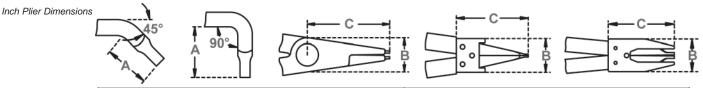
# **Standard Pliers**

# Standard Retaining Ring Pliers - Inch & Metric

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.





# Internal Inch

For use with the follo



1	INTERNAL	L STANDA	RD PLIER	S					GE	NERAL DIN			/	
owing												CLOSED	POSITION	
0	Ri	ing Series	/Size Ranı	ge	ROTOR	45°	90°			Tip	Cleara	nce	Length	
	HO-BH	0-VHO	H	01	CLIP	TIP	TIP	Weight	Tip	Length			Std.	
	FROM	THRU	FROM	THRU	PLIERS	PLIERS	PLIERS	lbs.	Dia.	A	В	C	Tip	Width
	-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
Л	-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
V 8	-181	-300	-206	-300	RP-500	RP-504	RP-509	.62	.090	7/16	1-1/8	2-3/4	9	2-1/4

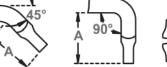
#### External Inch For use with the follow

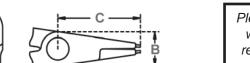
inch retainin	g rings:
SH	SHI
SHR	SHF
BSH	VSH

)	EXTER	NAL ST	ANDAR	D PLIEF	S								GEN	ERAL DI	MENSIC	)NS (inc	hes)	
wing														C	LOSED	POSITIO	N	
			Ring	Series	/Size Ra	ange			ROTOR	45°	90°			Tip	Clea	rance	Length	
	SH-BS	H-VSH	S	HI	SI	IR	SI	HF	CLIP	TIP	TIP	Weight	Tip	Length			Std.	
	FROM	THRU	FROM	THRU	FROM	THRU	FROM	THRU	PLIERS	PLIERS	PLIERS	lbs.	Dia.	A	В	C	Tip	Width
	-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
$\mathbb{N}$	-93	-143	-106	-200	-	-	-	-	RP-400	RP-404	RP-409	.19	.070	11/32	1	2-3/8	7	2-7/8
	-150	-350	-215	-325	-	-	-	-	RP-600	RP-604	RP-609	.44	.115	7/16	1-1/4	3-1/16	9-1/8	4-1/4
-	-	-	-	-	-75	-98	-31	-75	RPA-2	RPA-245	RPA-290	.22	.070	9/16	1	2	7-1/4	2-1/2

External pliers RP-12, RP-15 & RP-18 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.

Metric Plier Dimensions





Please wear protective eyewear while installing and removing retaining rings & hose clamps.

R

FREE (UNEXPANDED) CONDITION

Internal Metric For use with the following metric retaining rings:

DHO

METRIC INTERN	AL PLIERS (All Dir	nensions in	mm)					()		y compress Jtting) con	
	s/Size Range	ROTOR	45°	90°			Tip	Ti	ip	Overall	Max Width
DHO (DIN 472)	, DHT (DIN 984)	CLIP	TIP	TIP	Weight	Tip	Length	Clear	ance	Length	Across
FROM	THRU	PLIERS	PLIERS	PLIERS	Kg	Dia.	Α	В	C	Straight Tip	Handle
-8	-13	RPN-J0*	-	RPN-J01*	-	0.9	-	-	-	-	-
-12	-25	RPN-J1*	-	RPN-J11*	-	1.2	-	-	-	-	-
-18	-30	RPI-2	RPI-245	RPI-290	0.1	1.8	10	25	55	165	60
-31	-83	RPI-3	RPI-345	RPI-390	0.23	2.3	14	30	70	230	65
-85	-100	RPI-4	RPI-445	RPI-490	0.42	3.2	20	45	70	300	55
*See page 244 :	Heavy Duty Retain	ina Rina Pli	ers.								

### External Metric METRIC EXTERNAL PLIERS (All Dimensions in mm) For use with the f metric retaining ri

	METHO EXTERN	ALL LILIO (ALL DI	nonorono n	,					THEFT	ONEAL	HIDED) 00	<b>UDITION</b>
e following											Overall	Max
rings:	Ring Series	Size Range	ROTOR	45°	90°			Tip	Ti	р	Length	Width
	DSH (DIN 471)	, DST (DIN 983)	CLIP	TIP	TIP	Weight	Tip	Length	Clear	ance	Straight	Across
DST	FROM	THRU	PLIERS	PLIERS	PLIERS	Kg	Dia.	Α	В	C	Tip	Handle
	-3	-9	RPA-0	RPA-045	RPA-090	0.07	0.9	8	22	38	140	75
45	-10	-17	RPA-1	RPA-145	RPA-190	0.07	1.3	8	22	38	140	75
	-18	-30	RPA-2	RPA-245	RPA-290	0.1	1.8	14	25	50	185	100
	-19	-60	RPN-A2*	-	RPN-A21*	-	1.8	-	-	-	-	-
	-40	-82	RPN-A3*	-	RPN-A31*	-	2.3	-	-	-	-	-
	-85	-100	RPA-4	RPA-445	RPA-490	0.46	3.2	20	45	80	300	175
	1.0 0.1.1		DI DI									

\*See page 244 : Heavy Duty Retaining Ring Pliers.

For the most up-to-date specifications, online ordering, quotations & sample orders, visit **www.rotorclip.com** 

242

DSH

# **Ratchet & Grip Ring Pliers**



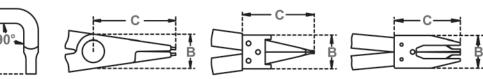
## **Ratchet Retaining Ring Pliers**

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.

**GENERAL DIMENSIONS (inches)** 

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



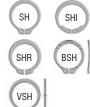


RATCHET	PLIERS	INTERN	IAL**							GE	NERAL D		IONS (inc			Interna	
													CLOSED	POSITION	-	For use wit	
Ring	Series/	Size Rar	nge	PLIERS	STD.	45°	90°	TIP			Tip	Clea	arance	Length		following re	taining
HO-BHO	D-VHO	H	01	W/OUT	TIPS	TIPS	TIPS	COLOR	Weight	Tip	Length			Std.		$\frown$	6
FROM	THRU	FROM	THRU	TIPS				CODE	lbs.	Dia.	A	В	C	Tip	Width	(но)	- (° F
-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	вно	VH
-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		1 C
-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	4 V I	

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

RATCH	ET PLIE	RS EXT	ERNAL	**								GE	NERAL D	IMENS	ONS (ii	nches)		Externa	l
	Ring	Series/	Size Ra	ange			070	450		T O			Ŧ			) POSITI		For use with	the
	SH-BSH-VSH   SHI   SHF				PLIERS	STD.	45°	90°	TIP			Tip	Clear	ance	Length		following reta	aining rings:	
SH-BS	H-VSH	S	HI	SI SI	HR	W/OUT	TIPS	TIPS	TIPS	COLOR	Weight	Tip	Length			Std.			
FROM	THRU	FROM	THRU	FROM	THRU	TIPS				CODE	lbs.	Dia.	Α	В	C	Tip	Width	(SH)	SHI
-	-	-	-	-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	SIT	Shi
-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	0.0	
-	-	-	-	-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	SHR	BSH
-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	10	1

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



following retaining rings:

HOI

VH0



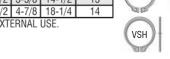
R

### **Grip Ring Retaining Ring Pliers**

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.

Please wear protective evewear while installing and removing retaining rings & hose clamps.

HEAVY DUTY PL		L (Inch & Metric	)	DOTOD	External	
SH (in	IF	s/Size Range DS (mi		ROTOR CLIP PLIERS	For use with the following retaining rings	js:
FROM	THRU	FROM	THRU	FLIENS	SHF DSF	
-6	-12	-1.5	-4	RPN-G0	7 10	r
-15	-15	-4	-7	RPN-G1		
-18	-25	-5	-13	RPN-G2		
-31	-75	-14	-18	RPN-G3		



# **Convertible & Heavy-Duty Pliers**

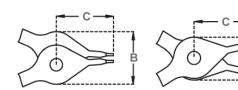
## **Convertible Retaining Ring Pliers**

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.









Please wear protective eyewear while installing and removing retaining rings & hose clamps.

#### Internal For use with the following retaining ring



	CONVERT	IBLE PLIE	RS, INTEF	RNAL RING	i SERIES				GE	NERAL DIN	IENSIONS	(inches)		
												CLOSED	POSITION	
igs:	R	ing Series	/Size Rang	ge	ROTOR	45°	90°			Tip	Clear	ance	Length	
	HO-BH	0-VHO	H	01	CLIP	TIP	TIP	Weight	Tip	Length			Std.	
	FROM	THRU	FROM	THRU	PLIERS	PLIERS	PLIERS	lbs.	Dia.	A	В	C	Tip	Width
	-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
Л	-181	-206	-206	-212	RP-560	RP-564	RP-569	.55	.090	5/8	1-3/4	3	9-1/4	4-1/2

### External For use with the

following retaining rings:



CONVERT	IBLE PL	IERS, EX	(TERNA	L RING S	SERIES							G	ENERAL	DIMENSIC			
		Rina	Series/	Size Rar	nae											POSITIO	N
					5			ROTOR	45°	90°			Tip	Cleara	ince		
SH-BSH	I-VSH	S		Sł	IR	SI	HF	CLIP	TIP	TIP	Weight	Tip	Length				
FROM	THRU	FROM	THRU	FROM	THRU	FROM	THRU	PLIERS	PLIERS	PLIERS	lbs.	Dia.	A	В	C	Length	Width
-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-564	RP-569	.55	.090	5/8	1-7/8	3	9-1/4	4-1/2

## **Heavy-Duty Retaining Ring Pliers**

LIEANING DUTY DUTED

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.



internal		HEAVY D	UTY PLIEF	IS - INTER	NAL (Incl	n & Metric	)							
For use with t	the				R	ing Series	/Size Ranı	je				ROTOR	90°	TIP
following reta	ining rings:	H	0	H	01	DHO (D	IN 472)	DHT (D	IN 984)	M	HO	CLIP	CLIP	DIAMETER
$\frown$										(ANSI	Metric)	PLIERS	PLIERS	
(но)			1.)	(ii	n.)	(m	m)	(m	m)	(m	m)			
	FROM THRU		THRU	FROM	THRU	FROM	THRU	FROM	THRU	FROM	THRU			(mm)
$\frown$		-37	-56	-75	-100	-8	-13	-	-	-8	-15	RPN-J0	RPN-J01	0.9
( рно )	DHT	-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
	~ v	-181	-300	-206	-300	-40	-100	-40	-100	-62	-100	RPN-J3	RPN-J31	2.3

## MHO 0 External

DST

MSH

Internal For use with the

External	l	HEAVY DUTY PLIERS - EXTERNAL (Inch & Metric)												
For use with the		Ring Series/Size Range											90°	TIP
following retaining rings:		SH		SHI		SHR		DSH (DIN 471)		MSH		CLIP	CLIP	DIAMETER
$\frown$								DST (DIN 983)		(ANSI Metric)		PLIERS	PLIERS	
(sh)	SHI	(in.)		(in.)		(in.)		(mm)		(mm)				
00		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
SHR	(DSH)	-68	-87	-81	-100	-50	-66	-10	-25	-13	-23	RPN-A1	RPN-A11	1.2
		-93	-143	-106	-220	-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

**(R**)