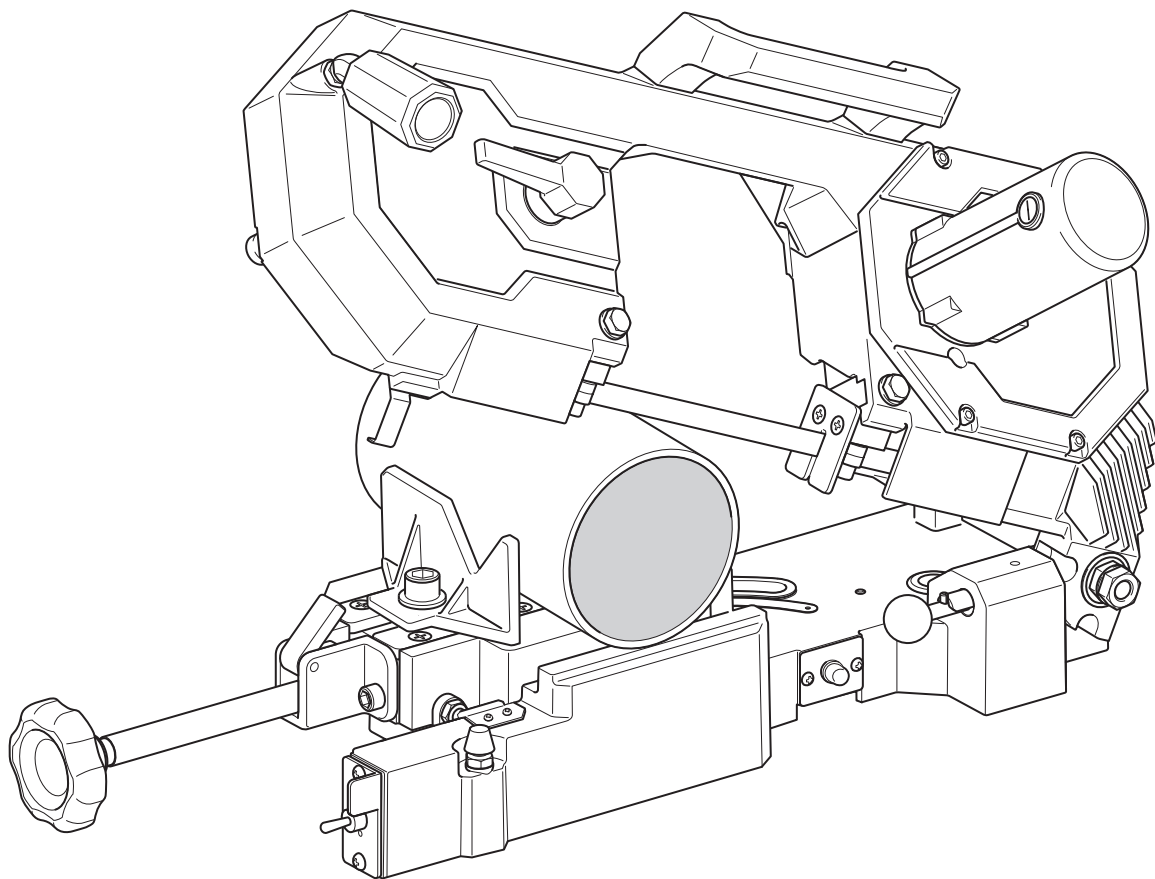


# Asada

## BAND SAW

# BEAVER4 ACTIVE

## INSTRUCTION



**[Read through this manual carefully before using the machine]**

# BAND SAW BEAVER4 ACTIVE

## SAFETY PRECAUTIONS

Thank you for choosing our BAND SAW BEAVER 4ACTIVE.

\*This Instruction Manual must be retained by the user of this machine.

\*Read this Instruction Manual carefully and completely before use and thoroughly understand the usage, capacity, cautions, and easy repairs for correct operation.

\*Handle the machine properly to make full use of its functions for safe work.

\*After reading the instructions, save this manual so that you can read it when necessary.

\*Use the machine for the intended application only. It will do a better job and be safer at the rate for which it was designed.

\*Upon receiving the machine, check the following.

Check that the machine is built conforming to the specifications stated in your order.

Check the overall machine for any damage or deformation caused in transit due to accidents or other reasons.

Check that all items and accessories delivered.

In case any discrepancy is found, immediately report the fact to the shop you purchased or our sales office.

(The contents of this manual are subject to change without prior notice.)

## CLASSIFICATION OF CAUTIONS

Precautionary signs are classified into the following 3 levels.



Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.



Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.



Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.

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# BAND SAW BEAVER4 ACTIVE

## OPERATING INSTRUCTIONS

- Please observe “OPERATING INSTRUCTIONS” to prevent fire, electric shock or injury.
- Before using, please understand all the contents of “OPERATING INSTRUCTIONS” and follow the instructions.
- After reading this manual, please keep it so that you can take it out at any time.

### DANGER

- Always ground the machine to avoid electric shock or resultant death.
- Do not touch Power Plug with wet hands.
- Do not expose the machine to rain and water and use it in damp or wet locations. Humidity may deteriorate the motor insulation and it leads to electric shock.
- Immediately replace Power Plug, Power Cord or the extension cord, if damaged.
- Do not pull out Power Plug from the receptacle holding itself or place the machine on Power Cord not to damage Power Cord.
- An extension cord used should be a three-core cable having an earth wire.  
Use a thick and durable cord for outdoor use.

### WARNING

- Always use the machine at the voltage indicated on Machine Plate.  
Otherwise, the machine may become hot, emit smoke or catch fire.
- At cutting do not force the machine in a manner that Motor stops due to an overload switch.
- If the machine has emitted smoke or caught fire, do not disassemble it unnecessarily and request inspection or repair.
- Never ground the machine with a gas pipe as it may cause an explosion.
- Do not use the machine in the presence of flammable liquids or gases such as gasoline and thinner. Otherwise, ignition or explosion may take place.
- The machine and other parts coast for a while after the machine is turned off.  
Never touch them while they are moving.
- Cut surfaces are very sharp and do not touch them with bare hands.
- When it is required to touch Saw Blade and the moving parts for replacement, etc.,  
turn off the machine and unplug it before starting that operation.
- Before plugging the machine in, always make sure that the machine is turned off. If the machine remains turned on, it will start suddenly and lead to unexpected accident or injury.
- During operation, keep your hands and face away from the moving parts. You may be caught in the moving parts, and it causes injury.
- Do not use gloves for works such as cutting. You may be caught in the moving parts, and it causes injury.
- Do not wear neckties, open-sleeved clothing, knitted gloves, loose clothing or jewelry (such as necklaces). Otherwise, you may get caught in moving parts.

# BAND SAW BEAVER4 ACTIVE

## WARNING

- Wear caps or protective hair covering to contain long hair. Otherwise, you may get caught in moving parts.
- When not in use or at servicing, cleaning, checking or replacing parts, turn off and unplug the machine. If the machine remains plugged in, it may start suddenly, and leads to accident or injury.
- Do not leave the machine during operation. Others may get caught in the moving parts.
- Use Pipe Support for long and heavy workpieces to avoid shaking and distortion. Otherwise, the workpieces are distorted and the weight of the workpiece tilts the machine.
- Wear safety glasses during operation. Chips may enter your eyes and nose.
- Do not blow off chips with compressed air. They may get into your eyes and loss of eyesight may result.
- Use a face or dust mask for operations which generate dust. Chips and dirt may enter your eyes and nose.
- Take sufficient measures to prevent dust and scattering.  
In particular, be careful when cutting materials that contain harmful ingredients to human body.
- Do not use the product in an environment around asbestos (including removal work).  
Asbestos is a substance that causes serious health problems such as lung cancer in the human body.
- Immediately after cutting, cut surfaces are hot. Do not touch them with bare hands.
- When lifting the machine, bend your knees to avoid a load on your waist.
- The machine with chip is slippery. Do not drop the machine on your feet while lifting it.
- Do not install the machine inclined or on an unstable place. The machine may fall down, and it may cause injury.
- Always keep proper footing and balance. You may tumble and get hurt.
- Do not operate the machine when you cannot concentrate on your work, e.g. when you are tired or while under the influence of alcohol, medication or drugs.
- Before turning on the machine, make sure that hand tools used for inspection or adjustment are removed from the machine. Accident or injury may occur if you start the machine with hand tools on it.
- Use only the accessories and attachments given in this manual and our catalogs.  
A failure to do so will lead to accident or injury.
- Immediately stop the machine if something is wrong with the machine or you have noticed unusual smell, vibration, sound, etc. during operation, and refer to "BEFORE ASKING FOR REPAIRS" in this manual and follow the corresponding instructions.
- Repair should only be carried out by our sales representative. Otherwise the machine may not perform fully or you may get injured. Ask the shop your purchased or our sales office.
- Our products are in accordance with the relevant safety rules. Do not modify them.

# BAND SAW BEAVER4 ACTIVE

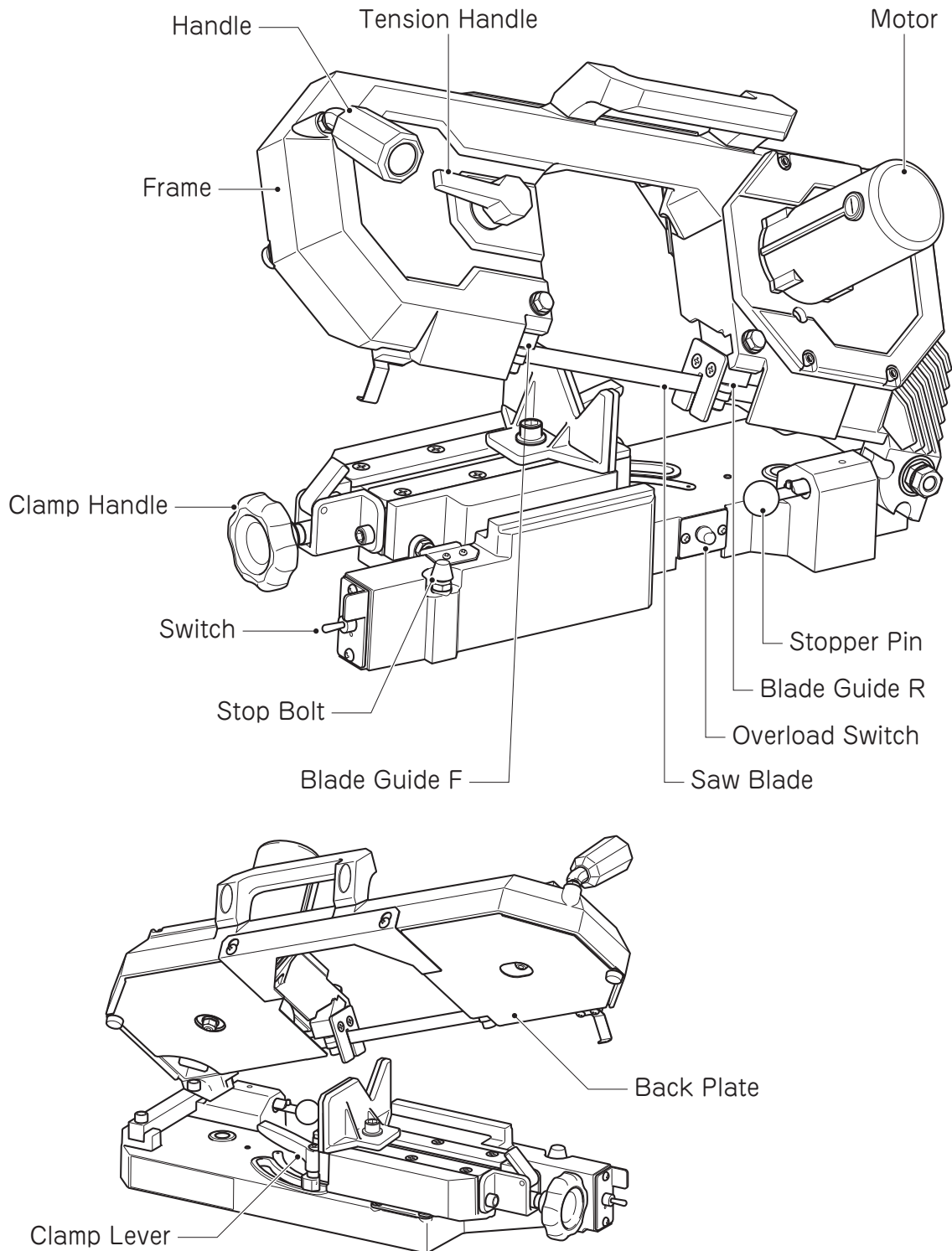
## CAUTION

- Watch the position of your fingers while lowering frame to avoid pinching of fingers.
- Do not leave the machine with a long workpiece set on it. You may tumble and get injured.
- Securely install accessories in accordance with this manual. Otherwise, accident or injury may result.
- Before further use of the machine that is damaged it should be carefully checked to determine that it will operate properly and perform its intended function.
- If you have dropped or hit the machine accidentally, carefully check for damage, crack or deformation. If the machine is used with such defect, poor cutting accuracy, accident and injury can result.
- Before leaving the machine for a long time, disconnect Power Plug.
- The workpiece with chip is slippery. Do not drop it on your feet.
- Keep your work bench and area tidy and well lit. Cluttered areas and benches invite injuries.
- Do not let visitors touch the machine and Power Cord or operate the machine.
- When not in use, machines should be stored in dry and high or locked up place out of reach of children.
- We cannot accept repairs of Power Tools that have been used in an environment around asbestos.

# BAND SAW BEAVER4 ACTIVE

## COMPONENTS OF THE MACHINE

### Main Parts



# BAND SAW BEAVER4 ACTIVE

## Specifications

Item		BAND SAW BEAVER 4 ACTIVE	
Cutting Capacity	0°	Round	φ 120 mm
		Square	□100 mm
	45°	Round	φ 50 mm
		Square	□50 mm
Blade speed	No Load		75m/min (50/60Hz)
	Cutting		45m/min (50/60Hz)
Motor		Voltage made to order	
Dimension (L×W×H)		600 × 250 × 290 mm	
Weight		16.5kg	
Standard Accessories		71151 SAW BLADE BB4A HSS 14T	

\*Specifications are subject to change without prior notice.

## Optional Accessories

Code No.	Description	Pcs/Box	Remarks
71151	SAW BLADE BB4A HSS 14T	5 pcs	Steel Pipe over 1.1/2, Steel over t=4mm
71152	SAW BLADE BB4A HSS 18T	5 pcs	Steel under t=4mm, Conduit thin wall pipe
BA900	Pipe Support 4A	1 pcs	Min height 75mm, Max height 100mm, Max load 80kg

# BAND SAW BEAVER4 ACTIVE

## Saw Blade Selection Chart

		14T	18T
Steel Pipe (Size)	Under 1.1/4"		○
	1.1/2"~2.1/2"	○	○
	3"~4"	○	
Conduit Pipe	Thin wall		○
	Thick wall		○
Shaped Steel & Rods (Thickness, mm)	Under 3.9		○
	4.0~4.9	○	○
	5.0~	○	
Stainless Steel Pipe (Thickness, mm)	~3.9		○
	4.0~	○	○
PVC Pipe		○	
Ductile Cast Iron Pipe for Drain (Excluding Mortared Cast Iron Pipe)		○	

- \*1. In Saw Blade selection, select suitable T.P.I. Two or more teeth should be in the thickness of the workpiece.
- \*2. The above chart is provided as a guideline. In case of cutting accuracy is not good with thin wall materials and PCV Pipes, cut them slowly holding Frame during cutting process.



# **BAND SAW BEAVER4 ACTIVE**

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# BAND SAW BEAVER4 ACTIVE

## INSTALLATION

### Carrying the Machine

#### ⚠ WARNING

- When lifting the machine, bend your knees to avoid a load on your waist.
- The machine with chip is slippery. Do not drop the machine on your feet while lifting it.

### Installation

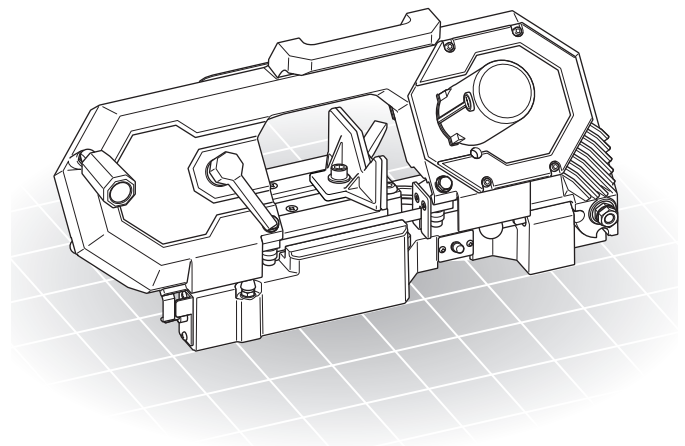
#### ⚠ DANGER

- Always ground the machine to avoid electric shock or resultant death.
- Do not touch Power Plug with wet hands.
- Do not expose the machine to rain and water and use it in damp or wet locations. Humidity may deteriorate the motor insulation and it leads to electric shock.
- Immediately replace Power Plug, Power Cord or the extension cord, if damaged.
- An extension cord used should be a three-core cable having an earth wire. Use a thick and durable cord for outdoor use.

#### ⚠ WARNING

- Never install an earth wire to a gas pipe as it may cause an explosion.
- Do not use the machine in the presence of flammable liquids or gases such as gasoline and thinner. Otherwise, ignition or explosion may take place.

1. Put the machine in a place free from moisture.
2. Put the machine on a flat surface without play or on a flat work bench.
3. Secure a sufficient space around the machine. Even wider space is needed when cutting long workpieces.
4. In case of cutting long workpiece, use Pipe Support. Be careful not to apply excessive force to the machine.
5. Make sure that the power source is equipped with a ground fault circuit breaker to avoid electric shock.
6. Use an earth clip when a power receptacle without a base for grounding is used.(\*1)
7. When an extension cord is used, use the one conforming to the applicable regulations.(\*2)



# BAND SAW BEAVER4 ACTIVE

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## \*1 Confirmation of Earth (Grounding) and Earth Leakage Circuit Breaker

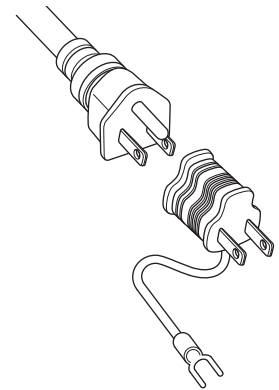
Before starting use of the machine, make sure that the power supply to which this machine will be connected is fitted with an earth leakage circuit breaker for prevention of electric shock (earth leakage circuit breaker) which conforms to the occupational safety and health law, electrical equipment technical standard, etc.

Always ground this machine. It is recommended to ground the machine for your own safety if it is used with a power supply which is fitted with a current-operated earth leakage circuit breaker having the rated sensitivity current of 15 milliamperes (mA) max. And the operating time of 0.1 seconds max.

When the receptacle used does not have a ground slot, confirm that the earth clip and earth wire are without fault.

When you have a tester or an insulation resistance meter, check for continuity between the earth clip and the machine's metal frame.

Grounding work (for example, burying the earth pole (earth plate, earth bar) in the ground and connecting the earth (ground) wire) must be done by a qualified electrician.



## \*2 Extension Cord

When an extension cord is required with a distant power supply, it should be thick enough to carry a current and ensure that the product is used with the maximum efficiency without a failure.

The extension cord used must be a three-core cable having one earth (grounding) core.

## \*3 Proper Working Environment

Make sure work spaces are in proper condition according to "OPERATING INSTRUCTIONS".

### Noise Prevention Control

Noise is controlled as set forth in relevant regulations. The machine must be operated at less than the control value to avoid discomfort to the neighborhood.

Sound barriers may be required under some circumstances.

# BAND SAW BEAVER4 ACTIVE

## OPERATION

### Preparing for Operation

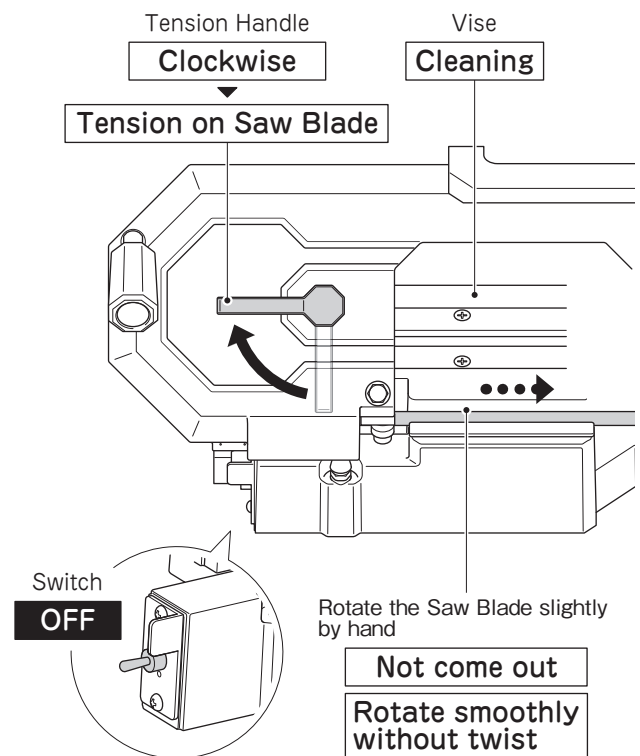
#### ⚠ CAUTION

- Select a suitable Saw Blade for the workpiece, referring to Saw Blade Selection Chart.
- Do not turn on the machine while Saw Blade is put on the workpiece. Otherwise, the machine may get failure.
- When start cutting, Lower Saw Blade to the workpiece after Saw Blade has fully rotated. Do not hurry it down or force it in to avoid a machine failure, accident.

1. Eliminate the sand, soil, chips, and dust, etc. on Vise.  
(In case of a new machine, wipe off the rust prevention oil on the vise surface with a clean cloth)
2. Turn Tension Handle clockwise to give a tension on Saw Blade.
3. Check if Saw Blade rotates smoothly by rotating it by hands.
4. Plug in Power Cord after checking the machine is turned off.

#### ⚠ WARNING

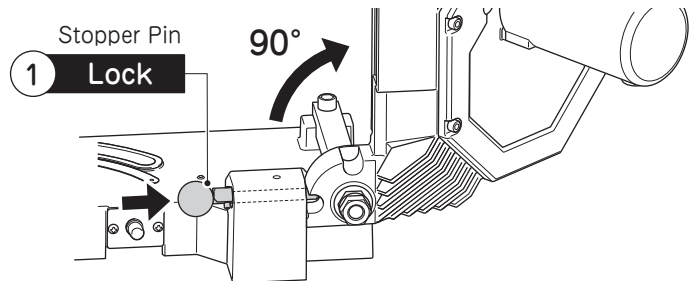
- Before preparation and adjustment work, always disconnect Power Cord. The machine may start suddenly and it may lead to injury or accident.
- When opening Back Plate, guard against Saw Blade which may spring out of the machine.
- After setting Saw Blade to the machine, always close Back Plate.



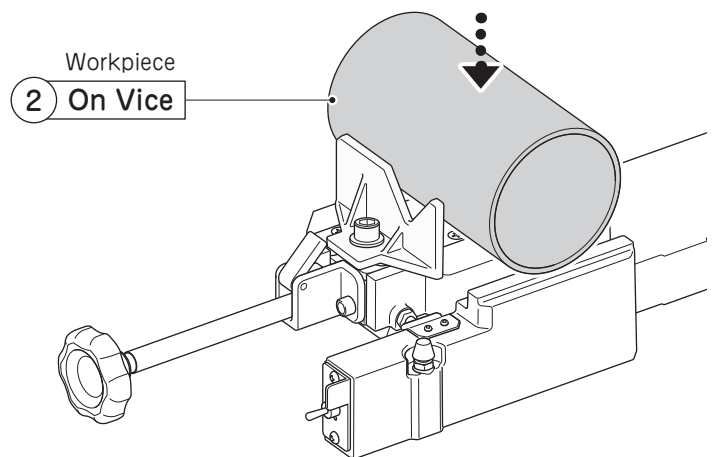
# BAND SAW BEAVER4 ACTIVE

## Setting a Workpiece

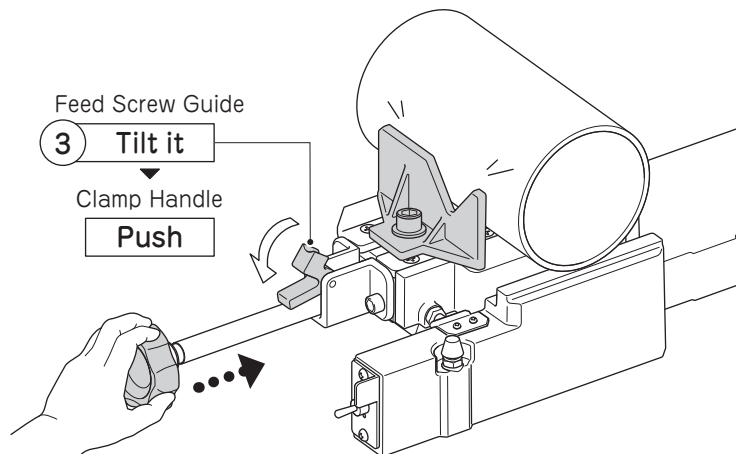
1. Pull out Frame to 90° and fix the position with Stopper Pin.



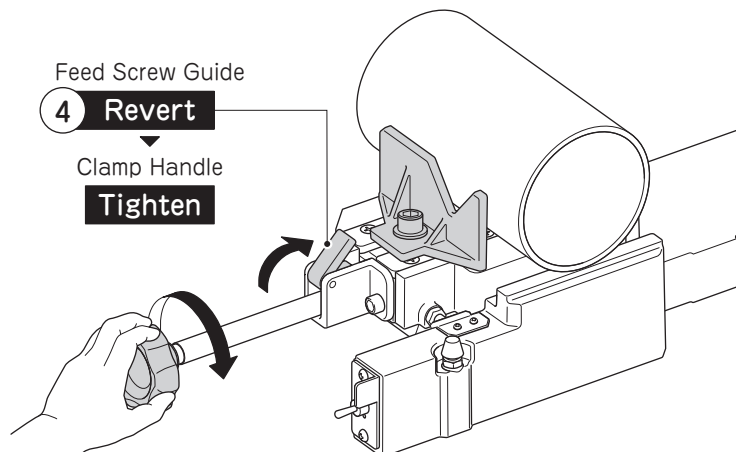
2. Place a workpiece on the vise surface in a stable position.



3. Tilt Feed Screw Guide to the opposite side of material and push Clamp Handle to the workpiece.



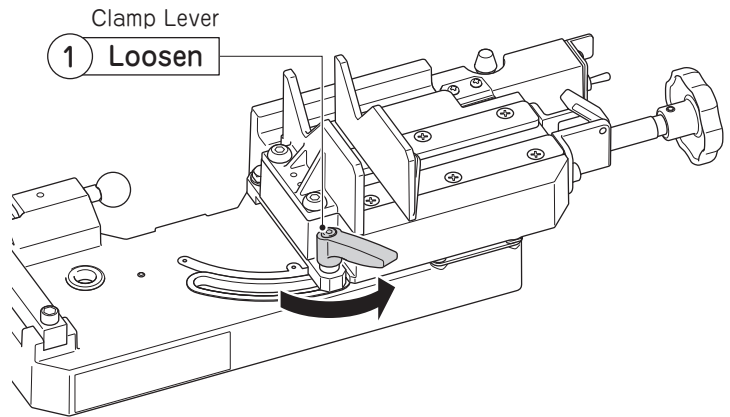
4. Once Flat Vise F contacted the workpiece, revert Feed Screw Guide and turn Clamp Handle clockwise to clamp the workpiece firmly.



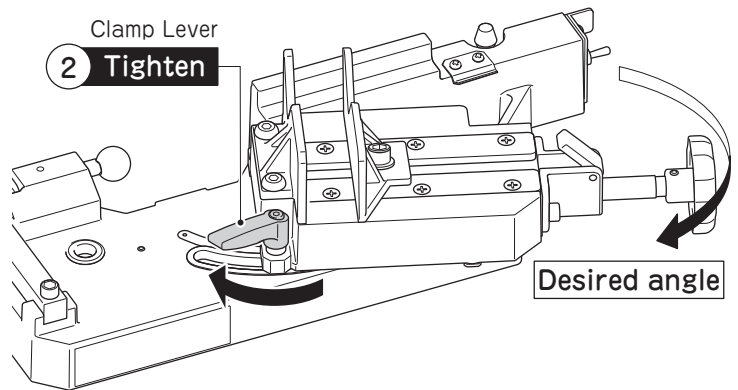
# BAND SAW BEAVER4 ACTIVE

## Miter Cutting

1. Turn Clamp Lever counterclockwise to loosen the vise part.

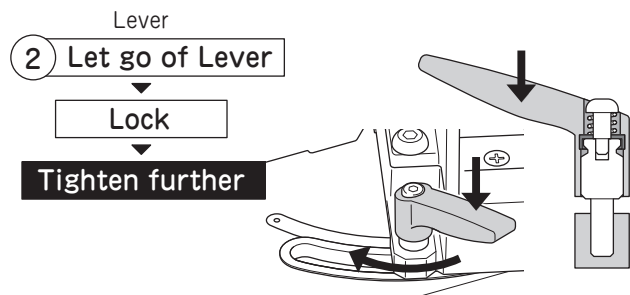
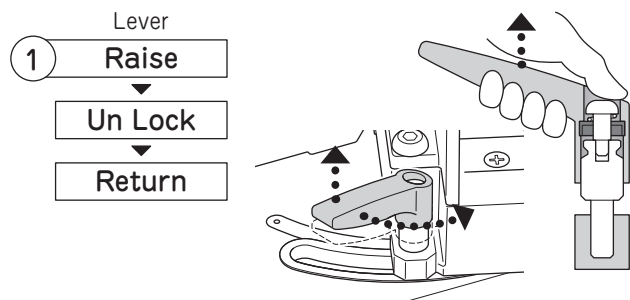


2. Turn the vise part to the desired angle and fix the position by turning Clamp Lever clockwise.



When raise Clamp Lever, only it can be turned and Bolt will not be turned (as shown in Figure 1).

### When tightening further



# BAND SAW BEAVER4 ACTIVE

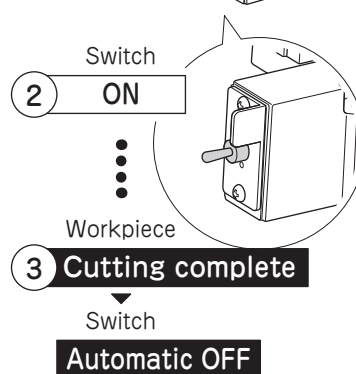
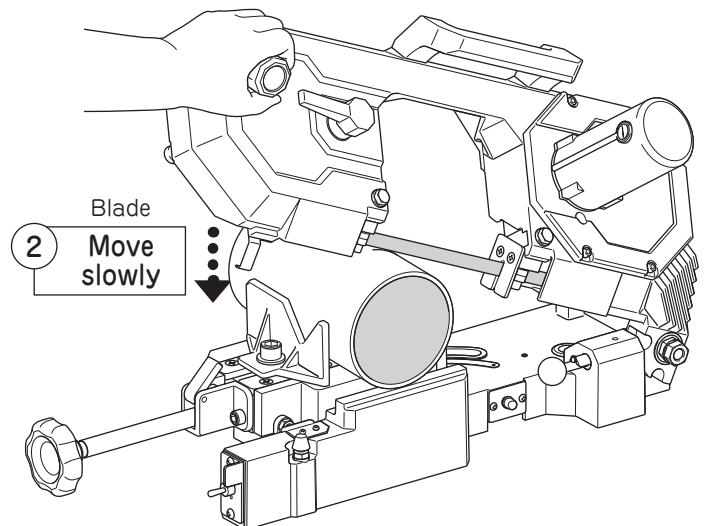
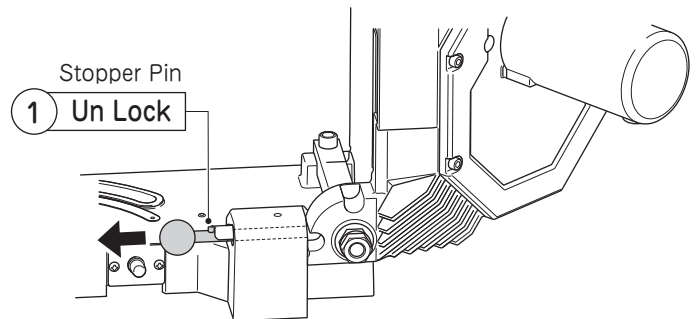
## Cutting

1. Pull out Stopper Pin and unlock Frame.

2. Turn on the machine and check Saw Blade is rotating smoothly. Lower Frame and place Saw Blade on the workpiece.

When miter cutting, hold Frame for a while until Saw Blade gets into the workpiece and stable.

3. The machine will be turned off automatically after cutting.



### ⚠ CAUTION

Slowly move Saw Blade closer to the workpiece.

Dropping Saw Blade suddenly or Forcing it in may cause breakdown of the machine, accident or injury.

When a new Saw Blade is used, test cuts are required as it is liable to cut obliquely.

Cut the workpiece slowly once or twice while supporting Handle with your hand.

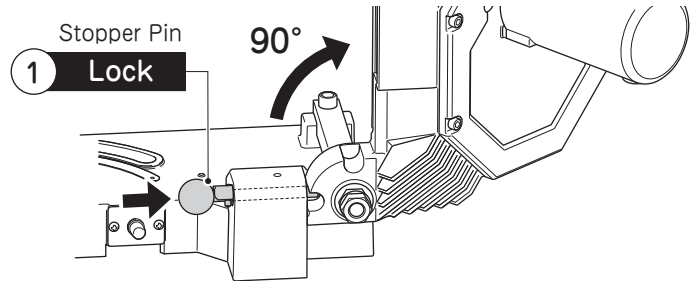
When cutting a workpiece with a wall thickness of less than 3mm, cut the workpiece while supporting the Handle with your hand.

Failure to do so may result in loss of accuracy or machine breakdown.

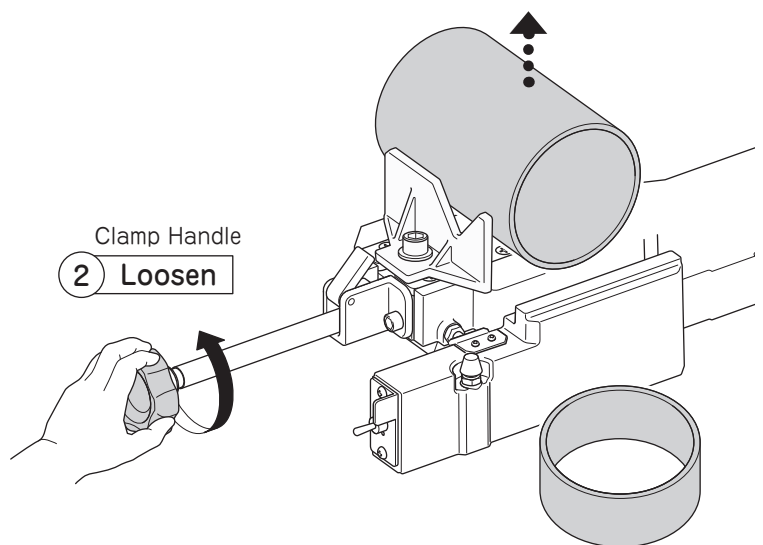
# BAND SAW BEAVER4 ACTIVE

## Removing Workpiece

1. After cutting, raise Frame to 90° and lock it with Stopper Pin.



2. Loosen Clamp Handle and remove the workpiece.



### ⚠ CAUTION

-Immediately after cutting, cut surfaces are hot. Do not touch them with bare hands.  
Otherwise you may get burned.



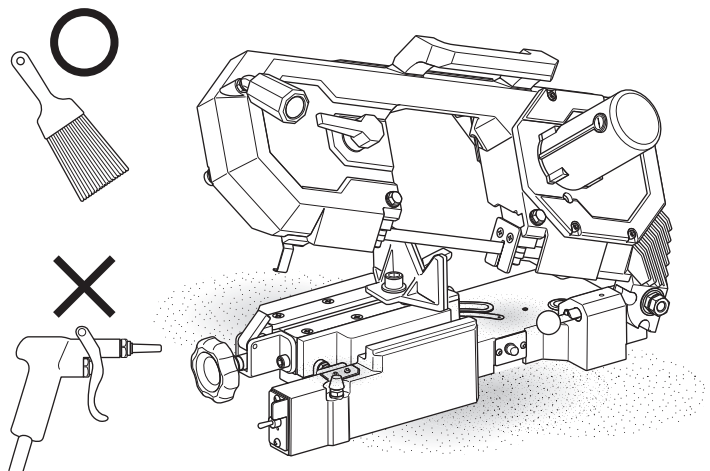
# BAND SAW BEAVER4 ACTIVE

## Cleaning After Use

### ⚠ WARNING

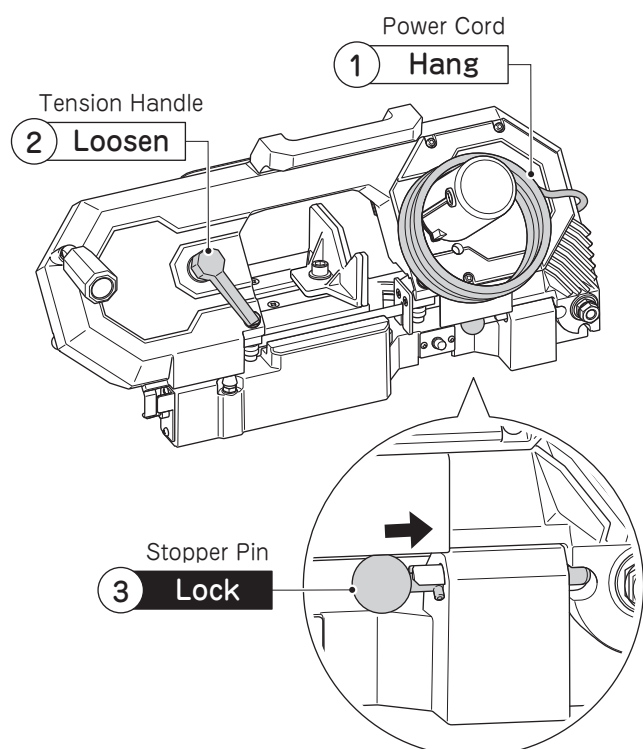
- Do not blow off chips using compressed air. They may get into eyes and loss of eyesight may result.
- Chips are sharp. Do not touch them with bare hands. Always wear gloves.

Remove chips scattered on the machine or in the area.



## Safekeeping

- 1.Coil Power Cord into a proper circle and hang it on Motor.
- 2.Turn Tension Handle counterclockwise. Do safekeeping in the state.
- 3.Keep Frame in the lowered position with Stopper Pin inserted.



# BAND SAW BEAVER4 ACTIVE

## MAINTENANCE & INSPECTION

### Replacing Saw Blade

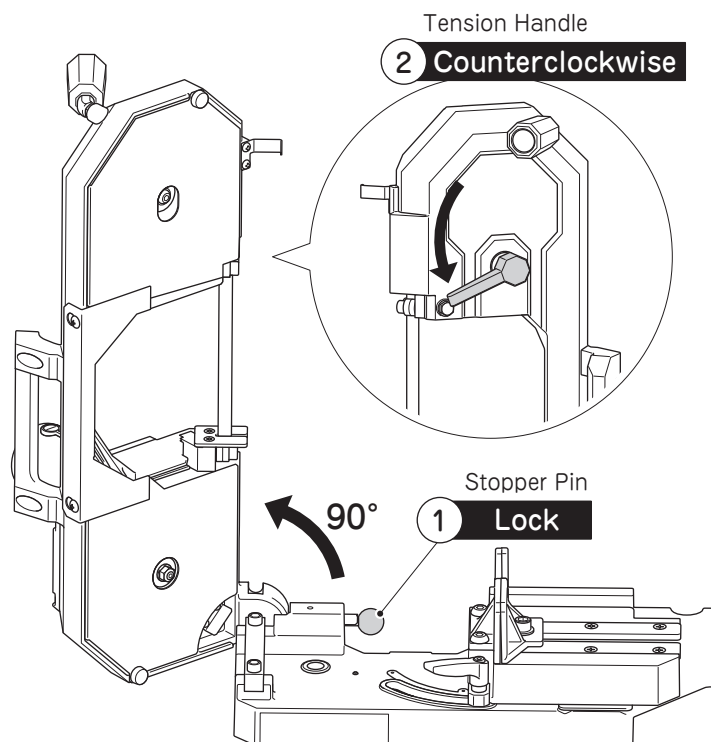
#### ⚠ WARNING

- Before replacing Saw Blade, always unplug the machine.  
The machine may start suddenly, it may lead to injury.
- When opening Back Plate, be careful with Saw Blade which may spring out of the machine.
- After correct setting of Saw Blade to the machine, always close Back Plate.  
You may get injured when Saw Blade is broken or comes off.

#### ⚠ CAUTION

- Install Saw Blade after completely wiping oil and dirt off. Otherwise, Saw Blade may slip or come off.
- Fix Back Plate with Screws after confirming it is correctly set.  
When Back Plate is not fixed correctly, it may cause a damage on Back Plate or Saw Blade may come off.
- When a new Saw Blade is used, test cuts are required as it is liable to cut obliquely.  
Cut the workpiece slowly once or twice while supporting the handle with your hand.
- Saw blade is very sharp. Do not touch with bare hand.

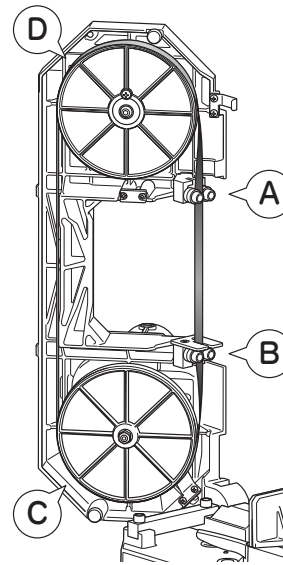
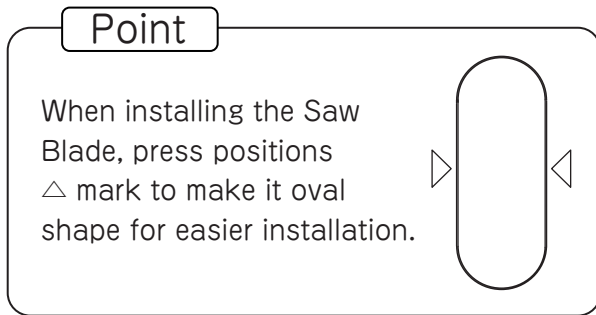
1. Raise Frame to 90° and lock it with Stopper Pin.
2. Turn Tension Handle counterclockwise.  
The tension of Saw Blade will get loosen.



# BAND SAW BEAVER4 ACTIVE

3. Open Back Plate and remove Saw Blade in the order D → C → B → A as the drawing.

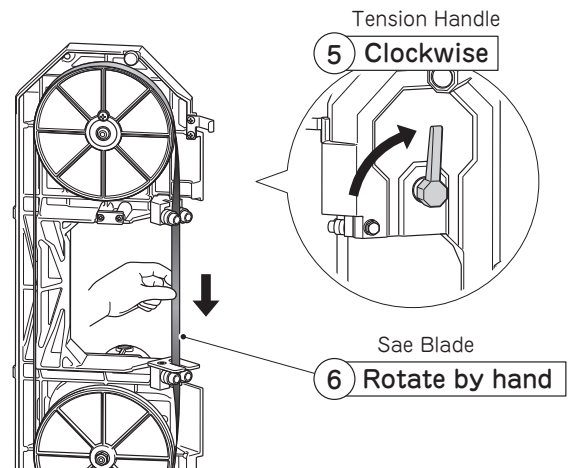
4. Install a new Saw Blade in the order A → B → C → D as the drawing.



**3 Remove**  
D → C → B → A

**4 Attach**  
A → B → C → D

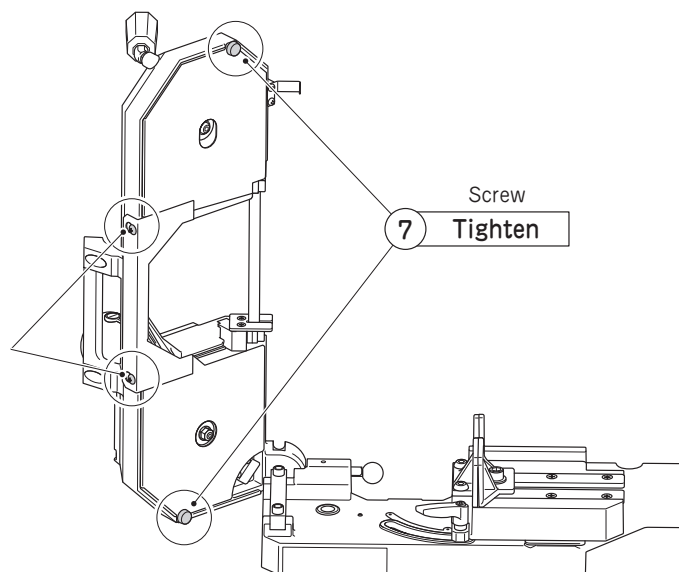
5. Turn Tension Handle clockwise and give tension on Saw Blade



6. Check if Saw Blade rotates smoothly by hand.

7. Reinstall Back Plate with Screws.

2 points are used for hooking



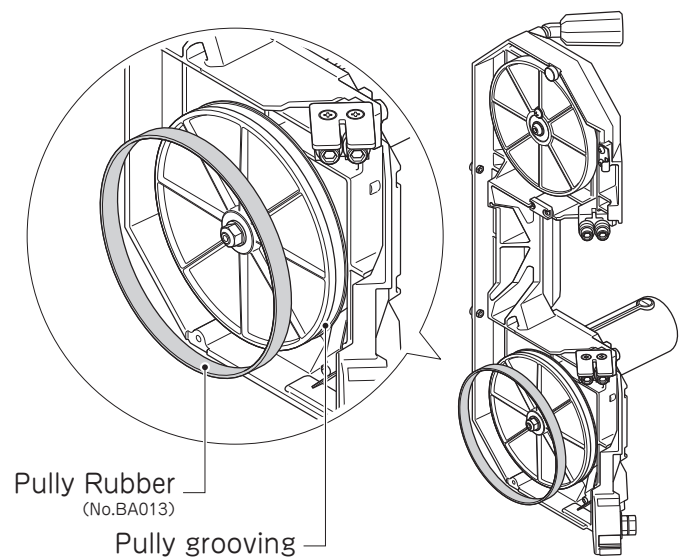
# BAND SAW BEAVER4 ACTIVE

## Replacing Pulley Rubber

### ⚠ WARNING

- Before replacing Pulley Rubber, always unplug the machine.  
The machine may start suddenly, it may lead to an accident or injury.
- When opening Back Plate, be careful with Saw Blade which may spring out of the machine.

1. Remove Saw Blade referring to Replacing Saw Blade (1)-(3)
2. Pull out Pulley Rubber by pinching it with hand.
3. Put a new Pulley Rubber along with the pulley grooving.
4. Install Saw Blade referring to Replacing Saw Blade (4)-(7).



# BAND SAW BEAVER4 ACTIVE

## Replacing Carbon Brush

### ⚠ WARNING

Unplug the machine to avoid electric shock.

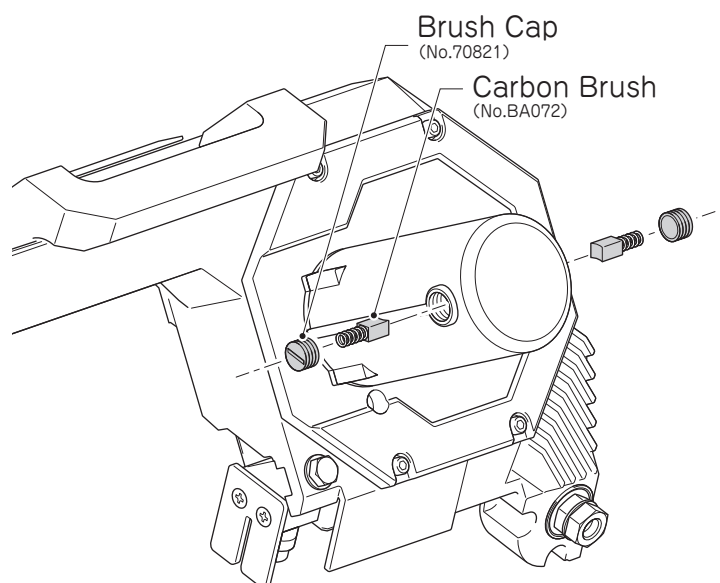
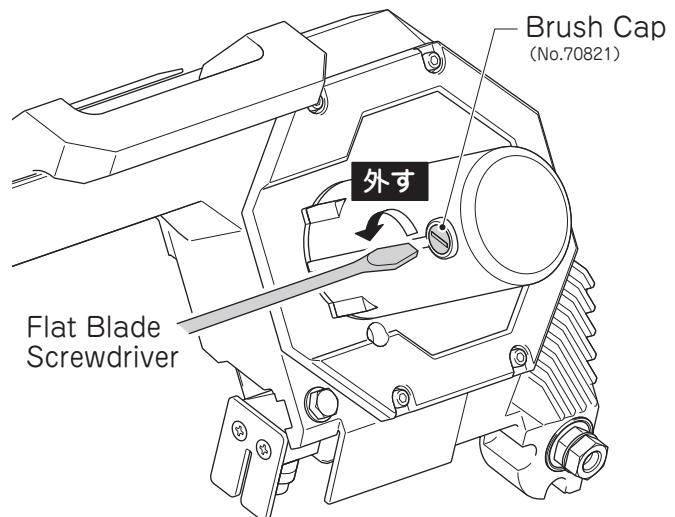
### ⚠ CAUTION

Do not get oil, chips, etc. on the new Carbon Brush.

Do not get dirt of gloves, etc. on the new Carbon Brush.

Motor has Carbon Brushes, which are consumable parts. Once Carbon Brush is wearing out, replace it with a new one. If Carbon Brush is worn out, it may cause a damage on Motor.

1. Remove Carbon Brush Caps with a Flat-Blade Screwdriver or similar tool and take out Carbon Brush.
2. Align a new Carbon Brush with the square hole in Brush Holder and push it into the hole with your finger.
3. While holding Carbon Brush with Carbon Brush Cap, tighten it with a Flat Blade Screwdriver, etc.



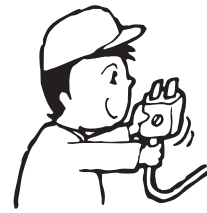
# BAND SAW BEAVER4 ACTIVE

## Daily Inspection and Maintenance

### ⚠ CAUTION

Do not wet Motor with water.

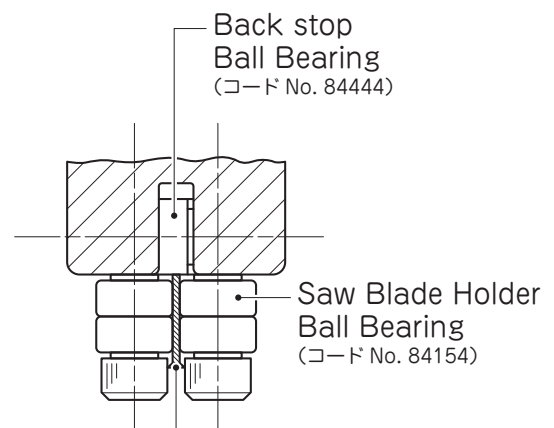
- If Power Plug, Power Cord or the extension cord is damaged, replace it immediately.
- Check if Saw Blade get chipped or damaged.  
If Saw Blade is chipped or damaged, replace Saw Blade. (Referring to Replacing Saw Blade )
- Inspect Back Stop Ball Bearings and Saw Blade Holder Ball Bearings. If they are not in correct position, it may cause poor cutting accuracy. If Ball Bearings are worn out, replace them with new ones. (replace all of them on both sides at the same time).
- Check that the mounting screws of each part are not loose. If they get loosened retighten them as using the machine with loosened screws is dangerous.
- Wipe off any dust or chips on the machine.
- If the machine is not to be used for a long period of time, store it with a rust-proofing coating.



Damage of Plug, Power Cord and Extension Cord



Damage of Saw Blade



# BAND SAW BEAVER4 ACTIVE

## BEFORE ASKING FOR REPAIRS

Trouble	Possible Cause	Solution
Oblique cutting	Test cuts are not enough.	When a new Saw Blade is used, it is liable to cut obliquely and test cuts must be required. Once oblique cutting occurred, it easily happens again with the same Saw Blade even after correction of oblique cutting. Replace Saw Blade and do test cuts certainly.
	Improper cutting speed.	Support Frame with your hands and cut the workpiece.
	Improper Saw Blade setting.	Securely set Saw Blade into Blade Guide Bearings.
	Saw Blade used caused oblique cut before, or Saw Blade is worn out.	Replace the Saw Blade. (Refer to page17)
	Improper Saw Blade select.	Select Saw Blade matched the workpiece. (Refer to page7)
	Blade Guide Bearings are worn out.	Replace the bearings. (Replace all of them on both sides at the same time)
	Workpiece moved during cutting.	Clamp the workpiece firmly.
	Improper Workpiece setting.	For rectangular shapes, tighten them so that the height is as low as possible.
	Saw Blade is not genuine.	Use genuine Saw Blade.
Long cutting time	Improper Saw Blade select.	Select Saw Blade matched to the workpiece. (Refer to page7)
	Saw Blade is worn out.	Replace Saw Blade.
Saw Blade is chipped	Improper cutting speed.	Support Frame with your hands and cut the workpiece.
	Workpiece moved during cutting.	Clamp the workpiece firmly.
	Saw Blade hit the workpiece.	Put Saw Blade onto the workpiece gently.
	Improper Saw Blade select.	Select Saw Blade matched to workpiece. (Refer to page7)

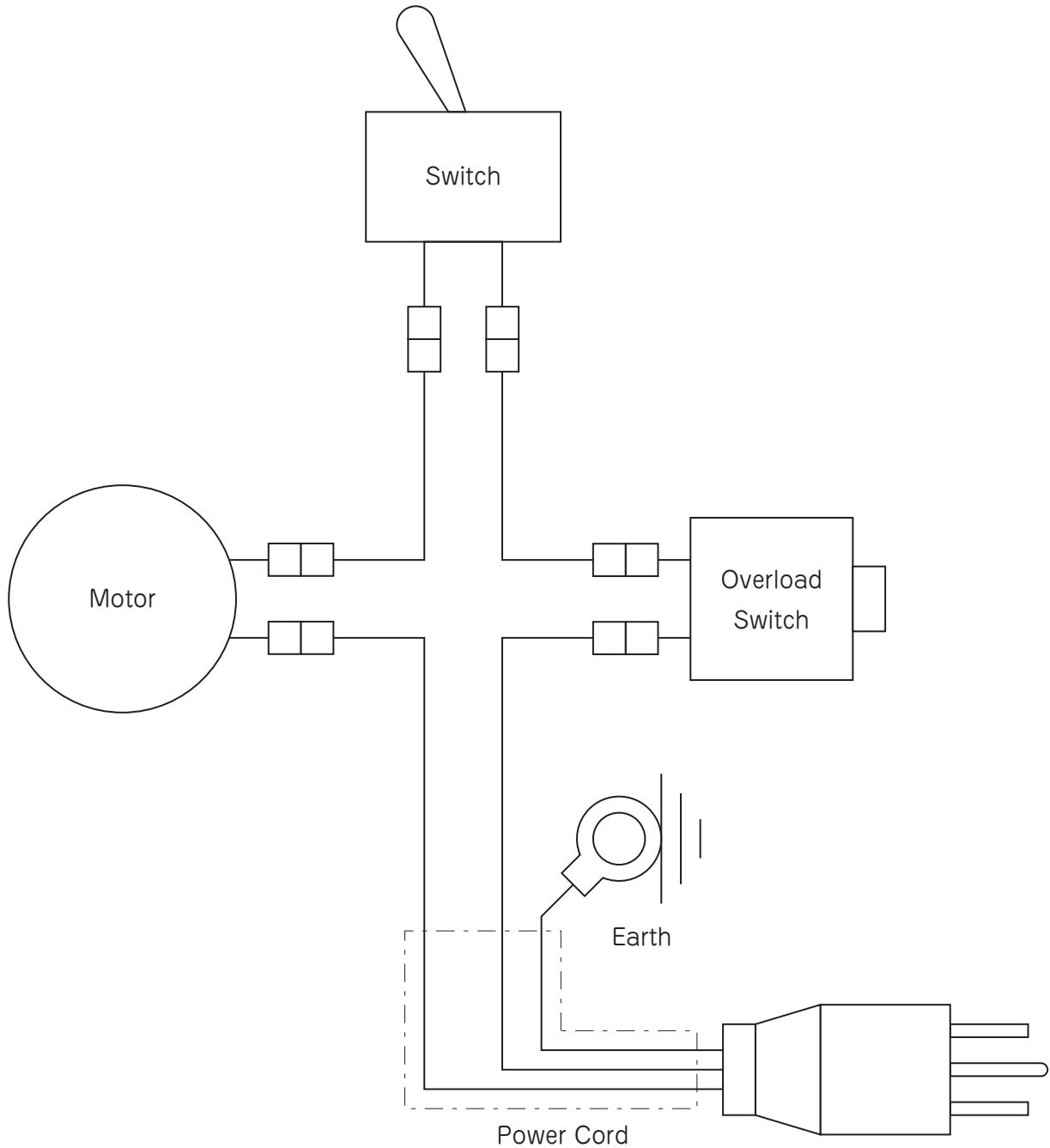
# BAND SAW BEAVER4 ACTIVE

Trouble	Possible Cause	Solution
Vibration during cutting	Saw Blade is chipped.	Replace the Saw Blade.
	Improper Tension Handle setting.	Turn Tension Handle clockwise fully.
	Back Plate is not closed correctly.	Attach Back Plate correctly.
Saw Blade comes off	Improper Saw Blade select.	Select Saw Blade matched the workpiece. (Refer to page7)
	Improper Saw Blade setting.	Securely set Saw Blade into Blade Guide Bearings.
	Saw Blade, Pulley Rubber, Workpiece, Blade Guide or Bearing is stained with oil.	Wipe off any oil on it/them.
	The movement of Following Pulley is not smooth.	Eliminate foreign matter to run Following Pulley smoothly.
	Improper Tension Handle tightening.	Turn Tension Handle clockwise fully.
	Pulley Rubber is worn out.	Replace Pully Rubber.
Saw Blade sank	Saw Blade sank lower than the workpiece at end of cutting.	Adjust Stop Bolt to raise the Saw Blade stopping position.
Motor does not run	Overload Switch is activated.	Turn off the machine and press Overload Switch.
	Voltage drop or a long Extension Cord used. Various machines connected to the same receptacle.	Use an extension cord with large capacity.



# BAND SAW BEAVER4 ACTIVE

## ELECTRICAL WIRING DIAGRAM



# **BAND SAW BEAVER4 ACTIVE**

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# **BAND SAW BEAVER4 ACTIVE**

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## ● Customer Memo

Please fill in for your record in the future.  
The information is helpful for inquiry and ordering parts.

Products Number :

Date Purchased :

Store Purchased the Unit :