

Specifications for the following Rotor Clip Retaining Ring Pliers can be found on the following pages.



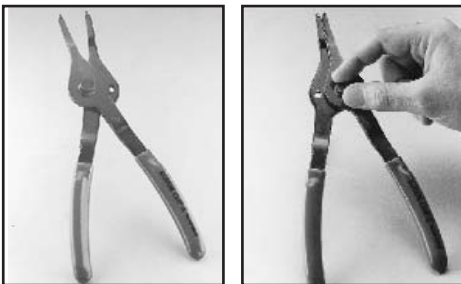
STANDARD RETAINING RING PLIERS

Rotor Clip Standard Retaining Ring Pliers are made of high carbon, heat treated steel and produced to exacting QC specifications. They feature stop and return springs for problem-free installation/removal of retaining rings. This eliminates overspreading of external retaining rings, and speeds the assembly/removal of internal retaining rings by orienting plier to exact location of lug holes. Most Rotor Clip retaining ring pliers have exclusive air-cushioned handles.

RATCHET RETAINING RING PLIERS

Assemble large retaining rings up to 10" in diameter with ease and comfort using Rotor Clip Ratchet Pliers. Spring loaded mechanisms compress or expand large rings through gradual "steps." Plier locks at the desired size without continued pressure on the handles.

(Note: Ratchet Pliers do not include plier tips, which must be purchased separately.)



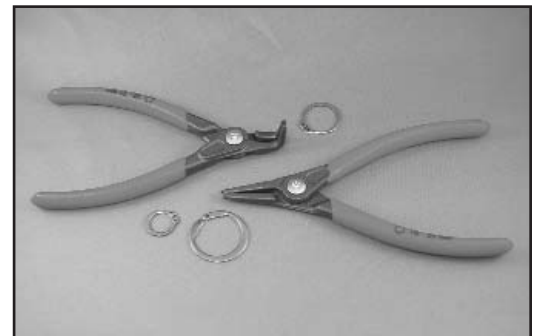
CONVERTIBLE RETAINING RING PLIERS

Convert quickly and easily from internal to external pliers and back again. This two-in-one capability is cost effective and ideal for handling a variety of applications with a minimum number of tools. Simply move the screw to the other hole and tighten with finger pressure to convert quickly to an internal/external plier.

HEAVY DUTY RETAINING RING PLIERS

Rotor Clip Heavy-Duty Retaining Ring Pliers are designed to perform with excessive use - up to 10 times longer than standard retaining ring pliers. The pliers are made of forged Chrome Vanadium steel, and the handles have a non-slip plastic coating. They feature inserted tips of high density drawn spring wire and a precise, smooth operating screw joint. Large contact faces on the tips helps to eliminate distortion of the ring, and the slim head style allows for use in confined areas.

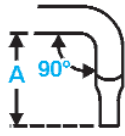
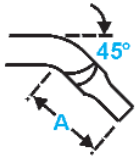
Rotor Clip Grip Ring Pliers are designed for SHF & DSF external (shaft) friction rings. The pliers are made of forged Chrome Vanadium steel with non-slip solid tips, and the handles have a non-slip plastic coating. Features a stop spring to prevent overspreading of the retaining ring.



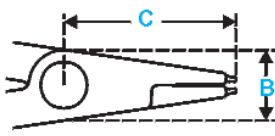
Standard Pliers



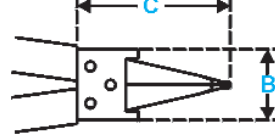
DIMENSIONAL ILLUSTRATIONS



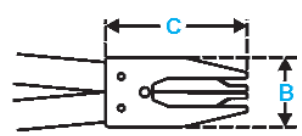
STANDARD & RATCHET PLIERS



UNSHIELDED



SHIELDED



For use with the following EXTERNAL standard retaining rings



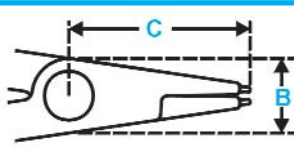
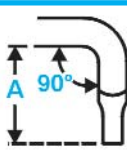
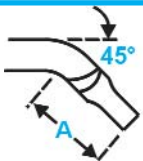
For use with the following INTERNAL standard retaining rings



Ring Series/Size Range				ROTOR CLIP PLIERS	45° TIP PLIERS	90° TIP PLIERS	Weight lbs.	Tip Dia.	Tip Length A	CLOSED POSITION			
HO-BHO-VHO		HOI								Clearance		Length Std. Tip	Width
FROM	THRU	FROM	THRU							B	C		
-25	-31	-62	-	RPS-100	RPS-104	RPS-109	.15	.025	9/32	7/8	1-7/8	5-1/2	1-7/8
-37	-56	-75	-100	RP-100	RP-104	RP-109	.15	.038	9/32	7/8	1-7/8	5-1/2	1-7/8
-62	-102	-106	-137	RPL-100	RPL-104	RPL-109	.15	.047	9/32	7/8	1-7/8	5-1/2	1-7/8
-106	-175	-143	-200	RP-300	RP-304	RP-309	.17	.070	11/32	7/8	2-1/8	6-7/16	2-1/4
-181	-300	-206	-300	RP-500	RP-504	RP-509	.62	.090	7/16	1-1/8	2-3/4	9	2-1/4

						ROTOR CLIP PLIERS	CLOSED POSITION								
Ring Series/Size Range							45° TIP PLIERS	90° TIP PLIERS	Weight lbs.	Tip Dia.	Tip Length A	Clearance		Length Std. Tip	Width
SH-BSH-VSH		SHI		SHR								B	C		
FROM	THRU	FROM	THRU	FROM	THUR										
-12	-	-	-	-	-	RP-12	RP-2124	RP-2129	.05	.023	7/32	1/2	1-1/8	5-5/16	1-1/2
-15	-	-	-	-	-	RP-15	RP-2154	RP-2159	.05	.023	7/32	1/2	1-1/8	5-5/17	1-1/2
-18	-23	-	-	-	-	RP-18	RP-2184	RP-2189	.05	.023	7/32	1/2	1-1/8	5-5/18	1-1/2
-25	-66	-50	-78	-39	-47	RP-200	RP-204	RP-209	.15	.038	9/32	1	2	5-1/2	2-1/2
-68	-87	-81	-100	-50	-66	RPL-200	RPL-204	RPL-209	.15	.047	9/32	1	2	5-1/2	2-1/2
-93	-143	-106	-200	-75	-98	RP-400	RP-404	RP-409	.19	.070	11/32	1	2-3/8	7	2-7/8
-150	-350	-215	-334	-	-	RP-600	RP-604	RP-609	.44	.115	7/16	1-1/4	3-1/16	9-1/8	4-1/4

External pliers RP12, RP15 & RP18 are available in the standard version with shielded tips. The 45° and 90° versions are unshielded. Both are equipped with fixed stops to prevent overspreading of the external retaining rings during installation or removal.



For use with the following metric retaining rings:



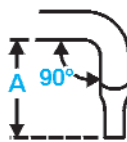
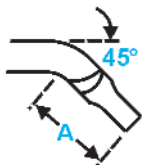
					Weight Kg	Tip Dia. mm	Tip Length A	CLOSED POSITION			
Ring Series/Size Range DSH (DIN 471), DST (DIN 983)		ROTOR CLIP PLIERS	45° TIP PLIERS	90° TIP PLIERS				Clearance		Length Std. Tip	
								B	C		
FROM	THRU										
-3	-10	RPA-0	RPA-045	RPA-090	1.0	0.9	8.3	22.2	38.1	141.7	73
-10	-25	RPA-1	RPA-145	RPA-190	1.0	1.3	8.3	22.2	38.1	141.7	73
-19	-60	RPA-2	RPA-245	RPA-290	1.5	1.8	14.0	25.4	51.6	183.1	106.0
-40	-100	RPA-3	RPA-345	RPA-390	3.6	2.3	14.2	29.5	77.7	230.4	111.1
-85	-165	RPA-4	RPA-445	RPA-490	7.1	3.2	20.0	43.2	80.1	303.8	179.6

TABLE 11: METRIC INTERNAL PLIERS						GENERAL DIMENSIONS (mm)						
Ring Series/Size Range DHO (DIN 472), DHT (DIN 984)		ROTOR CLIP PLIERS	45° TIP PLIERS	90° TIP PLIERS	Weight Kg	Tip Dia. mm	Tip Length A	CLOSED POSITION				
								Clearance		Length Std. Tip	Width	
FROM	THRU							B	C			
-3	-10	RPI-0	RPI-045	RPI-090	1.0	0.9	8.3	19.0	47.8	140.5	54.9	
-10	-25	RPI-1	RPI-145	RPI-190	1.0	1.1	8.3	19.0	47.8	140.5	54.9	
-19	-60	RPI-2	RPI-245	RPI-290	1.4	1.8	10.0	22.6	52.3	165.9	64.8	
-40	-100	RPI-3	RPI-345	RPI-390	3.3	2.3	13.9	28.6	69.7	229.9	72.1	
-85	-165	RPI-4	RPI-445	RPI-490	6.2	3.2	20.0	43.2	70.1	292.4	58.7	

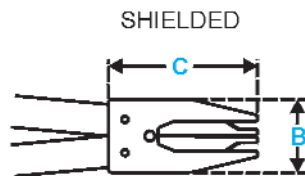
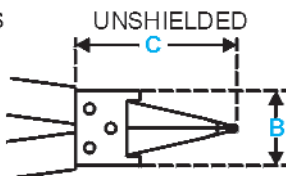
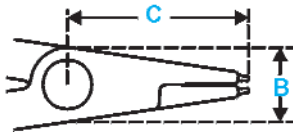


Ratchet Pliers

DIMENSIONAL ILLUSTRATIONS



STANDARD & RATCHET PLIERS



For use with the following EXTERNAL standard retaining rings



For use with the following INTERNAL standard retaining rings



TABLE 6: RATCHET PLIERS INTERNAL**

TABLE 6: RATCHET PLIERS INTERNAL **										GENERAL DIMENSIONS (inches)						
Ring Series/Size Range				PLIERS W/OUT TIPS	STD. TIPS	45° TIPS	90° TIPS	TIP COLOR CODE	Weight lbs.	Tip Dia.	Tip Length A	CLOSED POSITION				
												Clearance		Length Std. Tip	Width	
HO-BHO-VHO		HOI										B	C			
FROM	THRU	FROM	THRU													
-181	-237	-206	-250	RP-27R	RP-5021R	RP-5023R	RP-5024R	GOLD	.70	.093	15/32	1-3/8	3-13/32	10-5/8	3	
-244	-300	-262	-300	RP-27R	RP-5005R	RP-5007R	RP-5008R	BLACK	.70	.108	15/32	1-3/8	3-13/32	10-5/8	3	
-306	-400	-315	-400	RP-27R	RP-5009R	RP-5012R	RP-5013R	SILVER	.70	.120	15/32	1-3/8	3-13/32	10-5/8	3	
-306	-600	-315	-400	RP-900	RP-7801R	RP-7845R	RP-7890R	BLACK	1.9	.120	1/2	1-3/4	3-1/2	16	3-7/8	
-625	-1000	-	-	RP-1100	RP-71001R	RP-71451R	RP-71901R	BLACK	5.0	.150	1-5/32	1-3/4	4-5/16	28	6-1/2	

**PLIERS AND PLIER TIPS MUST BE ORDERED TOGETHER TO BE USABLE. TIPS ARE INTERCHANGEABLE FOR INTERNAL AND EXTERNAL USE.

TABLE 7: RATCHET PLIERS EXTERNAL**

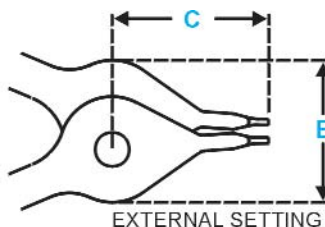
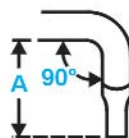
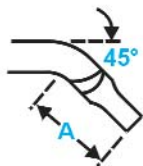
TABLE 7: RATCHET PLIERS EXTERNAL **											GENERAL DIMENSIONS (inches)							
Ring Series/Size Range						PLIERS W/OUT TIPS	STD. TIPS	45° TIPS	90° TIPS	TIP COLOR CODE	Weight lbs.	Tip Dia.	Tip Length A	CLOSED POSITION				
														Clearance		Length Std. Tip	Width	
SH-BSH-VSH		SHI		SHR														
FROM	THRU	FROM	THRU	FROM	THRU									B	C			
-	-	-	-	-106	-137	RP-28R	RP-5021R	RP-5023R	RP-5024R	GOLD	.70	.093	15/32	1-3/8	3-3/8	10-5/8	4-11/32	
-150	-375	-215	-325	-	-	RP-28R	RP-5009R	RP-5012R	RP-5013R	SILVER	.70	.120	15/32	1-3/8	3-3/8	10-5/8	4-11/32	
-	-	-	-	-150	-175	RP-1000	RP-8002R	RP-8452R	RP-8902R	BLACK	1.9	.108	5/8	2-1/2	3-5/8	14-1/2	13	
-354	-650	-350	-393	-193	-200	RP-1000	RP-7801R	RP-7845R	RP-7890R	BLACK	1.9	.120	5/8	2-1/2	3-5/8	14-1/2	13	
-675	-950	-	-	-	-	RP-1200	RP-68001R	RP-68451R	RP-68901R	BLACK	2.2	.170	1-5/32	2-1/2	4-7/8	18-1/4	14	

**PLIERS AND PLIER TIPS MUST BE ORDERED TOGETHER TO BE USABLE. TIPS ARE INTERCHANGEABLE FOR INTERNAL AND EXTERNAL USE.

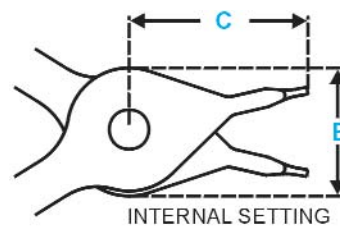
Convertible Pliers



DIMENSIONAL ILLUSTRATIONS



EXTERNAL SETTING



INTERNAL SETTING

For use with the following EXTERNAL standard retaining rings



For use with the following INTERNAL standard retaining rings



TABLE 4: CONVERTIBLE PLIERS, INTERNAL RING SERIES

TABLE 4: CONVERTIBLE PLIERS, INTERNAL RING SERIES							GENERAL DIMENSIONS (inches)						
							Weight lbs.	Tip Dia.	Tip Length A	CLOSED POSITION			
Clearance		Length Std. Tip	Width										
HOI													
Ring Series/Size Range				ROTOR CLIP PLIERS	45° TIP PLIERS	90° TIP PLIERS							
HO-BHO-VHO													
FROM	THRU	FROM	THRU										
-37	-43	-75	-100	RP-120	RP-124	RP-129	.19	.038	9/32	1-3/16	1-5/8	5-5/8	1-3/4
-45	-102	-106	-137	RP-320	RP-324	RP-329	.19	.047	9/32	1-3/16	1-5/8	5-5/8	1-3/4
-106	-175	-143	-200	RP-340	RP-344	RP-349	.45	.070	11/32	1-7/16	1-7/8	7-7/8	3-5/16
-181	-206	-206	-212	RP-560	RP-564	RP-569	.55	.090	5/8	1-3/4	3	9-1/4	4-1/2

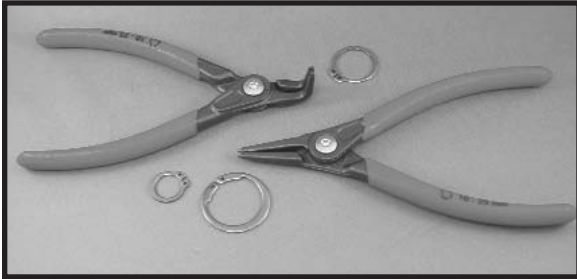
TABLE 5: CONVERTIBLE PLIERS, EXTERNAL RING SERIES*

TABLE 5: CONVERTIBLE PLIERS, EXTERNAL RING SERIES*											GENERAL DIMENSIONS (inches)							
Ring Series/Size Range								ROTOR CLIP PLIERS	45° TIP PLIERS	90° TIP PLIERS	Weight lbs.	Tip Dia.	Tip Length A	CLOSED POSITION				
														Clearance		Length	Width	
SH-BSH-VSH		SHI		SHR		SHF								B	C			
FROM	THRU	FROM	THRU	FROM	THRU	FROM	THRU											
-25	-60	-50	-78	-39	-47	-12	-25	RP-120	RP-124	RP-129	.19	.038	9/32	1-3/8	1-5/8	5-5/8	2-9/16	
-68	-87	-81	-100	-50	-66	-31	-37	RP-320	RP-324	RP-329	.19	.047	9/32	1-3/8	1-5/8	5-5/8	2-9/16	
-93	-143	-106	-200	-75	-98	-43	-75	RP-340	RP-344	RP-349	.45	.070	11/32	1-11/16	1-7/8	7-7/8	3-15/16	
-150	-200	-	-	-	-	-	-	RP-560	RP-560	RP-564	.55	.090	5/8	1-7/8	3	9-1/4	4-1/2	

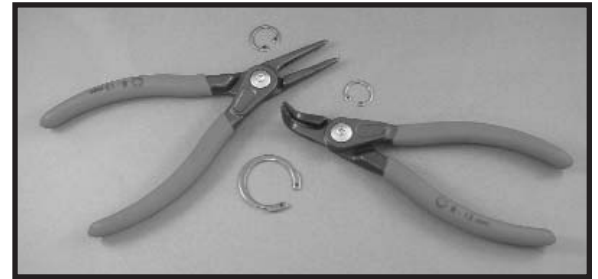
*KIT CONTAINS PLIERS LISTED IN TABLES 4&5.



Heavy-Duty & Grip Ring Pliers

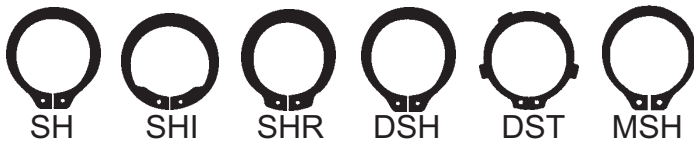


Left: RPN external heavy duty retaining ring pliers.
Right: RPN internal heavy duty retaining ring pliers.



Rotor Clip Heavy-Duty Retaining Ring Pliers are designed to perform with excessive use - up to 10 times longer than standard retaining ring pliers. The pliers are made of forged Chrome Vanadium steel, and the handles have a non-slip plastic coating. They feature inserted tips of high density drawn spring wire and a precise, smooth operating screw joint. Large contact faces on the tips helps to eliminate distortion of the ring, and the slim head style allows for use in confined areas.

For use with the following external retaining rings:



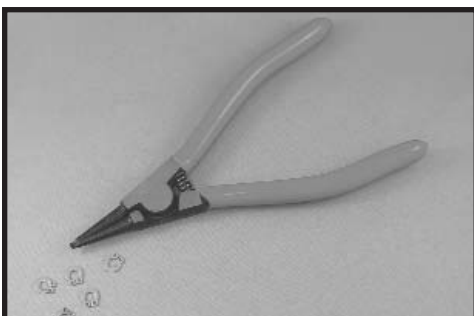
For use with the following internal retaining rings:



HEAVY DUTY PLIERS - EXTERNAL (Inch & Metric)												
Ring Series/Size Range										ROTOR CLIP PLIERS	90° TIP PLIERS	TIP DIAMETER
SH		SHI		SHR		DSH (DIN 471) DST (DIN 983)		MSH				
(in.)		(in.)		(in.)		(mm)		(mm)				
FROM	THRU	FROM	THRU	FROM	THRU	FROM	THRU	FROM	THRU			(mm)
-25	-66	-50	-78	-39	-47	-3	-10	-4	-12	RPN-A0	RPN-A01	0.9
-68	-87	-81	-100	-50	-66	-10	-25	-13	-23	RPN-A1	RPN-A11	1.2
-93	-143	-106	-200	-75	-98	-19	-60	-24	-36	RPN-A2	RPN-A21	1.8
-150	-350	-215	-350	-	-	-40	-100	-38	-90	RPN-A3	RPN-A31	2.3

HEAVY DUTY PLIERS - INTERNAL (Inch & Metric)												
Ring Series/Size Range										ROTOR CLIP PLIERS	90° TIP PLIERS	TIP DIAMETER
HO (in.)		HOI (in.)		DHO (DIN 472) (mm)		DHT (DIN 984) (mm)		MHO (mm)				(mm)
FROM	THRU	FROM	THRU	FROM	THRU	FROM	THRU	FROM	THRU			
-37	-56	-75	-100	-8	-13	-	-	-8	-15	RPN-J0	RPN-J01	0.9
-62	-102	-106	-137	-12	-25	-16	-25	-15	-26	RPN-J1	RPN-J11	1.2
-106	-175	-143	-200	-19	-60	-19	-60	-27	-60	RPN-J2	RPN-J21	1.8
-181	-300	-206	-300	-40	-100	-40	-100	-62	-100	RPN-J3	RPN-J31	2.3

Rotor Clip Grip Ring Pliers are designed for SHF & DSF external (shaft) friction rings. The pliers are made of forged Chrome Vanadium steel with non-slip solid tips, and the handles have a non-slip plastic coating. Features a stop spring to prevent overspreading of the retaining ring.



For use with the following external retaining rings:



HEAVY DUTY PLIERS - GRIP RING (Inch & Metric)				
Ring Series/Size Range				ROTOR CLIP PLIERS
SHF (in.)		DSF (mm)		
FROM	THRU	FROM	THRU	
-6	-9	-1.5	-4	
-12	-15	-4	-7	RPN-G0
-18	-25	-5	-13	RPN-G1
-31	-75	14	-18	RPN-G2
				RPN-G3