

# 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.

XEN ISO 11148-2:2011

Product name	AIR NIPPER
Model No.	CP-20

# 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.



# WARNIN

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

#### Do 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.

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

## TUse protective equipment.

- •Wear a protective glove.
- ·In cutting, please use an eye shield.
- Wear 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.

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

- ·A hand cannot be touched at a lever.
- ${}^{\textstyle \bullet} \text{The connector}$  to use, please prepare a metal connector.
- Please refer to PNEUMATIC CIRCUIT DIAGRAM in page 10.

#### (I) Connect 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.

### **2**Attach blade certainly according to an operation manual.

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

## <sup>3</sup>Use 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.
- MDo 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.

#### ①Use 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.

②During 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.

#### 3Do 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.

#### 4Do 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.

## 6Do 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.

7A workpiece should work fixing firmly.

#### 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.

#### 9In 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.

#### MHold an air nipper certainly during use not to be rejected about.

·It will become a cause of an injury if it does not hold certainly.

#### Do not work with an impossible posture.

·Always brace a step and maintain balance.

### 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.

#### <sup>(3)</sup>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.

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

# 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.

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

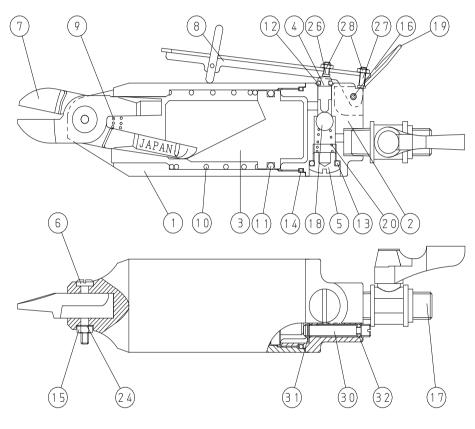
stop use immediately and request repair from the store or the Muromoto ironworker of a purchase.

## Mever do the non load operation.

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

- <a href="#"><After work"></a> 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.
- When 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.
- TRequest 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 40-Ring)
3	Piston_
,	(with ①O-Ring)
4	Valve Pin
7	(with ②O-Ring)
5	Screw
,	(with ③0-Ring)
	Screw Pin
6	(with ①Nut)
	(with 24Washer)
7	Blades
	Lever
8	(with 26ScrewA)
ō	(with 27ScrewB)
	(with 28Nut)
9	Spring
10	Spring
16	Spring Pin
17	Air Nipple with a
	Valve
18	Urethane Ball
19	Hanger
20	Spring
	Adjusting bolt
30	(with 31E-Ring)
30	
l	(with 320-Ring)

# **Product specification**

Model No.	CP-20			
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)	170			
Weight(g)	455			
Grip diameter(φ)	φ 45			
Air consumption(cm3/回)	230			
Welding pressure(N)	1,370			
Air pressure (Mpa)	0.5~0.6			
Noise emission values (based on ISO 15744)	A-weighted sound pressure level: dB(A)	A-weighted sour power level: dB(		Uncertainty K
	67.6	72.5		2.09
Vibration values (3 axes integrated:	Vibration value: m/s2		Uncertainty K	
based on ISO 20643)	5.2		2.51	

# **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 anythings 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 repair 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		
	It is the existence of slack or breakage to screw pin(⑥) part.	It is.	1	Bolting or part exchange	
	Existence of an air leak of air $pin(4)$ .	It is.	$\uparrow$	Part exchange	
Before work	Existence of an operation in the state where the valve of a nipple with a valve ① was closed	It is.	1	Maker repair	
	The crack in an appearance side, and the existence of a crack	It is.	$\rightarrow$	Part exchange	
	Existence of slack of a lever part(8)	It is.	$\uparrow$	Maker repair	
At the time	It is checked whether the spring and the piston and	It is.		Maker repair or	
of work	the lever are operating normally.	10 15.		Part exchange	

XIt 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.

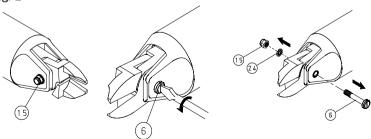
Fig. 1



#### •The exchange method of screw pin(6)

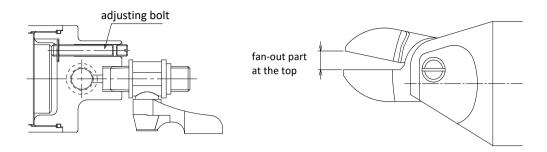
- (1) Intercept an air source of supply.
- (2) Remove an air hose from a main part. (Refer to Fig. 1)
- (3) Please loosen screw pin(6) with a minus driver in the state where nut(15) was made to fix with a spanner etc., and remove nut(15). (Refer to Fig. 2)
- (4) Extract screw pin(6) and replace with 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



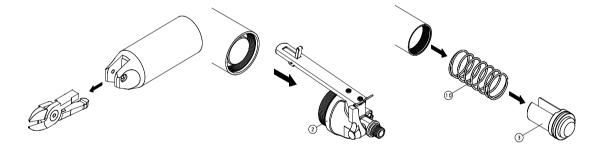
#### •The adjustment method of fan-out part at the top

- (1) The size of fan-out part at the top can be made small if an adjusting bolt is turned to the right.
- (2) The size of fan-out part at the top can be enlarged if an adjusting bolt is turned to the left.
- \*Keep in mind that a Oring will be damaged if an adjusting bolt is fastened too much.

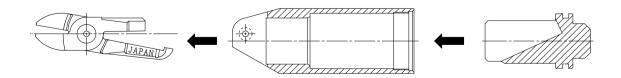


#### •The exchange method of a main part A(1) piston(3) return spring(10)

- (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(⑯) and remove blades from a main part. (Refer to Fig. 2)
- (4) Remove the main part B(2). (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(1))).
- (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 B 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.

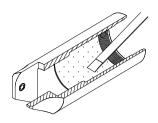


# \[ \times How to incorporate CP type blades and piston(3) \]

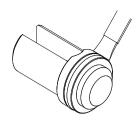


•Like of the above-mentioned Figure, Incorporate so that fixed blades and a piston(③) cut part become above a main part.

#### XGrease 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 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).
- XKeep in mind that the safe stopper of a lever stops working
- (8)From an air nipple with a valve (11), air is put in and a valve switch of an air nipple 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  $pin(\widehat{A})$  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.



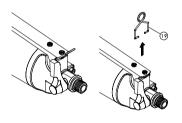
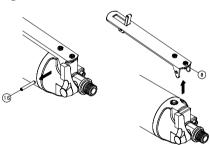
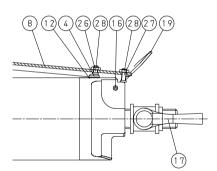
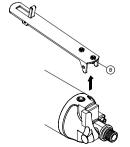


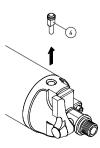
Fig. 4





- •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 0 ring).
- (6)Attach a lever(8), roll pin(16), hook(19), and complete.

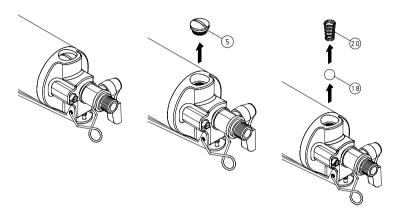




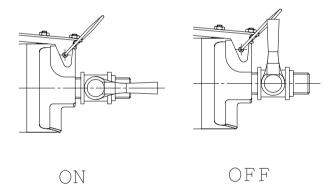
# ●When there is an air leak from an air pin part in the state Where the lever is not pushed (state which the valve switch of a nipple with a valve opened)

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.

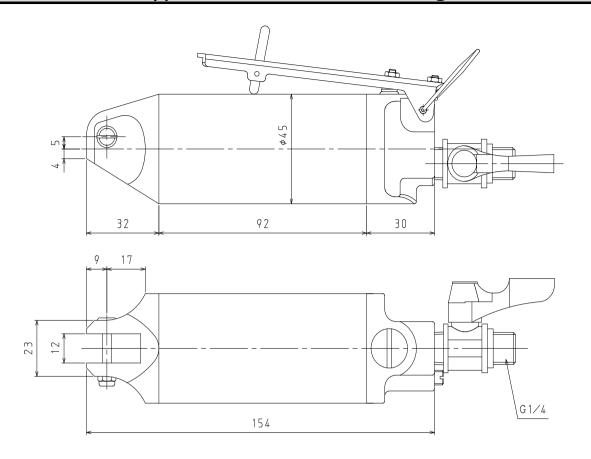


\*For safe reservation, please close the valve switch of a nipple with a valve before performing the above-mentioned maintenance.



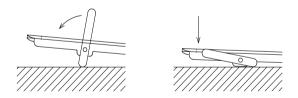
- ●When there is an air leak from an air pin part in the state Where the lever is not pushed. (state which closed the valve switch of a nipple with a valve)
- (1) Request repair from a maker through the store for which it asks.

# Appearance dimensional drawing

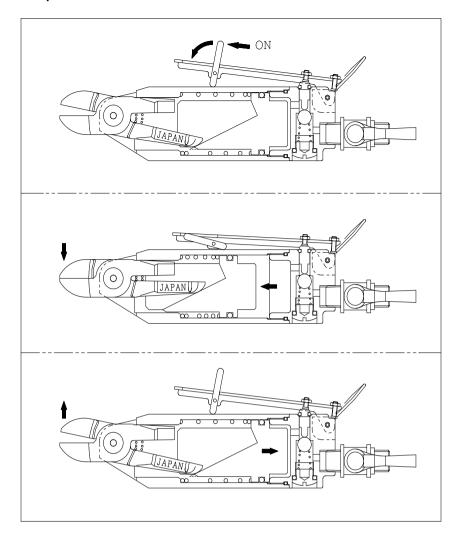


# Directions for use

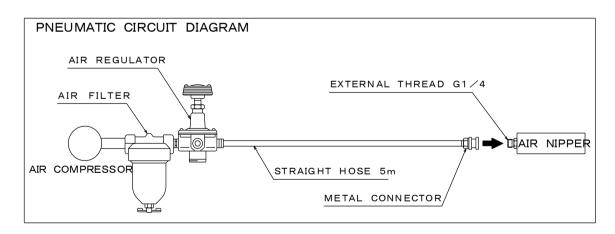
- Connect an air hose.
- •Hit a work subject to a cutting part and press down a lever lightly.



# ●A diagram of operation



# ●The air supply method (circuit)



# Warning label Information label

# Warning label

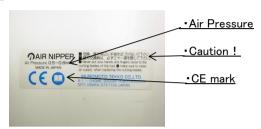


: Read the instruction manual before usage of air nipper

# Warning label attachment position



# ●Information label



●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.



### Manufacturer.

Merry - Brand, Hand Tools & Nile - Brand, Pneumatic Tools

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# **EC DECLARATION OF CONFORMITY**

# We, the undersigned,

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COUNTRY	JAPAN
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FAX NUMBER	+81-72-850-0082

## under our sole responsibility , declare that the product

Product name	AIR NIPPER
Model No.	CP-20

# complies with the provisions of following European Directives.

European Directive	Machinery Directive, 2006/42/EC

#### Applied Harmonized Standards:

Machinery Directive , 2006/42/EC	EN ISO 12100:2010
	EN ISO 11148-2:2011

# The Technical documentation is kept at the following address.

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