

## 2. CONVENTIONAL TOOLS

# PLIERS, CUTTING **PLIERS, SHEARS**



Pliers, cutting pliers, shears

• Do not use if there is a live electric curr

Do not use if there is a live electric current.

The plastic on the grip does not provide insulation against electrical current



- Do not use this tool as a hammer.
   Do not apply strong impact on this tool by hitting it with a hammer, etc.
   Take care not to get hands or fingers caught between the grips
- Take care when adjusting the width of the mouth.

#### Water pump pliers

- Do not use this tool as a hammer
- Do not apply strong impact on this tool by hitting it with a hammer, etc.
- Firmly hold the pliers perpendicular to the pipe and hold firmly at the center.
   Do not twist or apply force sideways.
   Take care when adjusting the width of the mouth.

#### Snap rings

- Snap rings

  Do not use except for snap rings.

  Use pliers that conform to the size of the snap rings.

  The pliers can loosen when too much force is applied.

  The snap ring may pop out if the tool looses its grasp.

  Wipe off any grease from the hole of the snap ring and tip of the pliers before use.
- Use protective goggles when working.

#### Pliers and nippers

- Pliers and nippers

  Check the direction the cut piece is likely to travel before cutting

  Use protective goggles when working.

  Do not use this tool as a hammer.

  Do not apply strong impact on this tool by hitting it with a hammer, etc.

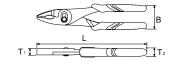
  Close the blade and store when the tool is not sping to be used.

#### Shears and bolt clippers

- Check the direction the cut piece is likely to travel before cutting.
   Use protective goggles when working.
   Close the blade and store when the tool is not
- going to be used.
- Do not twist or hit using the blade tip.
  Take care not to cut the hand holding the tool.

COMBINATION PLIERS (SOFT GRIP)									
No.	Is able to cut through I arge diameter wires (Steel wire)	L	В	T <sub>1</sub>	T <sub>2</sub>	<b>▼</b> g	#		
PJ-150	ø2	163	47	11	15	200	5		

- -200 -250 250 58 380 5 ø3.5 11 16 A safe design that prevents the hand from getting jammed when changing to the wide-sized width.
  Each blade of the "three stage form" allows the tool to grasp thin and thick objects.



# ● COMBINATION PLIERS (SOFT GRIP) PAT.P.

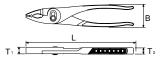


The three stage form of the pliers

COMBINATION PLIERS								
No.	Is able to cut through I arge diameter wires (Steel wire)	L	В	T <sub>1</sub>	T <sub>2</sub>	▼g	#	
PJ-150A	ø2	158	40	11	10	190	5	
-200A	ø2.6	195	45.5	11	11	270	5	
-250A	ø3.5	245	50	11	11	350	5	

- A safe design that prevents the hand from getting jammed when changing to the wide-sized width.
- Each blade of the "three stage form" allows the tool to grasp thin and thick objects





#### COMBINATION PLIERS



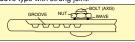
#### The three stage form of the pliers

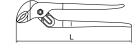
HEAVY DUTY WATERPUMP PLIERS										
No.	Nominal	Applicable Dia	L	▼g	8					
WPD1-250	250	ø6~32	265	360	10					
-300	300	ø6~50	295	500	5					

- The left and right teeth feature special design which become engaged in a unique way when the pliers turn in the direction of engagement.

  • The grooves are worked with a high-precision dedicated machine to eliminate virtually all
- rattle, and reduce slippage and deformation.
- The joint replacement section is fixed firmly in order to prevent accidental changes in

Groove type with strong joint.





#### **OHEAVY DUTY WATERPUMP PLIERS**

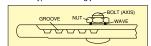


### •WATERPUMP PLIERS WITH SLOTTED



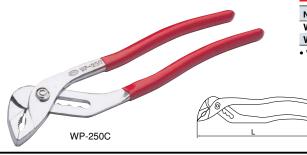
WATERPUMP PLIERS WITH SLOTTED HANDLE-END								
	No.	Nominal	Applicable Dia.	L	▼g	₩		
	WPDA-250	250	ø6~32	260	380	10		

- The shape of the teeth facilitates the grasp when the pliers are turned towards the lower jaw.
- The grooves are worked with a high-precision dedicated machine to eliminate virtually all rattle, and reduce slippage and deformation.
- · Screwdriver-shaped grip end is handy for turning screws and prying



Groove type with strong joint.

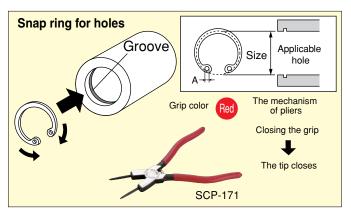
**●WATERPUMP PLIERS** 

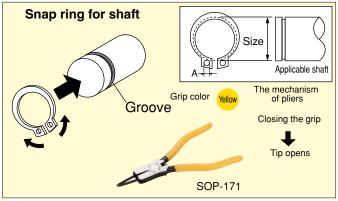


# No. Nominal Policiable Dia. L Type ▼g ⊜ WP-250C 250 ø6~32 245 With Coating With Coating WP-250 245 10 WP-250 250 ø6~32 240 Non Coating WP-250 240 10

#### Types and applicable diameters of the snap ring pliers

- ●KTC sets the claw diameter of the snap ring pliers according to the dimensions of the hole as shown in diagram "A" below. The "A" dimensions determine the nominal diameter of the snap ring according to the JIS standards. Therefore, the application of the snap ring pliers (nominal diameter) is dependent on the claw diameter.
- The grip color of KTC snap ring pliers is differentiated by using red for the "hole type" and yellow for the "shaft type", setting the tip shape according to use by dividing the types into the "straight type" where the tip is straight and the "curved type" where the tip is curved.





#### **•INTERNAL SNAP RING PLIERS**



## INTERNAL SNAP RING PLIERS INTERNAL SNAP RING PLIERS

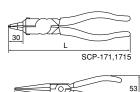
INTERNAL SNAF RING FEIENS							
	Claw Dia.	Applicable Dia.	L	<b>▼</b> g	Œ		
P- 171	ø2.0	19~30	185	200	10		
-1715	ø1.5	12~13	185	200	10		
	P- 171	Claw Dia. P- 171 Ø2.0	Claw Dia.         Applicable Dia.           P- 171         Ø2.0         19~30	Claw Dia.         Applicable Dia.         L           P- 171         ø2.0         19~30         185	Claw Dia.         Applicable Dia.         L         ▼g           P- 171         Ø2.0         19~30         185         200	Claw Dia.         Applicable Dia.         L         ▼g         ⊜           P- 171         ø2.0         19~30         185         200         10	

- The claws are interchangeable. The caulked part of the grips has little looseness. The spring helps open the mouth. (The set of claws shown on page 204 can be used.)
- \* The number marked on the pliers is the product number (SCP-170), which indicates only the pliers themselves (without claws). (The pliers are not sold alone.)

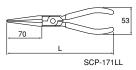
#### INTERNAL LONG SNAP RING PLIERS

No.	Claw Dia.	Applicable Dia.	L	▼g	8	
SCP-171LL	ø 1.2	10~11	220	160	10	

<sup>•</sup> Long clows for use in narrow spaces.







<sup>\*</sup>Replaceable parts are available for the opening/closing spring and screw. Check with your dealer for details.

<sup>\*</sup>Please check the merchandise inventory for a product that is marked by 💋 before placing an order.

#### BENT INTERNAL SNAP RING PLIERS

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No.	Claw Dia.	Applicable Dia.	L	▼g	8	
SCP-172L	ø1.2	10~11	165	200	10	

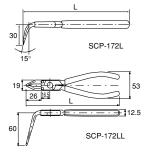
- Claws are interchangeable. (7 kinds of spare claw tip sets are available.)
- Convenient for removing/installing snap rings on master cylinders of brakes.

#### BENT INTERNAL LONG SNAP RING PLIERS

No.	Claw Dia.	Applicable Dia.	L	▼g	8	
SCP-172LL	ø1.2	10~11	175	200	10	

· Long claws (60a) for use in narrow deep spaces.





\*Replaceable parts are available for the opening/closing spring and screw. Check with your dealer for details.

#### **•EXTERNAL SNAP RING PLIERS**



**•BENT INTERNAL SNAP RING PLIERS** 

#### **EXTERNAL SNAP RING PLIERS**

#### **EXTERNAL SNAP RING PLIERS**

No.	Claw Dia.	Applicable Dia.	L	▼g	₩	
SOP- 171	ø2.0	19~30	180	200	10	
-1715	ø1.5	12	180	200	10	

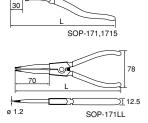
• The claws are interchangeable. The caulked part of the grips has little looseness. The spring helps open the mouth. (The set of claws shown on page 204 can be used.)

#### EXTERNAL LONG SNAP RING PLIERS

No.	Claw Dia.	Applicable Dia.	L	▼g	#	
SOP-171LL	ø1.2	10~11	215	200	10	



EXTERNAL SNAP RING



\* The number marked on the pliers is the product number (SOP-170), which indicates only the pliers themselves (without claws). (The pliers are not sold alone.)

# **(+)** SOP-171 SOP-171LL

#### BENT EXTERNAL SNAP RING PLIERS

#### DENT EVTEDNAL CNAD DING DUEDO

BENT EXTENNAL SNAF HING FEIENS								
	No.	Claw Dia.	Applicable Dia.	L	▼g	#		
	SOP-172	ø2.0	19~30	170	195	10		



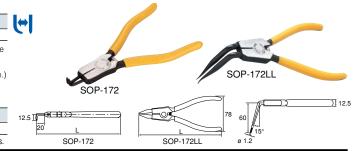
The claws are interchangeable. The caulked part of the grips has little looseness. The spring helps open the mouth. (The set of claws shown on page 204 can be used.)
 The number marked on the pliers is the product number (SOP-170), which indicates only the pliers themselves (without claws). (The pliers are not sold alone.)

#### SNAP RING BENT EXTERNAL LONG SNAP RING PLIERS

No.	Claw Dia.	Applicable Dia.	L	▼g	8			
SOP-172LL	ø1.2	10~11	170	200	10			
*Deplete able parts are available for the appring (alsoing apring and across Check with your deplet for details								

Replaceable parts are available for the opening/closing spring and screw. Check with your dealer for details

#### **•BENT EXTERNAL SNAP RING PLIERS**

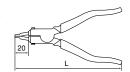


		<u></u>			
No.	Claw Dia.	L	▼g	8	
SOP-173	Flat type	170	195	10	



The claws are interchangeable. The caulked part of the grips has little looseness. The spring helps open the mouth. (The set of claws shown on page 204 can be used.)

The number marked on the pliers is the product number (SOP-170), which indicates only the pliers themselves (without claws). (The pliers are not sold alone.)



\*Replaceable parts are available for the opening/closing spring and screw. Check with your dealer for details

#### ●FLAT TYPE EXTERNAL SNAP RING PLIERS



**(+)** 

## ●INTERNAL-EXTERNAL CONVERTIBLE SNAP RING PLIERS



INTERNAL-EXTERNAL CONVERTIBLE SNAP RING PLIERS						
No.	Diameter of sharp end claw	Applicable Dia.	L	▼g	8	
SOCP-130	ø1.2	For Internal & External	145	120	6	
		10~40				

Good work efficiency for the hole provided on the shaft.





\*Replaceable parts are available for the opening/closing spring. Check with your dealer for details.

#### ●SPARE TIPS FOR SNAP RING PLIERS (10pcs.)



SPARE TIPS FOR SNAP RING PLIERS (10pcs.)						
No.	Contents		L	▼g	#	
SPC 110	Straight type ø2.0	10pcs.	36	40	10	
SPC 110L	Straight type ø2.0 (Long)	10pcs.	46	40	10	
SPC0110	Straight type ø1.5	10pcs.	36	40	10	
SPC0110L	Straight type ø1.5 (Long)	10pcs.	46	40	10	
SPC 210	Bent type ø2.0	10pcs.	34	40	10	
SPC0210	Bent type ø1.5	10pcs.	34	40	10	
SPC 310	Flat type	10pcs.	36	40	10	
SPC5	Straight ø1.5 (Long), ø2.0	1pa.ea.	_	40	10	
	Flat	1pa.				
	Bent ø1.5, ø2.0	1pa.ea.				

- 7 kinds of Interchangeable claws are available for installation/removal of various kinds of snap rings. Economical as the claws are replaceable.
- Claws are made of special alloy steel and specially heat-treated for extra strength. Also upside-down tapered tip to prevent snap rings from clipping off the claws.
- \* Suitable for work in narrow spaces.
- \* Snap ring pliers with a mark as shown on P.134~135 are applicable to the pliers themselves. (Cannot be used for SCP-171LL, SCP-172L, SCP-172LL, SOP-171LL, SOP-172LL, and SOCP-130.)

