



Instruction Manual of Air Nippers

Original instructions



Use

To help you achieve higher productivity and remarkable cost saving in cutting , squeezing , pressing , bending and punching jobs for modern industries .

※EN ISO 11148-2:2011

Product name	AIR NIPPER
Model No.	MP55AK

Attention on safe of this product

- In order to prevent accidents, such as an injury, be sure to follow "attention on safe" expressed below.
- Before use — this "attention on safe" — use it correctly according to directions after often reading all.
- Be sure to keep it to the place where those who use are seen always after reading.



WARNING

<Before work > Intercept an air source of supply at any cost at the time of air hose desorption.

①Do not use any power source except an air compressor.

•The tool is designed to operate on compressed air.

Use only air compressed by air compressors. Do not use any other power source , such as high pressure gas of oxygen , acetylene , propane , etc. which will cause explosive hazard .

②Use it for the work which suited the use.

•This machine is a tool in cutting, punching, pressing, bending and caulking jobs for the following.

The work subjects is copper wire , steel wire, stainless wire, piano wire, hard resin, elasticity resin and a pipe .

•Do not use it in addition to the specified use.

If cutting beyond capability are carried out, it becomes a cause of breakage of brade, a breakage part should fly, and since it is dangerous, never make it absolute.

③Please do not bring a child close.

•Do not let me touch air nippers and an air hose except a worker. It becomes a cause of an injury.

•Do not bring close to a workplace except a worker. It becomes a cause of an injury.

④Keep work area clean.

•The untidy place and working table cause an accident.

•Make a workplace bright enough. A dark workplace causes an accident.

⑤Dress properly . Too large dress and long hair cause an accident.

⑥In order to protect an ear from the exhaust sound and exhaust air , always wear hearing protective equipment.

⑦Use protective equipment.

•Wear a protective glove.

•In cutting, please use an eye shield.

⑧Wear protectors, such as a helmet, safety shoes, and a protection-against-dust mask, according to work environment.

⑨Carry out checking the following items before connecting an air hose.

•The screws of the brade attachment, the main part connection part, and the air piping part don't be loose.

•Be damaged or there need to be no detached parts.

•There need to be no parts in which rust does not operate normally owing to.

Use in the state of being abnormal is forbidden strictly. It becomes an accident and a cause of an injury.

Request repair from the purchased store or Muromoto at the time of an abrupt increase.

⑩Be careful of the following thing when you connect an air hose.

•A hand cannot be touched at a lever.

•The connector to use, please prepare a metal connector.

Please refer to PNEUMATIC CIRCUIT DIAGRAM in page 11.

⑪Connect an air hose and carry out the next check, before attaching blade etc.

•There should be neither an air leak nor unusual sound.

Use in the state of being abnormal is forbidden strictly. It becomes an accident and a cause of an injury.

Request repair from the purchased store or Muromoto at the time of an abrupt increase.

⑫Attach blade certainly according to an operation manual.

•If not certain, it will separate and will become a cause of an injury.

⑬Use appointed accessories and attachment.

•Use neither the accessories of the specification written in this operation manual and our catalog, nor things other than an attachment. It becomes an accident and a cause of an injury.

⑭Do not use it, when blades have modification and a crack.

<Under work > Intercept an air source of supply at any cost at the time of air hose desorption.

① Use the appointed air pressure power.

• The use air pressure power range of this machine is 0.5 – 0.6MPa. Use it within the limits of this.
If it is used by the air pressure power beyond 0.6MPa, there will be a burst of the body and fear of damage and it will become a cause of an injury.

② During use, do not turn tip parts, such as blade, to an operator or other persons, or bring neither a hand nor a face close.

• It becomes a cause of an injury.

③ Do not use it in a place with an inflammable liquid or gas.

• Do not use this machine in a place with the existing inflammable liquid or gas, such as thinner, gasoline, a paint, and gas. Suction compression is carried out together with air, there is fear of explosion or a fire, and it becomes a cause of an accident. It is not designed in the purpose of use in explosive environment.

④ Do not touch blade other than the time of blade exchange and trouble generating.

• Since each air nipper and air scissors have powerful cutting power (sticking-by-pressure power), do not touch blade or do not bring fingers around blade close.

⑤ In the following case, please remove an air hose and extract compressed air.

(There is a possibility that the stored air may cause danger.)

• It is after use at the case where it is not used, or the time of work discontinuation.

• In the cases of check, repair, adjustment, etc.

• When the accessories at the time of blade exchange, etc. are exchanged.

• When moving an air nipper and delivering by hand.

The air nipper operates accidentally and it becomes a cause of an injury.

⑥ Do not let me desorb an air hose, where a finger is applied to a lever.

• The air nipper operates accidentally and it becomes a cause of an injury.

⑦ A workpiece should work fixing firmly.

⑧ Be careful of a surrounding person during work.

• Since cutting has a possibility that scraps etc. may hit in use, do not let an outsider enter within a 1-m radius.
It causes the injury.

• Be sure to confirm well that there are no people, and to use a fall prevention implement downward,
at the time of height work, to equip it with it.

It becomes a cause of an accident when this machine and material are dropped.

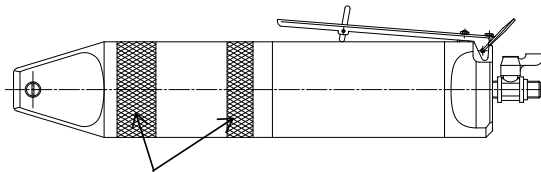
⑨ In the work to a weak material, cause a harmful fragment and be careful.

• Be careful of working leaning the head etc. in the work which discharge of a facet etc. generates.

⑩ Hold the air nipper certainly during use not to be rejected about.

• Hold firmly with both hands. It will become a cause of an injury if it does not hold certainly.

Apply the hand of the way which does not operate a lever to a skid portion, and hold a main body firmly.



The skid portion

⑪ Do not work with an impossible posture.

• Always brace a step and maintain balance.

⑫ Work being careful enough without being inattentive.

• When you use an air nipper, be careful of the handling method, the method of work, a surrounding situation, etc.
enough, and work carefully.

• The untidy place causes an accident.

• Make the workplace bright enough. Work at a dark place becomes a cause of the accident.

• Do not use it, when you are tired.

⑬ Perform the handling of a product carefully.

• Please never raise and lower, carrying the product by using the air hose.

• Please note that the air hose has the possibility of the whip.

⑭ Keep in mind that this air nippers are not insulated for contact with the electric power source.

⑮ When you drop accidentally or you throw, check well that there are not breakage, a crack, and modification in the body etc.

• There is fear of a burst by internal compressed air, and it becomes a cause of an injury.

⑯ During use, when the body is out of condition or you feel abnormalities,

stop use immediately and request repair from the store or the Muromoto ironworker of a purchase.

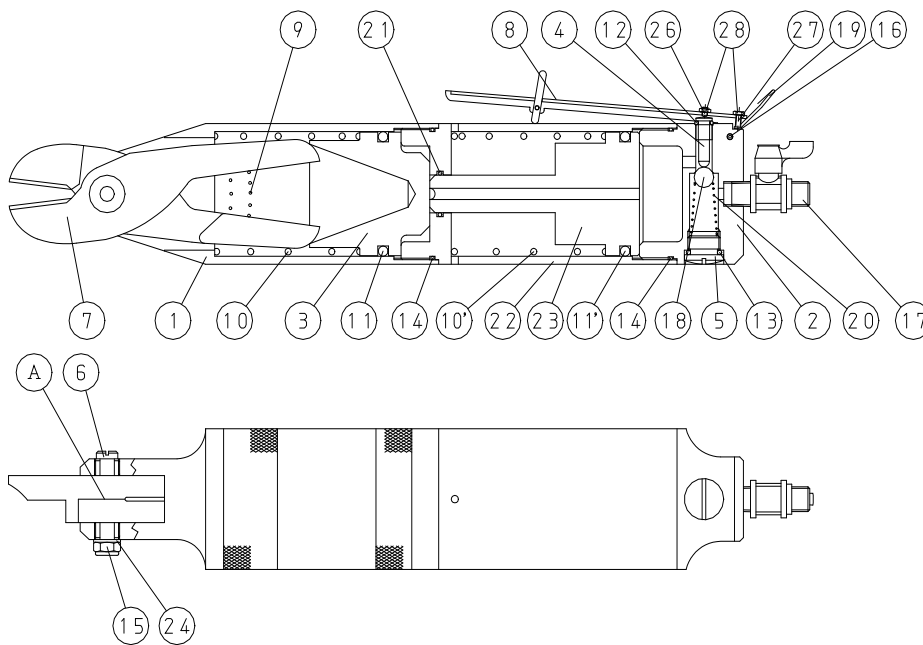
⑰ Never do the non load operation.

• The operation without load causes the damage of the cutting portion.

<After work > Intercept an air source of supply at any cost at the time of air hose desorption.

- ①After work should remove an air hose at any cost.
 - ②Neglect the air nipper and the air-conditioner presser, hit to direct rays for a long time, and come out.
 - ③An air nipper should repair carefully.
 - ④When you do not use it, please keep it exactly.
 - ⑤Do not remove parts or do not convert.
 - ⑥Do not use anythings other than the recommended lubricous material.
 - ⑦Request repair of the air nipper from the specialty store.
- Be sure to tell the store or Muromoto of a purchase repair.
If it fixes by itself, it will become an accident and a cause of an injury.

Machine construction (Parts list)



No.	DESCRIPTION
1	Body A
2	Body B (with ⑭O-Ring)
3	Piston (with ⑪O-Ring)
4	Valve Pin (with ⑫O-Ring)
5	Screw (with ⑬O-Ring)
6	Screw Pin (with ⑮Nut) (with 24Washer)
7	Blades
8	Lever (with 26ScrewA) (with 27ScrewB) (with 28Nut)
9	Spring
10	Spring
10'	Spring
16	Spring Pin
17	Air Nipple
18	Urethane Ball
19	Hanger
20	Spring
22	Body C (with ⑭O-Ring) (with 21O-Ring)
23	Piston B (with 11'O-Ring)

※A: Sliding Surface

Product specification

Model No.	MP55AK		
Product name	AIR NIPPER		
Product description	To help you achieve higher productivity and remarkable cost saving in cutting, squeezing, pressing, bending and punching jobs for modern industries . Equipped with different types of replaceable cutting blades , this AIR NIPPER can be versatile for various applications .		
Length(mm)	372		
Weight (g)	2,275		
Grip diameter(ϕ)	ϕ 75		
Air consumption(cm ³ /回)	2,670		
Welding pressure(N)	7,740		
Air pressure(Mpa)	0.5~0.6		
Noise emission values (based on ISO 15744)	A-weighted sound pressure level: dB(A)	A-weighted sound power level: dB(A)	Uncertainty K
	69.9	74.9	2.52
Vibration values (3 axes integrated: based on ISO 20643)	Vibration value: m/s ²		Uncertainty K
	6.1		1.65

Maintenance

Be sure to observe maintenance check.

If check is neglected, it will become an accident and a cause of failure.

Be sure to perform maintenance check before work and after work.

Remove an air hose at any cost in the case of check and care.

- Check whether there is neither dirt nor a crack in the appearance of a main part and an air hose.
- Check whether there is neither slack nor an air leak in each connection part, the screw, the nuts, main part, and air charging line part of a main part.

If it is used in the state where it loosened, the accident in the circumference of a worker and a workplace may be caused, and the lack of ability by main part breakage or air leak is caused.

- Carry out the check of operation of whether the air nipper is operating normally.
(Refer to the diagram of an operation manual of operation for normal operation.)

- The scupper method of an air compressor

If an inside is covered with water or oil, it will become a cause of failures, such as generating of rust.

Remove the oil or water from inside the air compressor by drain port, before and after using

Use the dry pure compressed air.

(Refer to the operation manual of an air compressor for details.)

- Piping

Be sure to use the air which let the air filter pass and which does not contain moisture.

Remove finely so that the garbage adhering to a nipple, etc. do not enter in a hose.

- Confirm whether to find abnormality in the air compressor.

(Refer to the operation manual of an air compressor for details.)

- Every hour five or six drops should lubricate the union portion of blades during work .

- Use it by the appointed air pressure power.

It is maximum use air pressure power 0.6MPa of this machine.

Use it within the limits of this.

If it is used by the air pressure power beyond 0.6MPa, there will be a burst of the body and fear of damage and it will become a cause of an injury.

• Use the appointed accessories.

Please do not use anything other than the accessories of the specification written in this operation manual and our catalog.

Since there is a possibility of becoming a cause of accidents, such as an injury.

• The use by an abnormal condition causes an injury and breakage of the body.

Request repair from the store or our company of a purchase in the case of abnormalities.

Neglect neither this machine nor an air compressor, hit to direct rays for a long time.

This machine should be repaired carefully.

When you do not use it, please keep it exactly.

Do not remove parts or do not convert.

I will carry out the product given unjust decomposition and reconstruction the outside of the object of a guarantee.

No responsibility for the failure accompanying a user's own reconstruction act or fault is taken.

Periodic check list

Time of check	Check	Do	
Before work	It is the existence of slack or breakage to screw pin (6) part.	It is.	→ Bolting or part exchange
	Existence of an air leak of air pin (4).	It is.	→ Part exchange
	Existence of an operation in the state where the valve switch was closed	It is.	→ Maker repair
	The crack in an appearance side, and the existence of a crack	It is.	→ Part exchange
At the time of work	Existence of slack of a lever part (8)	It is.	→ Maker repair
	It is checked whether the spring and the piston and the lever are operating normally.	It is.	→ Maker repair or Part exchange

※It recommends exchanging pistons in six months.

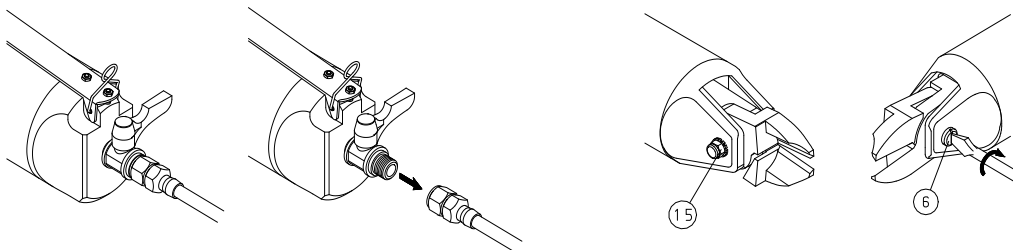
•How to bind tight in case screw pin(6) has slack

(1) Intercept an air source of supply.

(2) Remove an air hose from a main part. (Refer to Fig. 1)

(3) Fasten a screw pin(6) with a minus driver and be crowded with the state where the nut(15) was made to fix with a spanner etc.

Fig. 1



•The exchange method of screw pin(6)

(1) Intercept an air source of supply.

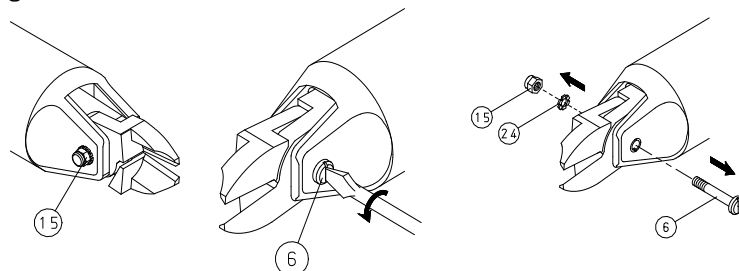
(2) Remove an air hose from a main part. (Refer to Fig. 1)

(3) Please loosen screw pin(6) with a minus driver in the state where nut(15) was made to fix with a spanner etc., and remove nut(15). (Refer to Fig. 2)

(4) Extract screw pin(6) and replace with a new screw pin.

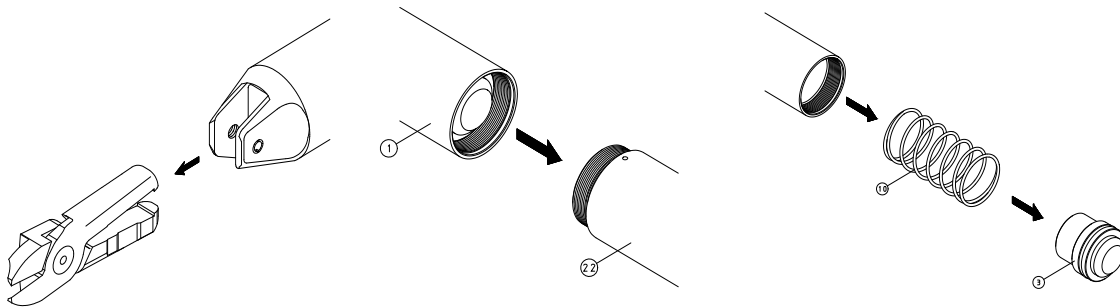
※Keep in mind that it will be in the state where blades separate when screw pin(6) is removed.

Fig. 2

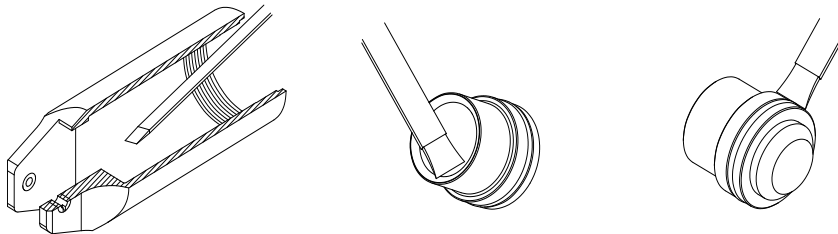


•The exchange method of a main part A(①) piston(③) return spring(⑩)

- (1) Intercept an air source of supply.
 - (2) Remove an air hose from a main part. (Refer to Fig. 1)
 - (3) Remove screw pin(⑥) and nut(⑮) and remove blades from a main part. (Refer to Fig. 2)
 - (4) Remove the main part C(22). (It turns to a clock and an opposite direction)
 - ※Keep in mind that a piston may jump out at this time.
 - (5) Carry out a grease rise for the inside of the new main part A(①).
 - (6) Carry out the grease rise of the inside and O ring portion of new piston(③) (with O ring(⑪)).
 - (7) Put new return spring(⑩) into the main part A.
 - (8) Put in new piston(③) which carried out the grease rise, fasten the main part C and complete.
- ※1. In exchange of the main part A, take the dirt of the existing piston(③), carry out a grease rise at the inside of a piston, and O ring portion, and include in the existing spring and (5).
2. In exchange of only a spring, please clean the existing main part A and the existing piston finely, carry out a grease rise and include in a required place with a new spring.
 3. In exchange of only a piston, clean and grease rise the inside of the existing main part A finely, and incorporate with the existing spring.



※Grease rise part



- The inside of main part A
- The inside of a piston
- Piston O ring portion

※Recommendation lubricant (grease rise) : Shell Alvania Grease RA-J

•The exchange method of a main part C(22),a piston B(23), and a return spring(10')

(1) Intercept an air source of supply.

(2) Remove an air hose from a main part. (Refer to Fig. 1)

(3) Remove the main part A(①) and the main part B(②). (Let me rotate counterclockwise.)

※Keep in mind that a piston may jump out at this time.

(4) Carry out the grease rise of the new inside of a main part C(22),and the O ring portion (O ring(⑭),O ring(21

(5) Carry out the grease rise of the O ring portion of a new piston(23) (with O ring(11')).

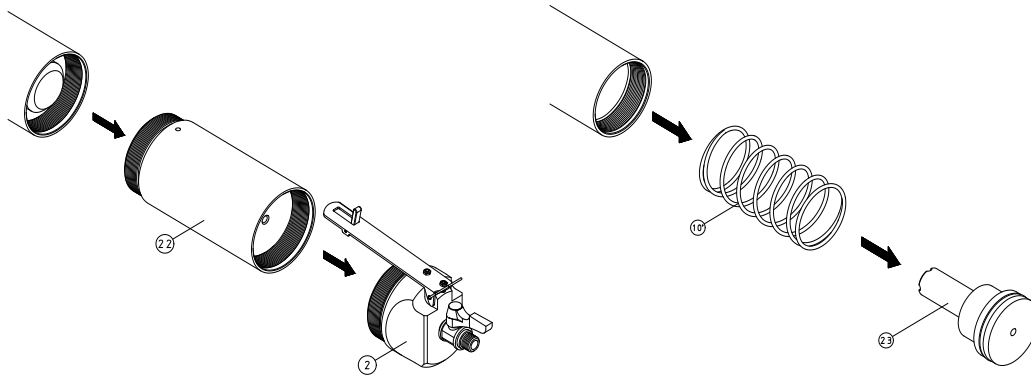
(6) Put a new return spring(10') into the main part C.

(7) Put in the new piston(23) which carried out the grease rise, fasten the main part A and the main part B, and be crowded complete.

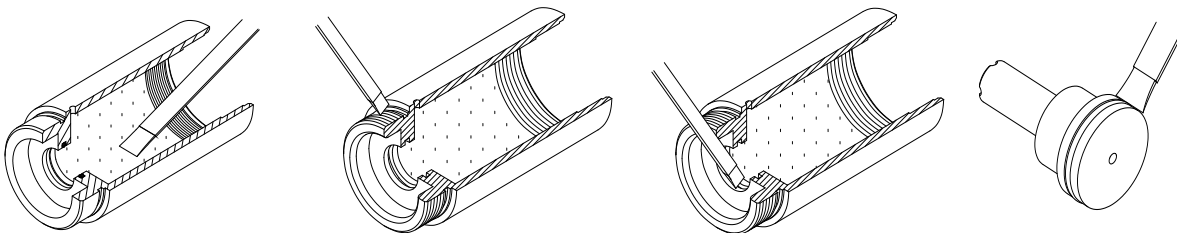
※1. In exchange of the main part C, take the dirt of the existing piston(23), carry out a grease rise at the O ring portion, and include in the existing spring.

2. In exchange of only a spring, clean the existing main part C and piston,and include O ring portion in the existing after grease rising.

3. In exchange of only a piston, clean the existing inside of a main part finely,and incorporate with the existing spring after a grease rise.



※Grease rise part



•The inside of main part C

•O ring(⑭) portion of main part C

•O ring(21) portion of main part C

•O ring portion of Piston I

※Recommendation lubricant (grease rise) : Shell Alvania Grease RA-J

•The replacement procedure of a lever

- (1) Intercept an air source of supply.
 - (2) Remove an air hose from a main part. (Refer to Fig. 1)
 - (3) Remove hook(19). (Refer to Fig. 3)
 - (4) Pull out roll pin(16) using pin omission, and remove lever(8). (Refer to Fig. 4)
 - (5) New lever(8) is set, insert roll pin(16), hit the head lightly, and make it come out equally.
 - (6) Hook(19) is attached.
 - (7) Thrust adjustable screw B(27) into the lower part by a wrench to the place which hits lightly, and make it fix with nuts(28).
- ※Keep in mind that the safe stopper of a lever stops working
- (8)From a nipple(17), air is put in and a valve switch(41) is opened.
- ※Be sure to remove blades from a main part for dangerous prevention at this time.
- (9)Adjustable screw A is thrust by a wrench in the state of lever-on.
- Although air leaks from near air pin (4) on the way, if it thrusts as it is, an air leak will stop.
Please let me fix with nuts(28) in the position at which the air leak stopped.
- ※When you make (28) fix, be careful for an adjustable screw not to turn simultaneously.
Attachment of a lever is completion above.

Fig. 3

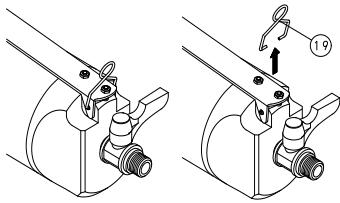
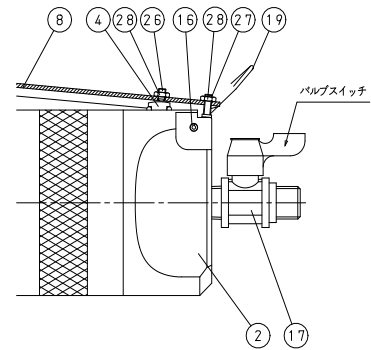
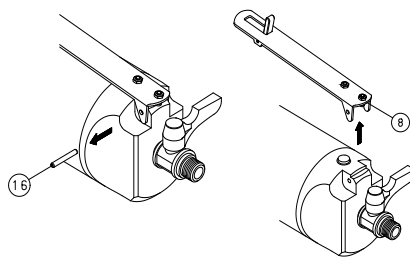


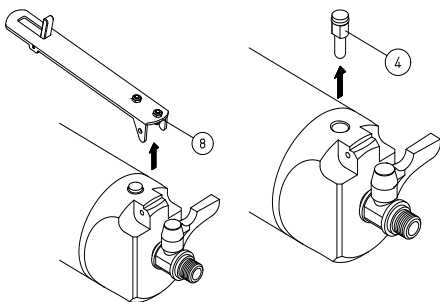
Fig. 4



●Where a lever is pushed in completely, when there is an air leak from an air pin part
Exchange of air pin(4) (with O ring) is required.

• The exchange method of air pin(4)

- (1) Intercept an air source of supply.
- (2) Remove an air hose from a main part. (Refer to Fig. 1)
- (3) Remove hook(19). (Refer to Fig. 3)
- (4) Pull out roll pin(16) using pin omission. (Refer to Fig. 4)
- (5) Remove lever(8) and exchange air pin (4) (with O ring).
- (6) Attach a lever(8) , roll pin(16) , hook(19), and complete.



●When there is an air leak from an air pin part in the state Where the lever is not pushed
(state which the valve switch opened)

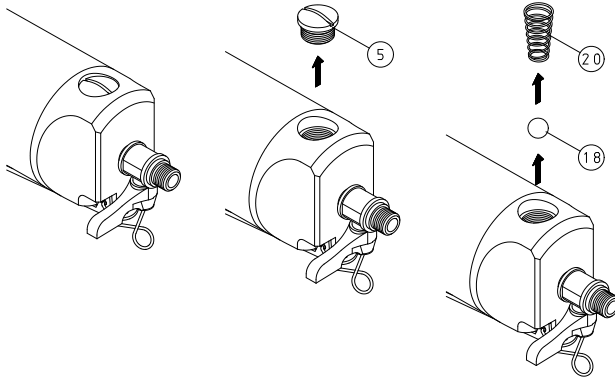
A urethane ball(18) needs to be exchanged.

•The exchange method of a urethane ball(18)

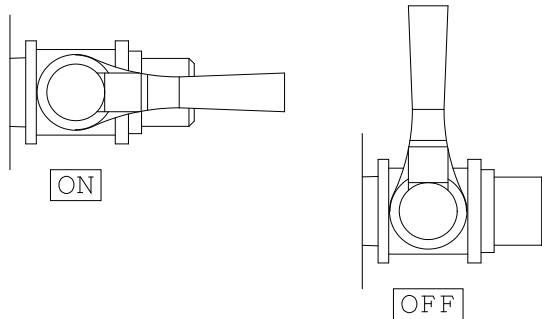
- (1) Intercept an air source of supply.
- (2) Remove an air hose from a main part. (Refer to Fig. 1)
- (3) Remove screw(5) with a minus driver.
- (4) Take out a spring (20) and urethane ball(18).
- (5) Put in new urethane ball(18).
- (6) Put in spring(20).

* Direction of a spring (urethane ball side: a smallness side, the screw side : a largeness side)

- (7) Screw(5) is attached and it completes.



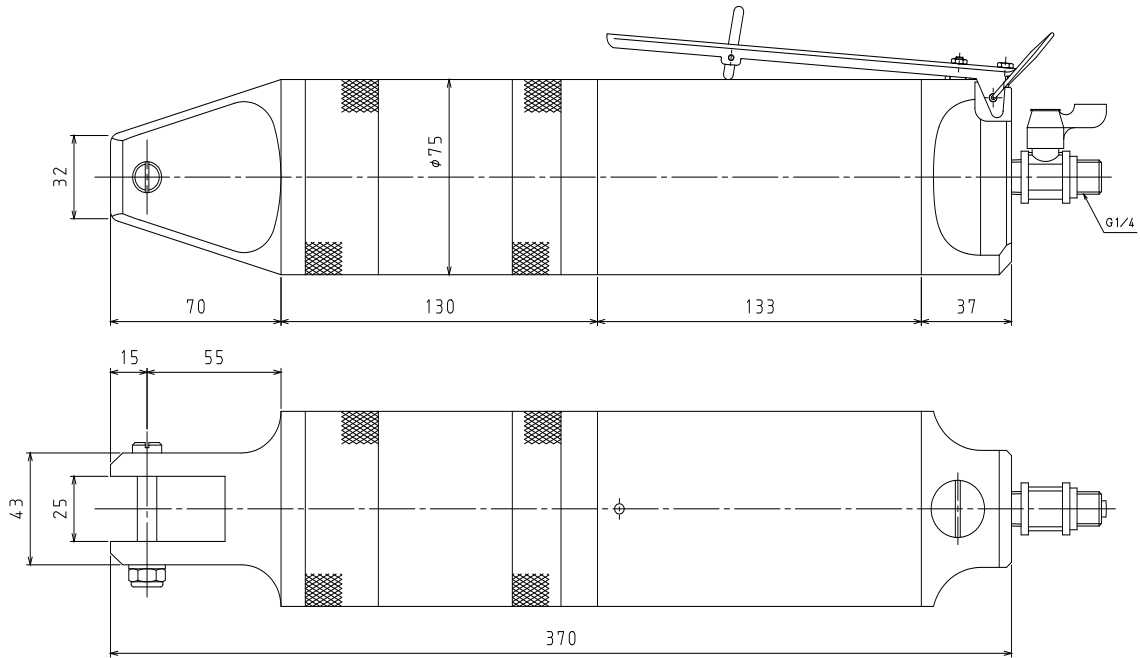
※For safe reservation, please close a valve switch before performing the above-mentioned maintenance.



●When there is an air leak from an air pin part in the state Where the lever is not pushed.
(state which closed the valve switch)

- (1) Request repair from a maker through the store for which it asks.

Appearance dimensional drawing

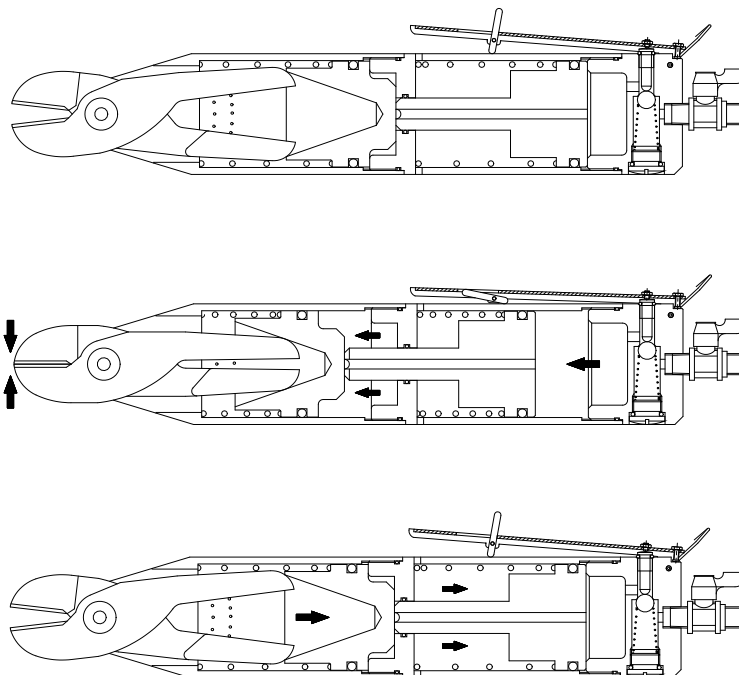


Directions for use

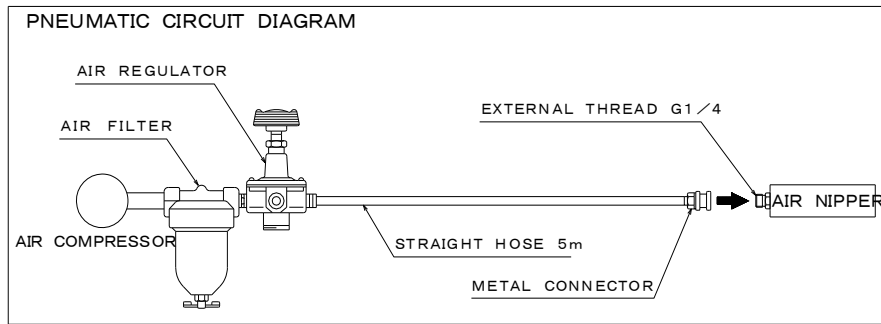
- Connect an air hose.
- Hit a work subject to a cutting part and press down a lever lightly.



● A diagram of operation



● The air supply method (circuit)



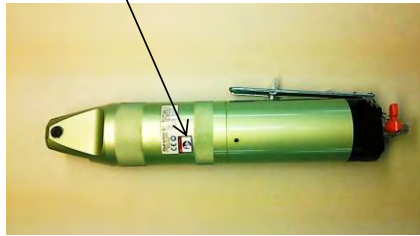
Warning label - Information label

● Warning label



: Read the instruction manual before usage of air nipper

● Warning label attachment position



● Information label



- Air Pressure
- Caution !
- CE mark

● Information label attachment position



● Serial No. - Model No.



At the time of repair

This product is manufactured in strict accuracy.
 Request the store or the Muromoto TEKKO of a purchase without never fixing in person,
 when it stops operating normally.
 If it fixes by itself, it will become an accident and a cause of an injury.
 In addition, when you are on the case where he wants parts, or handling and it is troubled, please ask.