	10
36752-SS	#11	3/16 x 7/8	10
36756-SS	A	1/4 x 7/8	10
36760-SS	#15	1/4 x 1	10
36762-SS	B	5/16 x 1	10



## 3.2 KEYS & KEY STOCK

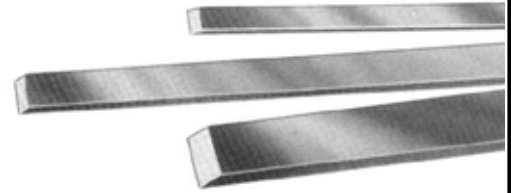
### Square Key Stock

Key stock sold in 12" lengths.

Assortment Avail.

95403
95403A

No.	Size	Qty	No.	Size	Qty
38090	3/32	1	38106	3/8	1
38092	1/8	1	38108	7/16	1
38094	5/32	1	38110	1/2	1
38096	3/16	1	38112	9/16	1
38098	7/32	1	38114	5/8	1
38100	1/4	1	38116	3/4	1
38102	9/32	1	38118	7/8	1
38104	5/16	1	38120	1	1



### Key Stock Assortment

#### Assortment No. 95401

11 Items • 21 Pieces

Arranged in a 12 Compartment

#### Wall-Mounted Rack

3 each of 1/8, 3/16 and 1/4

2 each of 5/16, 3/8, 7/16 and 1/2

1 each of 5/8, 3/4, 7/8 and 1



## 3.3 SNAP & RETAINING RINGS

### Internal Snap Rings

*Groove Required In Bore*

Assortment Avail.	
95422,	
95411 &	
97306	

#### Features

- Made of strong spring steel for durability
- Contacts grooved shaft along entire periphery, ensuring highest thrust load.
- Use for axial installation into machined grooves in mechanical parts.
- Serves as shoulders for retaining parts.



No	Housing Diameter	Groove Diameter	Groove Width	Pkg Qty
37200	1/4	.268	.02	25
37202	5/16	.330	.02	25
37204	3/8	.397	.029	25
37206	7/16	.461	.029	10
37208	1/2	.530	.039	10
37210	9/16	.596	.039	10
37212	5/8	.665	.039	10
37214	11/16	.732	.039	10
37216	3/4	.796	.039	10
37218	13/16	.862	.046	10
37220	7/8	.931	.046	10
37222	15/16	1.00	.046	10
37224	1	1.066	.046	10
37226	1-1/16	1.03	.056	10
37228	1-1/8	1.197	.056	10
37230	1-3/16	1.262	.056	10
37232	1-1/4	1.330	.056	10
37234	1-5/16	1.396	.056	10
37236	1-3/8	1.461	.056	10
37238	1-7/16	1.528	.056	10
37240	1-1/2	1.594	.056	10
37242	1-9/16	1.658	.068	10
37244	1-5/8	1.725	.068	10
37246	1-3/4	1.858	.068	5
<b>372480</b>	1-7/8	1.989	.068	10
<b>372500</b>	2	2.122	.068	10

## 3.3 SNAP & RETAINING RINGS

### External Snap Rings

*Groove Required On Shaft*

Assortment Avail.

95400, 95406, 95411, 97307
-------------------------------

#### Features

- Made of strong spring steel for durability.
- Contacts grooved shaft along entire periphery, ensuring highest thrust load.
- Use for axial installation into machined grooves in mechanical parts.
- Serves as shoulders for retaining parts.

No.	Shaft Diameter	Groove Diameter	Groove Width	Pkg Qty
36930	1/8	.117	.012	25
36932	1/4	.230	.029	25
36934	9/32	.260	.029	25
36936	5/16	.290	.029	25
36938	3/8	.352	.029	25
36940	7/16	.412	.029	25
36942	1/2	.468	.039	25
36944	9/16	.530	.039	25
36946	5/8	.588	.039	25
36948	11/16	.646	.046	25
36950	3/4	.704	.046	25
36952	25/32	.733	.046	25
36954	13/16	.762	.046	25
36956	7/8	.821	.046	25
36958	15/16	.882	.046	25
36960	63/64	.926	.046	10
36962	1	.940	.046	10
36964	1-1/16	.998	.056	10
36966	1-1/8	1.059	.056	10
36968	1-3/16	1.118	.056	10
36970	1-1/4	1.176	.056	10
36972	1-5/16	1.232	.056	10
36974	1-3/8	1.29	.056	10
36976	1-1/2	1.406	.056	5
36978	1-9/16	1.468	.068	5
36980	1-5/8	1.520	.068	5
36982	1-3/4	1.650	.068	5
36986	2	1.886	.068	5
36988	2-1/8	2.003	.086	2
36990	2-1/4	2.120	.086	5
36992	2-3/8	2.239	.103	1
36994	2-1/2	2.360	.086	5
36996	2-5/8	2.481	.086	2
36998	2-3/4	2.602	.103	2
37000	2-7/8	2.721	.103	
37002	3	2.838	.093	



# 3.3 SNAP & RETAINING RINGS

## "E" Type Retaining Rings

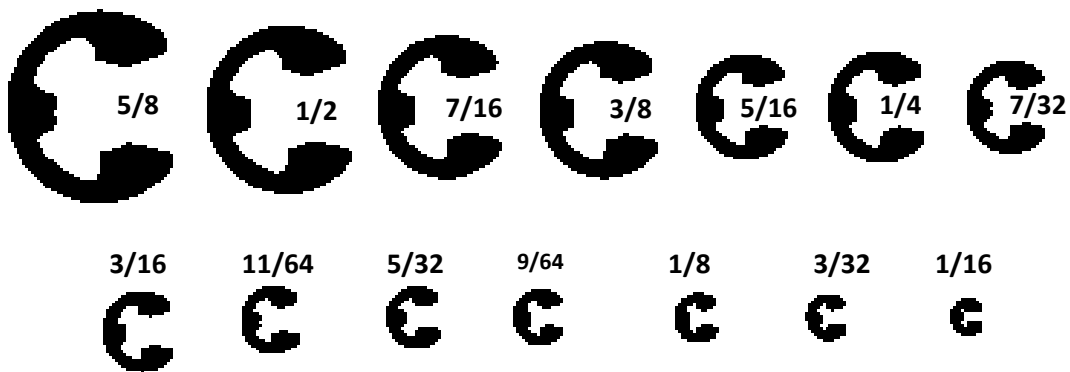
Assortment Avail.

		95414		

### Features

- Made of strong spring steel for durability.
- Contacts grooved shaft along three critical contact points, ensuring highest thrust load.
- Use for axial installation into machined grooves in mechanical parts.
- Serves as shoulders for retaining parts.

No.	Shaft Diameter	Groove Diameter	Groove Width	Pkg Qty
37080	1/16	.052	.012	25
37082	3/32	.074	.020	25
37084	1/8	.095	.020	25
37086	9/64	.102	.020	25
37088	5/32	.116	.029	25
37090	11/64	.127	.029	25
37092	3/16	.147	.029	25
37094	7/32	.188	.029	25
37096	1/4	.210	.029	25
37098	5/16	.250	.029	25
37100	3/8	.303	.039	25
37102	7/16	.343	.039	25
37104	1/2	.396	.046	10
37106	5/8	.485	.046	10
37108	3/4	.625	.056	10
37110	7/8	.675	.056	10
37112	1	.835	.056	10



## 3.3 SNAP & RETAINING RINGS

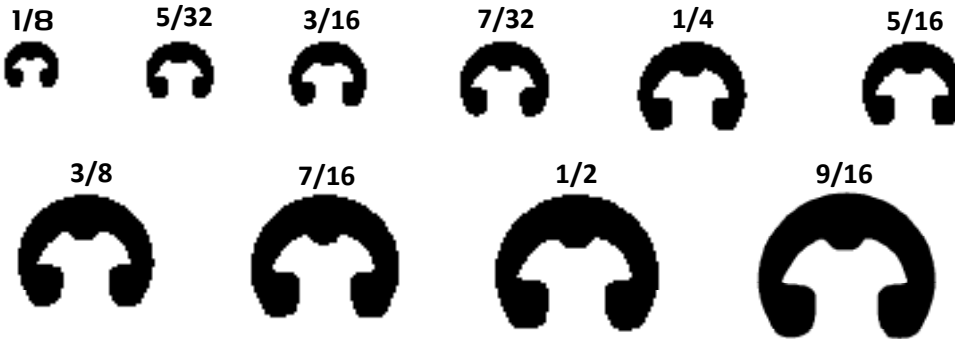
### Reinforced "E" Type Rings

Assortment Avail.			
		95414	

#### Features

- Made of strong spring steel for durability.
- Contacts grooved shaft along three critical contact points, ensuring highest thrust load.
- Use for axial installation into machined grooves in mechanical parts.
- Serves as shoulders for retaining parts.

No.	Shaft Diameter	Groove Diameter	Groove Width	Pkg Qty
37140	1/8	.095	.020	25
37142	5/32	.116	.029	25
37144	3/16	.147	.029	25
37146	7/32	.188	.029	25
37148	1/4	.210	.029	25
37150	5/16	.250	.029	25
37152	3/8	.303	.039	25
37154	7/16	.343	.039	25
37156	1/2	.396	.046	25
37158	9/16	.437	.046	25



# 3.4 O-RINGS

## O-Rings – 1/16 & 3/32

*Buna-N70 (Nitrile) Base Elastomer*

Assortments Avail.

95412	
96816	

### Features

- Excellent resistance to petroleum products
- Temperature range -65°F to +275°F
- Superior to most elastomers with regard to compression set or cold flow, tear and abrasion resistance

### 1/16 Thick O-Rings

No.	Ind. #	I.D.	O.D.	Width	Qty
37330	006	1/8	1/4	1/16	25
37332	007	5/32	9/32	1/16	25
37334	008	3/16	5/16	1/16	25
37336	009	7/32	11/32	1/16	25
37338	010	1/4	3/8	1/16	25
37340	011	5/16	7/16	1/16	25
37342	012	3/8	1/2	1/16	25
37344	013	7/16	9/16	1/16	25
37346	014	1/2	5/8	1/16	25
37348	015	9/16	11/16	1/16	25
37350	016	5/8	3/4	1/16	25
37352	017	11/16	13/16	1/16	25
37354	018	3/4	7/8	1/16	25
37356	019	13/16	15/16	1/16	25
37358	020	7/8	1	1/16	25
37358	021	15/16	1-1/16	1/16	25
37360	022	1	1-1/8	1/16	25
37362	023	1-1/16	1-3/16	1/16	25
37364	025	1-3/16	1-5/16	1/16	25
37368	026	1-1/4	1-3/8	1/16	25



### 3/32 Thick O-Rings

No.	Ind. #	I.D.	O.D.	Width	Qty
37432	110	3/8	9/16	3/32	25
37434	111	7/16	5/8	3/32	25
37436	112	1/2	11/16	3/32	25
37438	113	9/16	3/4	3/32	25
37440	114	5/8	13/16	3/32	25
37442	115	11/16	7/8	3/32	25
37444	116	3/4	15/16	3/32	25
37445	117	13/16	1	3/32	25
37447	118	7/8	1-1/16	3/32	25
37452	124	1-1/4	1-7/16	3/32	25

# 3.4 O-RINGS

## O-Rings – 1/8 & 3/16

Assortment Avail.

		95412			

*Buna-N70 (Nitrile) Base Elastomer*

### Features

- Excellent resistance to petroleum products.
- Temperature range -65°F to +275°F.
- Superior to most elastomers with regard to compression set or cold flow, tear and abrasion resistance.



### 1/8 Thick O-Rings

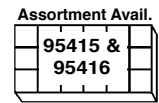
No.	Ind. #	I.D.	O.D.	Width	Qty
37468	210	3/4	1	1/8	25
37470	211	13/16	1-1/16	1/8	25
37472	212	7/8	1-1/8	1/8	25
37474	213	15/16	1-3/16	1/8	25
37476	214	1	1-1/4	1/8	25
37478	215	1-1/16	1-5/16	1/8	25
37480	216	1-1/8	1-3/8	1/8	25
37482	217	1-3/16	1-7/16	1/8	25
37484	218	1-1/4	1-1/2	1/8	25
37486	219	1-5/16	1-9/16	1/8	25
37488	220	1-3/8	1-5/8	1/8	25
37490	221	1-7/16	1-11/16	1/8	25
37492	222	1-1/2	1-3/4	1/8	25
37494	223	1-5/8	1-7/8	1/8	10
37496	224	1-3/4	2	1/8	10
37498	225	1-7/8	2-1/8	1/8	10
37500	226	2	2-1/4	1/8	10
37502	227	2-1/8	2-3/8	1/8	10
37504	228	2-1/4	2-1/2	1/8	10
37506	229	2-3/8	2-5/8	1/8	10
37508	230	2-1/2	2-3/4	1/8	10
37510	231	2-5/8	2-7/8	1/8	10
37512	232	2-3/4	3	1/8	10
37514	233	2-7/8	3-1/8	1/8	10
37516	234	3	3-1/4	1/8	10
37518	244	4-1/4	4-1/2	1/8	10
37520	251	5-1/8	5-3/8	1/8	10

### 3/16 Thick O-Rings

No.	Ind. #	I.D.	O.D.	Width	Qty
37540	325	1-1/2	1-7/8	3/16	10
37542	326	1-5/8	2	3/16	10
37544	327	1-3/4	2-1/8	3/16	10
37546	328	1-7/8	2-1/4	3/16	10
37548	329	2	2-3/8	3/16	10
37550	330	2-1/8	2-1/2	3/16	10
37552	331	2-1/4	2-5/8	3/16	10
37554	332	2-3/8	2-5/8	3/16	10
37556	333	2-1/2	2-7/8	3/16	10
37558	334	2-5/8	3	3/16	10

# 3.4 O-RINGS

## Metric O-Rings



### Features

- Buna-N (Nitrile) base elastomer construction.
- Excellent resistance to petroleum products.
- Temperature range -65°F to +275°F.
- Superior compression, tear and abrasion resistance to standard elastomers.
- Ideal for all sealing applications in automotive, truck, machinery and equipment.
- Not for use in harsh chemical applications.

No.	I.D. (MM)	O.D. (MM)	Width	Qty
37600	3.0	6.0	1.5	25
37602	5.0	8.0	1.5	25
37604	7.0	10.0	1.5	25
37606	9.0	12.0	1.5	25
37608	11.0	14.0	1.5	25
37620	6.0	10.0	2.0	25
37622	8.0	12.0	2.0	25
37624	10.0	14.0	2.0	25
37626	12.0	16.0	2.0	25
37628	14.0	18.0	2.0	25
37630	18.0	22.0	2.0	25
37632	20.0	24.0	2.0	25
37650	6.3	11.1	2.4	25
37652	8.3	13.1	2.4	25
37654	11.8	16.4	2.4	25
37656	13.3	18.1	2.4	25
37658	17.3	22.1	2.4	25
37670	5.0	10.0	2.5	25
37672	7.0	12.0	2.5	25
37674	10.0	15.0	2.5	25
37676	12.0	17.0	2.5	25
37678	15.0	20.0	2.5	25

No.	I.D. (MM)	O.D. (MM)	Width	Qty
37700	10.0	16.0	3.0	25
37702	12.0	18.0	3.0	25
37704	14.0	20.0	3.0	25
37706	16.0	21.0	3.0	25
37708	18.0	24.0	3.0	25
37814	20.2	26.2	3.0	25
37816	22.0	28.0	3.0	25
37818	22.2	28.2	3.0	25
37822	24.2	30.2	3.0	25
37824	25.0	31.0	3.0	25
37826	26.2	32.2	3.0	25
37828	28.0	34.0	3.0	25
37830	30.2	36.2	3.0	10
37832	32.0	38.0	3.0	25
37834	38.0	44.0	3.0	10
37900	25.0	33.0	4.0	10
37902	30.0	38.0	4.0	10
37904	32.0	40.0	4.0	10
37906	25.0	43.0	4.0	10
37908	36.0	44.0	4.0	10
37910	38.0	46.0	4.0	10
37912	40.0	48.0	4.0	10
37914	44.0	52.0	4.0	10
37916	45.0	53.0	4.0	10
37918	50.0	58.0	4.0	10
37960	25.0	35.0	5.0	10
37962	30.0	40.0	5.0	10
37964	35.0	45.0	5.0	10
37966	40.0	50.0	5.0	10
37968	45.0	55.0	5.0	10
37970	50.0	60.0	5.0	10


# 3.4 O-RINGS

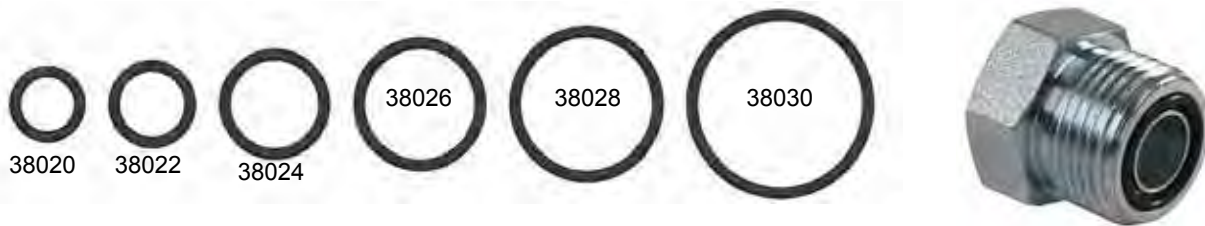
## Flat Face O-Rings

VersaPak Avail.		Assortment Avail.	
95428		95430	

### Features

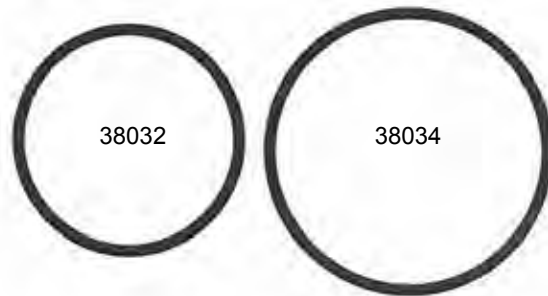
- For use with flat faced hydraulic fittings
- Buna-N (Nitrile) 90 Durometer base elastomer construction. Excellent resistance to petroleum products.
- Superior compression, tear and abrasion resistance.
- Temperature range -40°F to +250°F (-40°C to +121°C).

Flat Face O-Ring Kit		P/N 95428	
1/4 (-4) P/N 38020	3/8 (-6) P/N 38022	1/2 (-8) P/N 38024	
5/8 (-10) P/N 38026		3/4 (-12) P/N 38028	
1 (-16) P/N 38030	1-1/4 (-20) P/N 38032	1-1/2 (-24) P/N 38034	



### Flat Face O-Rings

No.	I.D.	O.D.	Thickness	Qty
38020	0.301	1/4 (-4)	0.070	10
38022	0.364	3/8 (-6)	0.070	10
38024	0.489	1/2 (-8)	0.070	10
38026	0.614	5/8 (-10)	0.070	10
38028	0.739	3/4 (-12)	0.070	10
38030	0.926	1 (-16)	0.070	10
38032	1.176	1-1/4 (-20)	0.070	10
38034	1.489	1-1/2 (-24)	0.070	10





# 3.4 O-RINGS

## Boss O-Rings

VersaPak Avail.		Assortment Avail.	
95424		95426	

### Features

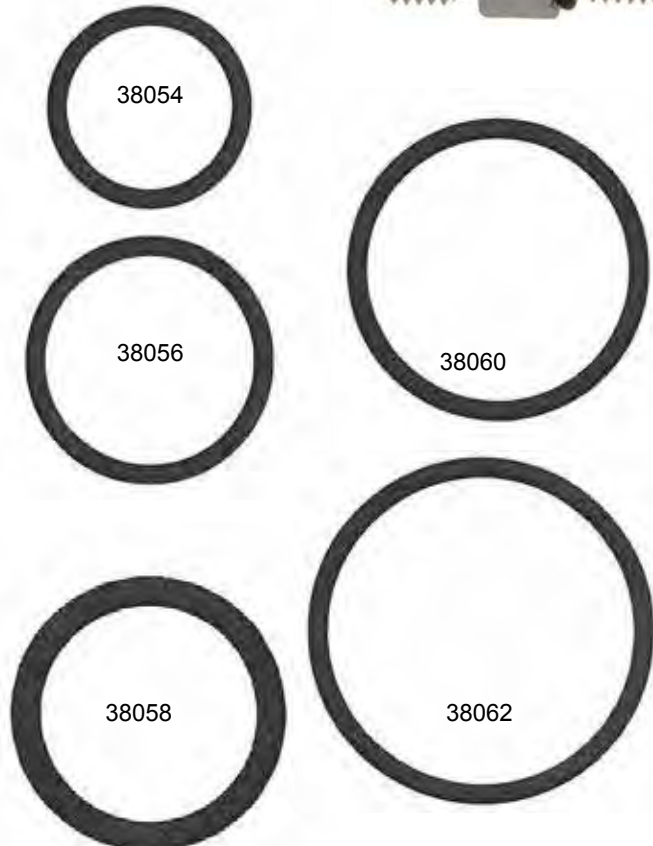
- For use with Boss hydraulic fittings
- Buna-N (Nitrile) 90 Durometer base elastomer construction.
- Excellent resistance to petroleum products.
- Superior compression, tear and abrasion resistance.
- Temperature range -40°F to +250°F (-40°C to +121°C).

Boss O-Ring Kit			P/N 95424
1/8 (-2) P/N 38040	3/16 (-3) P/N 38042	1/4 (-4) P/N 38044	1-1/4 (-20)
5/16 (-5) P/N 38046		3/8 (-6) P/N 38048	P/N 38060
5/8 (-10) P/N 38052	3/4 (-12) P/N 38054	1/2 (-8) P/N 38050	1-1/2 (-24) P/N 38062
7/8 (-14) P/N 38056	1 (-16) P/N 38058		



### Boss O-Rings

No.	I.D.	O.D.	Thickness	Qty
38040	0.230	1/8 (-2)	0.064	10
38042	0.301	3/16 (-3)	0.064	10
38044	0.351	1/4 (-4)	0.072	10
38046	0.414	5/16 (-5)	0.072	10
38048	0.468	3/8 (-6)	0.078	10
38050	0.644	1/2 (-8)	0.087	10
38052	0.755	5/8 (-10)	0.097	10
38054	0.924	3/4 (-12)	0.116	10
38056	1.047	7/8 (-14)	0.116	10
38058	1.171	1 (-16)	0.116	10
38060	1.475	1-1/4 (-20)	0.118	10
38062	1.720	1-1/2 (-24)	0.118	10
38064	2.337	2 (-32)	0.118	10



# 3.4 O-RINGS

## Air Conditioning O-Rings

VersaPak Avail.

		96815		

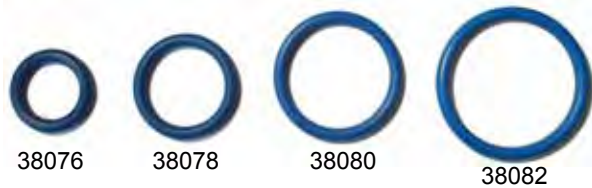
These products are designed to meet a variety of automotive air conditioning needs and come in sizes you most use.

### Features

Common sizes found in automotive air conditioning systems utilizing R134A refrigerant. Will also work in Freon-12 applications.



P/N 96815



### Auto Air Conditioning O-Rings

No.	Description	Color	Qty
38066	#6 Std Hose Fitting O-Ring - Ford	Green	10
38068	#8 Std Hose Fitting O-Ring - Ford	Green	10
38070	#10 Std Hose Fitting O-Ring - Ford	Green	10
38072	#12 Std Hose Fitting O-Ring - Ford	Green	10
38074	Capillary O-Ring - Ford	Green	10
38076	#6 Std Hose Fitting O-Ring - GMC	Blue	10
38078	#8 Std Hose Fitting O-Ring - GMC	Blue	10
38080	#10 Std Hose Fitting O-Ring - GMC	Blue	10
38082	#12 Std Hose Fitting O-Ring - GMC	Blue	10
38084	#6 Captured O-Ring - GM	Blue	10
38086	#8 Captured O-Ring - GM	Blue	10
38088	#10 Captured O-Ring - GM	Blue	10

## 3.4 O-RINGS

### O-Ring Cord

Assortment Avail.	
95420	

#### Features

- Buna-N cord material.
- 70 Durometer.
- Sold in 4' lengths.

No.	Description	Qty
37300	1/16" x 4'	1
37302	3/32" x 4'	1
37304	1/8" x 4'	1
37306	3/16" x 4'	1
37308	1/4" x 4'	1



### O-Ring Splice Kit

*Instant O-Rings on the Job...Anytime!*

With this O-ring splicing kit, you can now make O-rings in the exact size to fit your needs and end costly downtime of important equipment. No more waiting for "special order" O-rings! Downtime is eliminated! Makes all 300 standard O-rings as well as many "special" O-rings! Ingenious splicing system never fails! Kit includes a tube of special rapid-set adhesive.

Tolerance exceeds commercial and precision tolerance. Complies with the following standards: MIL-R-3065; ASTM D2000; SAE J200; BG715 Shore A Hardness 70 Durometer.



#### Assortment No. 95420

7 Pieces Arranged in a **Red Plastic Case**

Kit includes razor blade, cutting & splicing jig, and a tube of special Rapid-Set Adhesive

4 pieces of Nitrile Buna-N O-ring cord stock sizes 3/32" x 7', 1/8" x 7', 3/16" x 7' and 1/4" x 7'