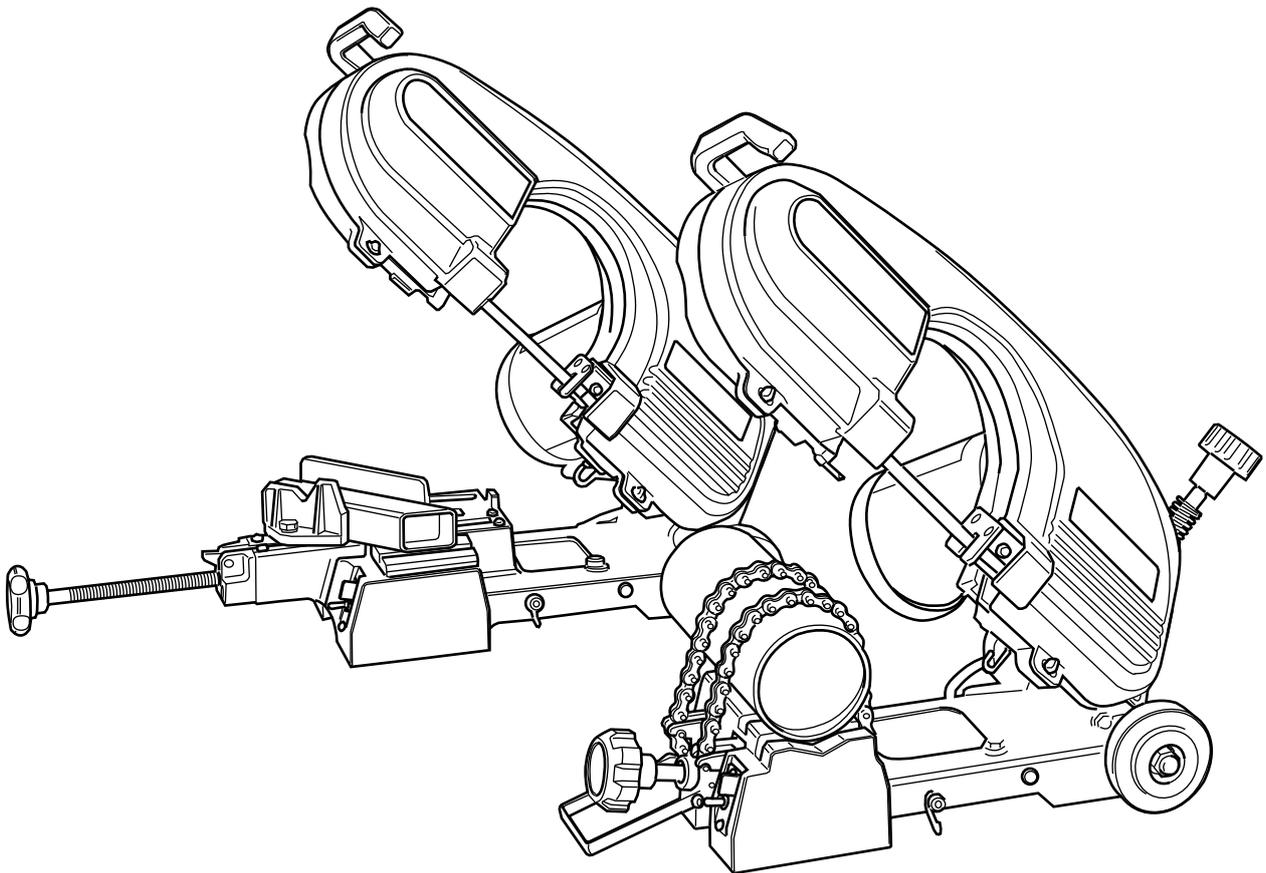


# Asada

**BAND SAW**  
**BEAVER 4 Eco · 4F Eco**

## INSTRUCTION MANUAL



[Read through this manual carefully before using the machine]

IM 1103

# BEAVER 4Eco·4FEco

## SAFETY PRECAUTIONS

Thank you for choosing our Band Saw Beaver 4Eco · 4F Eco

\*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.

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

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

ECheck that all items and accessories delivered.

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

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

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

 **CAUTION** 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.

## SYMBOLS



Electric Shock



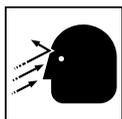
Cutting Blade



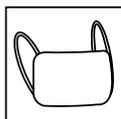
Dragging



Pinching



Splashing



Mask



Explosion



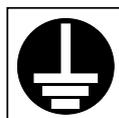
Fire



High Temperature



Falling



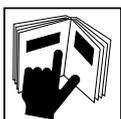
Earth



Rotation parts



Other



Instruction manual

# BEAVER 4 Eco • 4F Eco

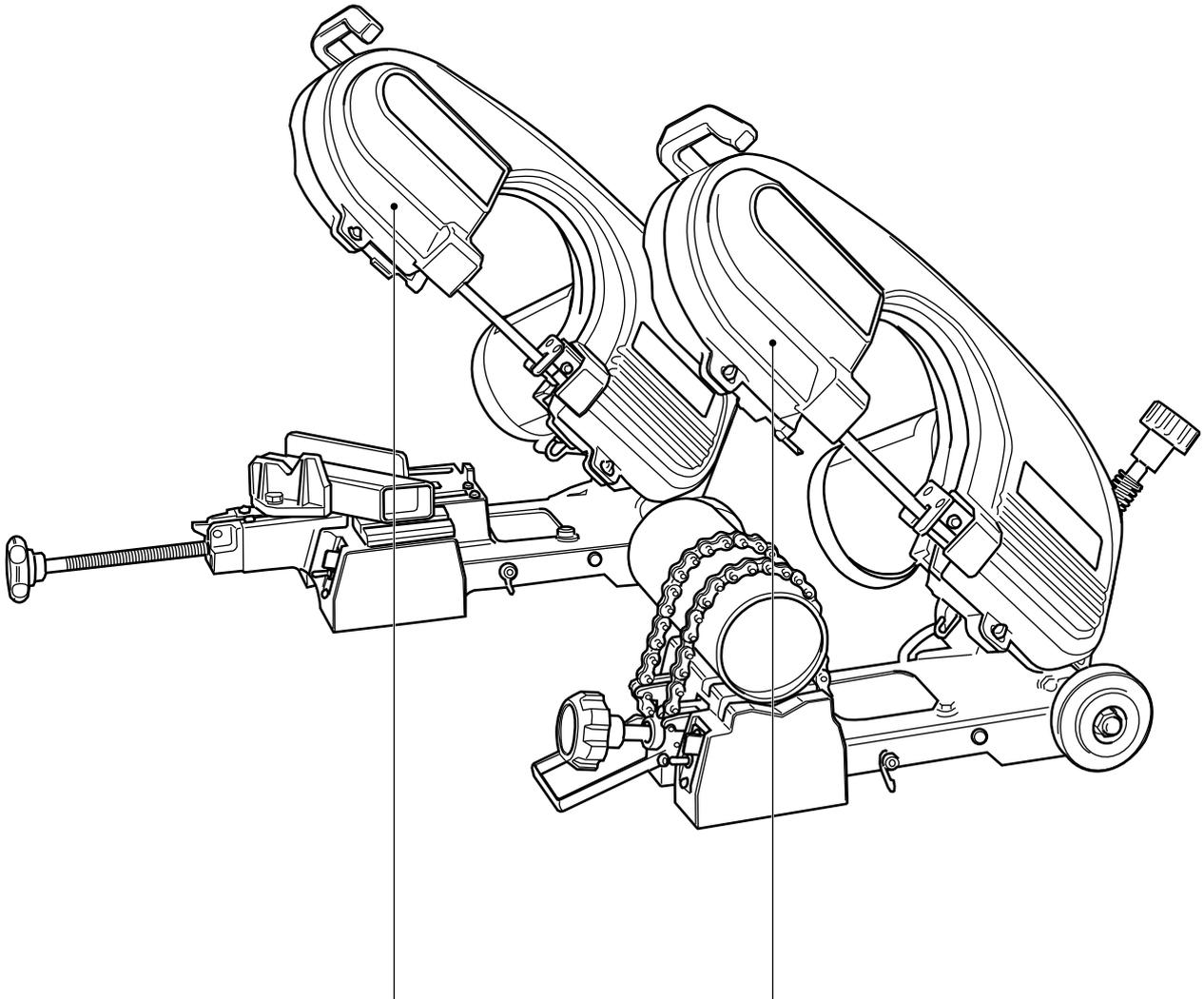
## Warning Seal

One warning seal has been pasted on this machine.

The explanation for securing safety is written in the warning seal, and keeping clean, please.

Please claim the warning seal to our company when to come off or to not easy see.

And, try always to paste it to be the same place.



### **WARNING**

- For your own safety before operation this unit, read the operation manual carefully and completely.
- Do not bring your hand and face close to moving part and Saw Blade.
- When changing the Blades, disconnect Power Cord.
- When Plug into the power source, make sure to switch OFF.

# BEAVER 4 Eco • 4F Eco

## OPERATING INSTRUCTIONS

### DANGER



-Always ground the machine to avoid electric shock or resultant death.

-Do not touch the plug with wet hands.

-Do not expose the machine to rain and water and do not use it in damp or wet locations. Humidity will deteriorate motor insulation or lead to electric shock.



-Immediately replace Power Plug, Power Cord or extension cord, if damaged.

-Do not hold the Power Cord and pull it to disconnect from the receptacle and do not put the machine on the cord and damage it.

-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 the motor stops due to an overload switch.

-Immediately replace the Power Plug, Power Cord and extension cord, if damaged.

-If the machine has emitted smoke or took fire, do not disassemble it but have it inspected or repaired by a qualified person.



-Never install an earth wire to the gas pipe. If attempted, explosion may take place.

-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 switch is turned off.

Never touch them while they are moving.

-Cut surfaces are very sharp and do not touch them with your hands.

-When it is required to touch the saw blade and moving parts for replacement, etc., switch off the machine and unplug it before starting that operation.

# BEAVER 4Eco • 4FEco

## WARNING



-Before plugging the machine in, always make sure that the switch is OFF. If the machine remains plugged in, it will start suddenly, leading 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, causing injury.

-Do not use gloves for works such as cutting. You may be caught in the moving parts, causing injury.

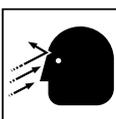
-Do not wear neckties, open-sleeved clothing, knitted gloves, loose clothing or jewelry (such as necklaces). Otherwise, you may get caught in moving parts.

-Wear caps or protective hair covering to contain long hair. Otherwise, you may get caught in moving parts.

-When not in use or when servicing, cleaning, checking or replacing parts, switch off and unplug the machine. If the machine remains plugged in, it will start suddenly, leading to accident or injury.

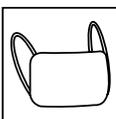
-Do not leave the machine unattended during rotating. Others may get caught in moving parts.

-It is mandatory to use Pipe Support for long and heavy work to avoid shaking and distortion of the work during turning and tilting of the machine by the weight of the workpiece. Otherwise, the workpiece and the machine become unstable.



-Wear safety glasses while operating the machine. Chips enter your eyes and nose.

-Do not blow off chips using compressed air. They may get into your eyes and loss of eyesight may result.



-Use a face or dust mask if operation creates dust. Sawdust and dirt may enter your eyes and nose.



-Immediately after cutting, fragment are hot. Do not touch them directly with 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 fall down, causing injury.

# BEAVER 4 Eco • 4F Eco

## WARNING



- Keep proper footing and balance at all times. 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. Otherwise, accident or injury may occur.
- 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 "5.TROUBLE SHOOTING" in this manual and follow the corresponding instructions.
- Repair should only be carried out by our sales representative. Otherwise the machine may not show its performance or you may get injured. Ask the shop of your purchase or our sales office.
- Our products are in accordance with the relevant safety rules. Do not modify them.

## CAUTION



-Do not put the machine or workpiece on the Power Cord. Damaged cord and current leakage will occur.



-Watch the position of your finger 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 hurt.



-Securely install accessories in accordance with this manual. Otherwise, accident or injury result.



-Before further use of the machine that is damaged 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 the Power Plug.

-The work material 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.

# BEAVER 4 Eco • 4F Eco

## CAUTION



- 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.

## CONTENTS

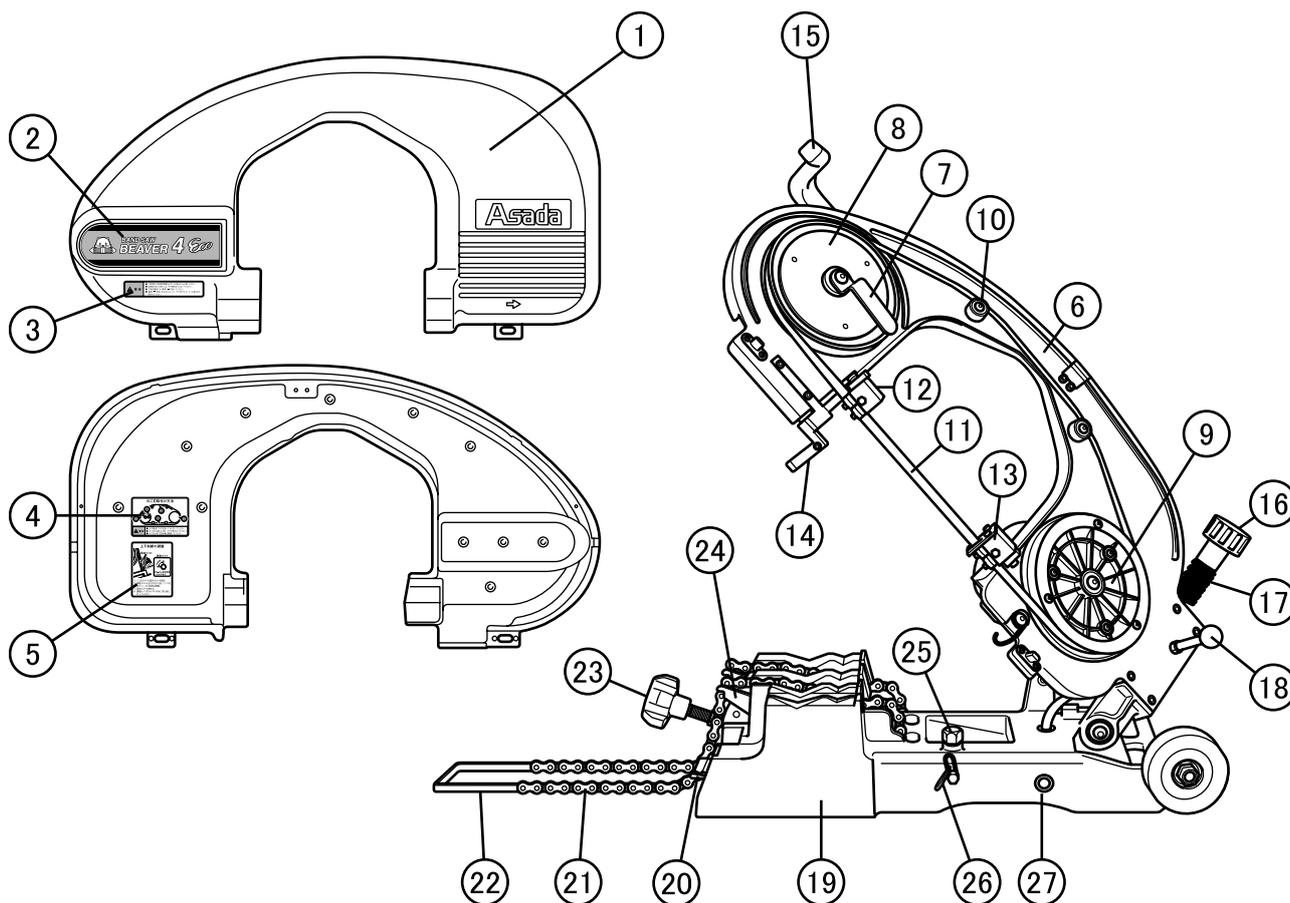
1.COMPONENTS OF THE MACHINE	
1)Main Parts-----	8
2)Specifications-----	10
3)Optional Accessories-----	10
3-1)Work, Saw Blade and cutting load chart-----	11
2.INSTALLATION	
1)Carrying the Machine-----	12
2)Installation-----	12
3.OPERATION	
1)Preparing for Operation-----	14
2)Setting the Workpiece(Chain Vise Type)-----	16
3)Cutting-----	16
4)Removing the Workpiece-----	16
2)Setting the Workpiece(Flat Vise Type)-----	17
3)Cutting-----	17
4)Removing the Workpiece-----	17
5)Cleaning after Use-----	18
6)Safekeeping-----	18
4.MAINTENACE & INSPECTION	
1)Replacement of Parts	
1-1)Replacement the Saw Blade-----	18
1-2)Replacement the Pulley Rubber-----	19
2)Correction Procedure for Oblique Cutting-----	20
3)Daily Inspection and Maintenance-----	22
5.BEFORE ASKING FOR REPAIRS-----	23
6.ELECTRICAL WIRING DIAGRAM-----	25

# BEAVER 4 Eco • 4F Eco

## 1. COMPONENTS OF THE MACHINE

### 1) Main Parts

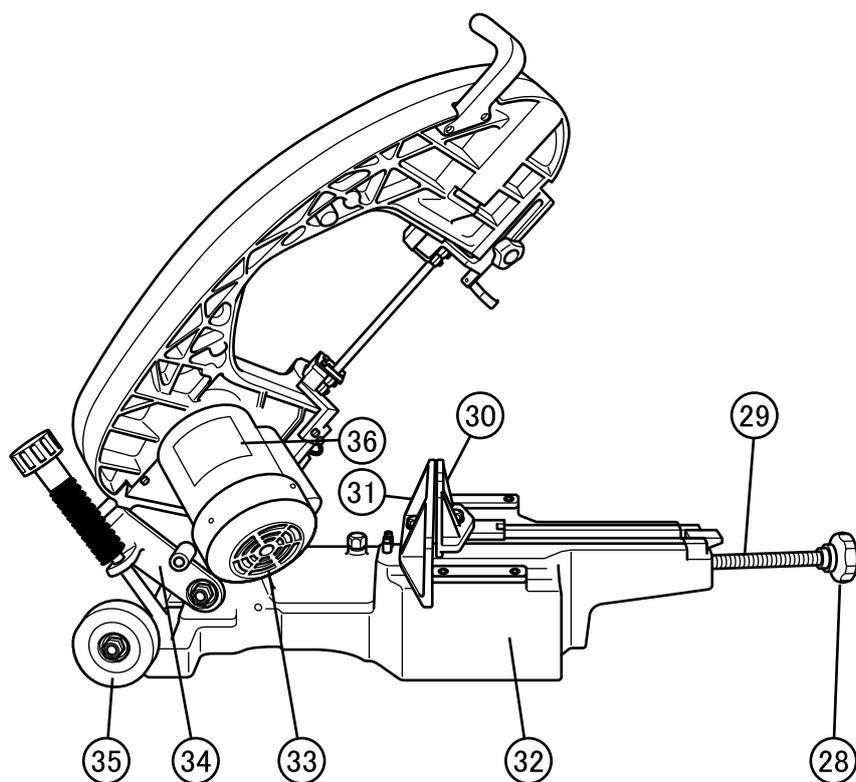
## BAND SAW BEAVER 4 Eco



1. Front cover	8. Following pulley	15. Handle
2. Beaver plate	9. Driving pulley	16. Adjustment knob
3. Warning seal	10. Bearing	17. Adjustment spring
4. Blade instruction seal	11. Saw blade	18. Cord hook
5. Blade adjustment seal	12. Blade guide F	19. Chain vise
6. Frame	13. Blade guide R	20. Switch
7. Tension handle	14. Dog	21. Chain

# BEAVER 4Eco•4FEco

## BAND SAW BEAVER 4FEco



22.Chain handle

23.Clamp knob

24.Clamper

25.Stop bolt

26.Chain hook

27.Overload protector reset button

28.Clamp handle

29.Feed Screw

30.Flat vise F

31.Flat vise R

32.Flat vise

33.Motor

34.Shaft Support

35.Caster

36.Cutting load chart

# BEAVER 4E<sub>00</sub>・4FE<sub>00</sub>

## 2) Specifications

Item		Band Saw Beaver 4E <sub>00</sub>	Band Saw Beaver 4FE <sub>00</sub>
Cutting capability	Round	Φ 130mm	Φ 120mm
	Square	□ 100mm	□ 100mm
	Angle cut	—	Φ 50mm □ 50mm
Blade speed		0.72/0.90m/s · (50/60Hz)	
Motor		Condenser motor, Voltage made to order, 200W, 50/60Hz	
機械寸法 (L × W × H)		740 × 390 × 330mm	
質量		31kg	33kg
標準付属品		88915 Saw Blade (14T.P.I Bimetal) 86514 Open-end Wrench 10X11 86003 Hex Wrench 5mm	88915 Saw Blade (14T.P.I Bimetal) 86514 Open-end Wrench 10X11 86003 Hex Wrench 5mm 86511 T Socket Wrench 17

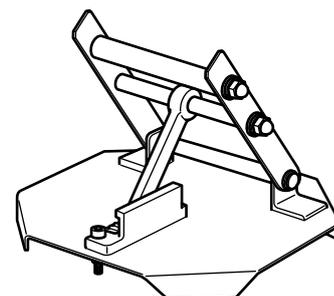
\*Specifications are subject to change without prior notice.

## 3) Optional Accessories

Code No.	Description	Pcs/Box	Remarks
70078	Saw blade, 8 T.P.I	10pcs	Steel over t=10mm
88916	Saw blade, 10 T.P.I	10pcs	Steel over t=5mm
88887	Saw blade, 14 T.P.I	10pcs	Galvanized Iron pipe 1/2, Steel over t=3.6mm
70077	Saw blade, 18 T.P.I	10pcs	Galvanized Iron pipe 1/2, Steel over t=2mm
88888	Saw blade, 24 T.P.I	10pcs	Steel under t=1.9mm, Conduit thin wall pipe
71069	Saw blade, 32 T.P.I	10pcs	under t=1.2mm
70132	Saw blade, 8 T.P.I, Bimetal	5pcs	Steel over t=10mm, Stainless steel pipe over t=6.5mm
70075	Saw blade, 10 T.P.I, Bimetal	5pcs	Steel over t=5mm, Stainless steel pipe over t=6.5mm
88915	Saw blade, 14 T.P.I, Bimetal	5pcs	Galvanized Iron pipe 1/2, Steel over t=4mm
70603	Saw blade, 18 T.P.I, Bimetal	5pcs	Stainless steel pipe under t=4mm, Conduit thin wall pipe
70413	Saw blade, 24 T.P.I, Bimetal	5pcs	Stainless steel pipe under t=2mm, Conduit thin wall pipe
70141	Saw blade, Grit saw	5pcs	Flame-resistant two-layer pipe, etc.

### PIPE SUPPORT Code No.BS620

Use the pipe support to cut a long workpiece.



# BEAVER 4 Eco • 4F Eco

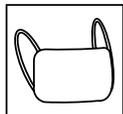
## 3-1) Work, Saw Blade And Cutting Load Chart

● : 4 (heavy load)    ◎ : 3 (middle load)    ○ : 2 (light load)    ☆ : 1 (very light load)

		SK						Bimetal					Grit Saw
		8	10	14	18	24	32	8	10	14	18	24	
		T.P.I.											
		No.70078	No.88916	No.88887	No.70077	No.88888	No.71069	No.70132	No.70075	No.88915	No.70603	No.70413	No.70141
Galvanized Iron Pipe	Under 1.1/4"			○	○					○	○		
	1.1/2" ~ 2.1/2"			◎	◎					◎	◎		
	3" ~ 4"			●						●			
Conduit Pipe	Thin wall				○	○					○	○	
	Think Wall			◎	◎					◎	◎		
Angle, Steels & Rods (Thickness, mm)	Under 1.2						☆						
	1.3 ~ 1.9					○						○	
	2.0 ~ 3.5				◎	○					◎	○	
	3.6 ~ 4.9			●	◎					●	◎		
	5.0 ~ 9.9		●	●					●	●			
	Over 10	●	●					●	●				
Stainless Steel Pipe (Thickness, mm)	1.3 ~ 2.0											○	
	2.1 ~ 3.9										○	◎	
	4.0 ~ 6.4								◎	◎			
	6.5 ~ 13.5							◎	◎	●			
	13.6 ~ 18.2							●	●				
PVC Pipe				☆						☆			
Ductive Cast Iron Pipe for Drain (Excluding Mortared Cast Iron Pipe)			◎	●					◎	●			
Flame-resistant two-layer pipe													●

- \*1. In saw blade selection, choose T.P.I. to satisfy the condition that there are two or more teeth in the thickness of a workpiece.
- \*2. The above chart is provided as a guideline. Select the saw blade and cutting load position according to the shape of a workpiece.

### WARNING



-Use a face or dust mask while operating the machine with a Grid saw.

# BEAVER 4 Eco • 4F Eco

## 2. INSTALLATION

### 1) 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.

### 2) Installation

#### DANGER



- Always ground the machine to avoid electric shock or resultant death.
- Do not touch the plug with wet hands.
- Do not expose the machine to rain and water and do not use it in damp or wet locations. Humidity will deteriorate motor insulation or lead to electric shock.
- Immediately replace Power Plug, Power Cord or 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



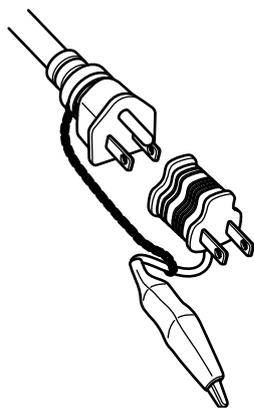
- Never install an earth wire to the gas pipe. If attempted, explosion may take place.
- Do not use the machine in the presence of flammable liquids or gases such as gasoline and thinner. Otherwise, ignition or explosion may take place.

- (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. A wide space is necessary particularly when working long and heavy pipe.
- (4) It is mandatory to use the Pipe Support for long and heavy pipe. Avoid excessive force applied to the machine which causes it to tilt.
- (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)

# BEAVER 4Eco • 4F Eco

## \*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, the earth clip and earth (ground) wire, confirm that they 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 for use with a distant power supply, it should be thick enough to carry a current and as possible to 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

The working area should be put in order following the clauses in "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.

# BEAVER 4E00・4F00

## 3. OPERATION

The following gives a general description of work including the pipe cutting.

- (1) Prepare for operation.
- (2) Install the work on this machine.
- (3) Cutting the pipe.
- (4) Remove the cut pipe.

The following describes the contents of the above procedures.

### 1) Preparing for Operation

#### ⚠ CAUTION



**-The saw blade selected should have T.P.I. which matches the workpiece.**

For saw blade selection, refer to the cutting load chart on the machine or in the instruction manual.

**-Operate the machine in the cutting load position which matches the workpiece.**

A mismatch in the T.P.I. of the saw blade or in the cutting load position will lead not only to oblique cutting capability but also to a damaged saw blade.

**-Do not turn on the switch with the saw blade being put on the workpiece.**

Otherwise, the tool can fail.

**-When starting cutting, ease the saw blade down to the workpiece after the saw blade has fully rotated.**

Do not hurry it down or force it in to avoid a tool failure.

- (1) Remove sand, the soil, chips, and dust, etc. on its vise.

(Wipe off for the new article with a clean cloth because the rust prevention oil has painted the upper surface of stock vise)

- (2) Raise the frame and set the cutting load adjustment knob in a position which matches the workpiece as indicated in the cutting load chart.

(For cutting load adjustment, push down the cutting load adjustment knob and set the pin in the groove position.) [ Fig.1 , 2 ]

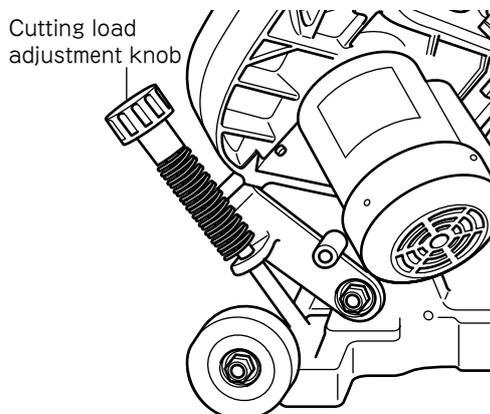


Fig.1

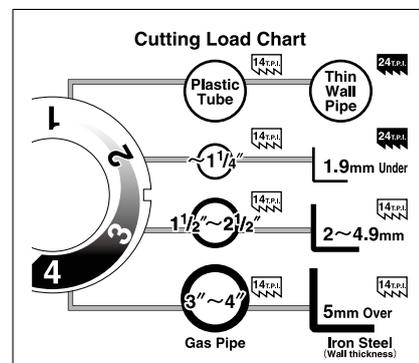


Fig.2

# BEAVER 4 Eco • 4F Eco

## ⚠ WARNING



-Before adjustment work, always disconnect the power cord.

The machine may start suddenly, leading to injury.

-When opening the front cover, guard against the saw blade which may spring out of the machine.

-After correct setting of the saw blade to the machine, always close the front cover. You may get injured when the saw blade is broken or comes off.

(4)Unlatch the front cover and open the cover. Turn the tension handle clockwise. The saw blade will be tight.

[ Fig.3 , 4 ]

(5)Hand-turn the saw blade to make sure that it turns.

(6)After reinstall the front cover, tighten the fasteners.

(7)Insert the power supply cord after confirming the thing to which the switch is off.

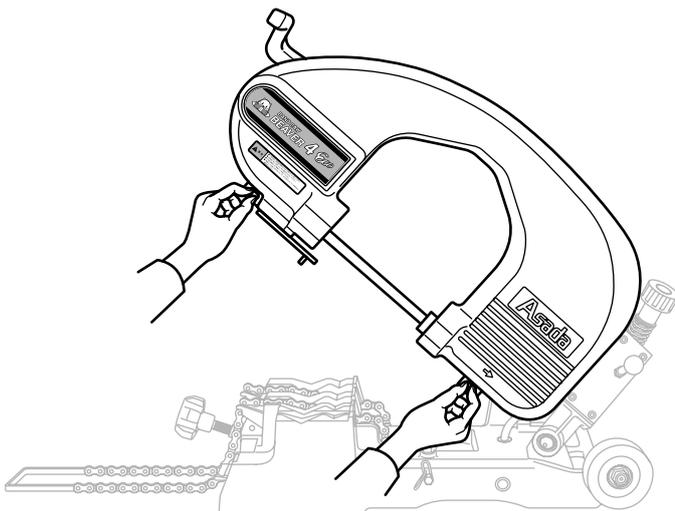


Fig.3

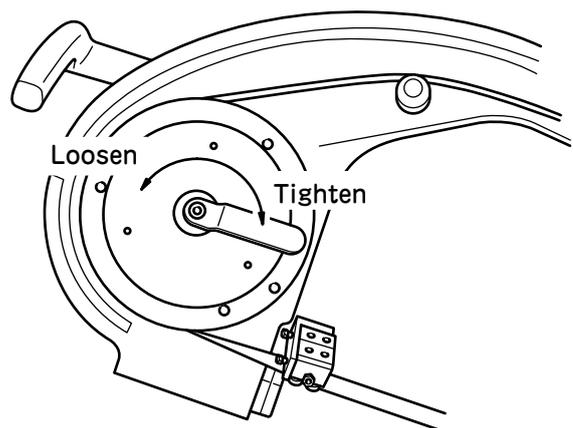


Fig.4

## ⚠ CAUTION



-Fix with the latch after confirming the front cover is correctly set.

Causes the accident and the injury, damaging latch when the cutting work is done with front cover not correctly set.

-It is mandatory to use Pipe Support for long and heavy work to avoid shaking and distortion of the work during turning and tilting of the machine by the weight of the workpiece. Otherwise, the workpiece and the machine become unstable.



-Saw blade is very sharp. Do not touch with bare hand.

# BEAVER 4 Eco • 4F Eco

## 2)Setting the Workpiece(Chain Vise Type)

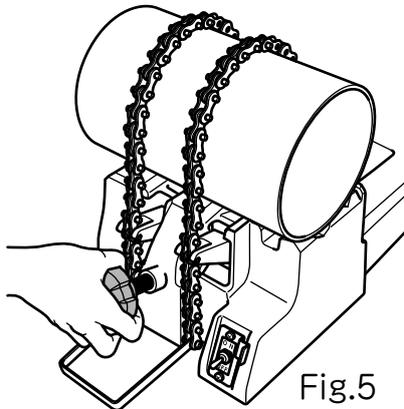


Fig.5

- (1)Place the workpiece into contact with the vise V groove. Hold the chain handle, chain the workpiece, grad the pin of the chain with the clamber, and turn the clamp knob to tighten the workpiece. [ Fig.5 ]  
The workpiece should be clamped securely without looseness.

## 3)Cutting

- (1)To release the stopper, hold the grip, lift the frame, and turn on the switch.
- (2)After making sure that the saw blade rotates steadily, lower the frame slowly to put the saw blade onto the workpiece.

### CAUTION



**-Ease the saw blade toward a workpiece.**

Do not hurry it down or force it in to avoid a machine failure, accident or injury.

**-When a new saw blade is used, test cuts are required as it is liable to cut obliquely.**

Cut a workpiece once or twice at the cutting load position "1".

- (3)At the end of cutting, the machine switches off automatically.

## 4)Removing the Workpiece

- (1)After cutting ends,removing the workpiece.

### CAUTION



**-Immediately after cutting, fragment are hot. Do not touch them directly with hands.**

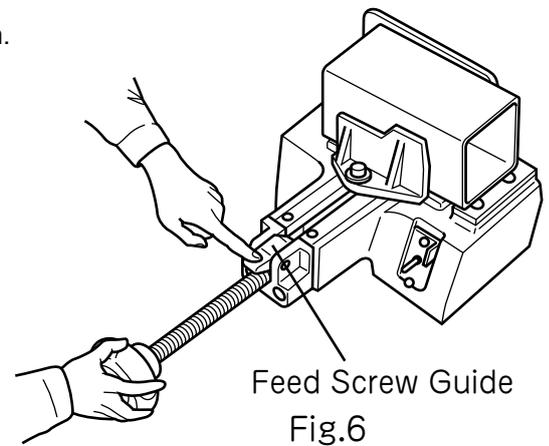
Wait for a while or hold the pipe with a cloth. Otherwise you may get burned.

## 2)Setting the Workpiece(Flat Vise Type)

(1)Put the workpiece on the vise sureface in a secure condition.

- Because of the rapid feed mechanism, hold down the feed screw guide and push the clamp handwheel toward the workpiece. [ Fig.6 ]
- Release your finger from the feed screw guide and turn the handwheel to clamp the workpiece.

\* For beveling, loosen the two bolts in the jaw (R), set it to the cutting angle on the scale, and tighten the bolts.



## 3)Cutting

(1)To release the stopper, hold the grip, lift the frame, and turn on the switch.

(2)After making sure that the saw blade rotates steadily, lower the frame slowly to put the saw blade onto the workpiece.

\* For miter cutting, support the frame Handle by hand until the saw blade bits the workpiece slightly.

### CAUTION



**-Ease the saw blade toward a workpiece.**

Do not hurry it down or force it in to avoid a machine failure, accident or injury.

**-When a new saw blade is used, test cuts are required as it is liable to cut obliquely.**

Cut a workpiece once or twice at the cutting load position "1".

(3) At the end of cutting, the machine switches off automatically.

## 4)Removing the Workpiece

(1)After cutting ends,removing the workpiece.

\*The quickly loosened can be done by separating Flat Vise-F from workpiece after clamp handle is loosened.

### CAUTION



**-Immediately after cutting, fragment are hot. Do not touch them directly with hands.**

Wait for a while or hold the pipe with a cloth. Otherwise you may get burned.

# BEAVER 4 Eco • 4F Eco

## 5) 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 hand. Always wear gloves.

(1) Remove chips scattered on the machine or in the area.

## 6) Safekeeping

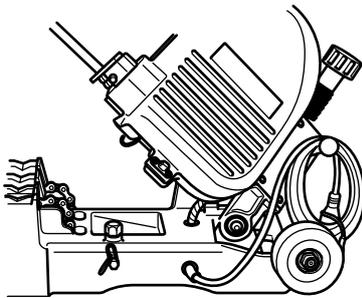


Fig.7

-Coil the power cord into a proper circle, and hang it on the cord hook.

[ Fig.7 ]

-Unlatch the front cover and open the cover. Turn the tension handle anti-clockwise. Do safekeeping in the state. [ Fig.4 ]

-Do safekeeping with cutting load adjustment knob matched to the "4" load.

[ Fig.1 ]

## 4. MAINTENANCE & INSPECTION

### 1) Replacement of Parts

#### 1-1) Replacement the Saw Blade

### WARNING



-Before replacing the saw blade, always disconnect the power cord.

The machine may start suddenly, leading to injury.

-When opening the front cover, guard against the saw blade which may spring out of the machine.

-After correct setting of the saw blade to the machine, always close the front cover. You may get injured when the saw blade is broken or comes off.

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## CAUTION



-Install the saw blade after completely wiping oil and dirt off. Otherwise, the saw blade may slip or come off.

-Fix with the latch after confirming the front cover is correctly set.

Causes the accident and the injury, damaging latch when the cutting work is done with front cover not correctly set.



-When a new saw blade is used, test cuts are required as it is liable to cut obliquely.

Cut a workpiece once or twice at the cutting load position "1".

-Saw blade is very sharp. Do not touch with bare hand.

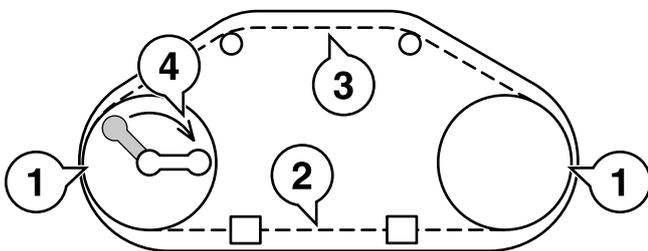


Fig.8

(1)Unlatch the front cover and open the cover. [ Fig.3 ]

(2)Turn the tension handle counterclockwise. [ Fig.4 ]

(3)Detach saw blade in the reverse order of [ Fig.8 ].

(4)Install new saw blade in order of [ Fig.8 ].

(5)Turn the tension handle clockwise. The saw blade will be tight. [ Fig.4 ]

(6)Hand-turn the saw blade to make sure that it turns.

(7)After reinstall the front cover, tighten the fasteners.

## 1-2)Replacement the Pulley Rubber

## WARNING



-Before replacing the pulley rubber, always disconnect the power cord.

The machine may start suddenly, leading to injury.

-When opening the front cover, guard against the saw blade which may spring out of the machine.

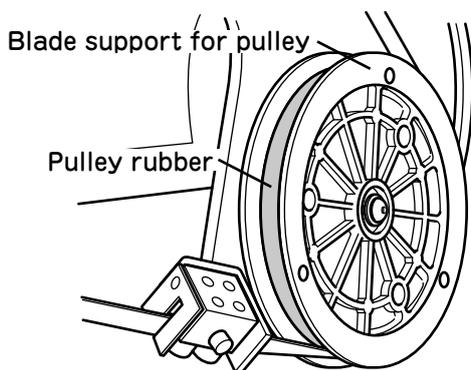


Fig.9

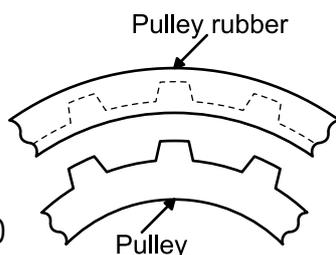


Fig.10

(1)Detach saw blade referring to 1-1)Replacement the Saw Blade (1)-(3)

(2)Using a screwdriver or the like, remove the saw blade support for pulley.[ Fig.9 ]

(3)To remove the pulley rubber, pull out its outer periphery by hand.

(4)Extend a new pulley in the circumferential direction and fit it into the highs and lows of the pulley in sequence. [ Fig.10 ]

(5)After fitting, hand-turn the pulley and make sure that the rubber fits in the highs and lows completely.

\*Always wipe oil, if any, off the pulley rubber.

(6)Reinstall the saw blade support for pulley.

(7)Install saw blade in order of [ Fig.8 ].

(8)Install saw blade referring to 1-1)Replacement the Saw Blade (5)-(7).

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## 2) Correction Procedure for Oblique Cutting

### WARNING



**-Before correction for oblique cutting, always disconnect the power cord.**

The machine may start suddenly, leading to injury.

\*If the saw blade cuts obliquely, check for worn bearings in the blade guide heads.

-When the back stopper ball bearing is worn

Remove the blade stopper bearing, remove the adjustment bolt, and change the back stopper ball bearing.

(For bolt F and R)

-When the blade stopper ball bearing are worn

Change all the blade stopper ball bearings. (For bolt F and R)

The bearing will come off by removing the U nuts under the bearings.

\*If oblique cutting still persists after bearing replacement, make corrections in the following procedure:

(1) Prepare a 4" galvanized pipe. (Other materials acceptable.)

(2) Cut it once in an ordinary state. (Mark the pipe end face to indicate which side is top or bottom.)

(3) After rotating the pipe a half turn, cut it once more to a length of about 5mm. (Mark the pipe end to indicate which side is top or bottom and right or left.)

### CAUTION



**-Immediately after cutting, fragment are hot. Do not touch them directly with hands.**

Wait for a while or hold the pipe with a cloth. Otherwise you may get burned.

(4) Measure the top, bottom, right and left lengths of that butt end with a rule, vernier calipers or the like.

A difference between these lengths indicates a oblique cut. A oblique cut value is a half of this difference.

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(5)When there is a difference between top and bottom lengths, detach saw blade referring to 1-1)Replacement the Saw Blade (1)-(3)

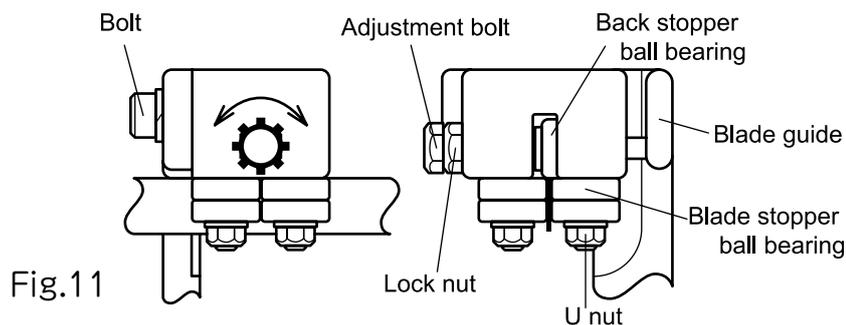
(6)Loosen the two Bolts of Blade Guide and the Lock Nut of Blade Guide Head, and turn the adjustment bolt clockwise or counterclockwise to adjust the angle of the blade guide head.

When the top length is larger: Turn the adjustment bolt counterclockwise.

When the bottom length is larger: Turn the adjustment bolt clockwise.

\*A half turn of the adjustment bolt allows adjustment of about 1.2mm.(For 4" pipe)[ Fig.11 ]

Always adjust the blade guides F and R to the same value.(After adjustment, always make sure that the end of the adjustment bolt makes contact with the surface of the blade guide.)



\*The correction procedure is also given on the inside of the front cover.

(7)Install saw blade in order of [ Fig.8 ].

(8)Install saw blade referring to 1-1)Replacement the Saw Blade (5)-(7).

(9)Confirm the oblique cutting according to the procedure (1)-(4).

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## 3) Daily Inspection and Maintenance

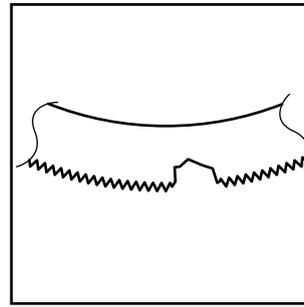
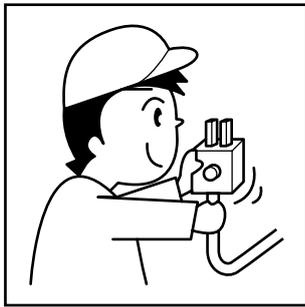
### ⚠ CAUTION



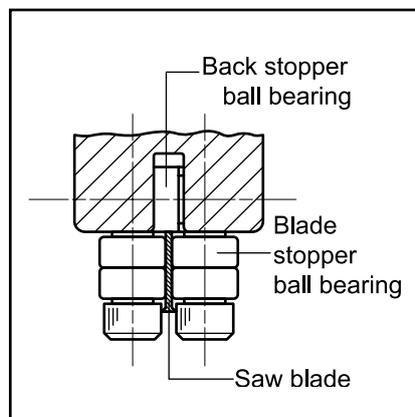
-Do not wet the motor with water.

\*Immediately replace Power Plug, Power Cord and extension cord, if damage.

\*Check the saw blade for chipping or damage. Replace if chipping is found. (For the saw blade replacing procedure, refer to “1-1) Replacement the Saw Blade”.)



\*Check the blade stopper ball bearings and back stopper ball bearings. If they are not set correctly, cutting accuracy will decline. When the ball bearings are worn, replace them as soon as possible. (Replace all the bearings on both sides.)



\*Check for loose fitting screws of parts. If used loosened, danger can result. Retighten them.

\*Completely wipe off dirt and chips from the machine.

\*Coat the machine with rust preventive grease when the machine is not used for a long period of time.

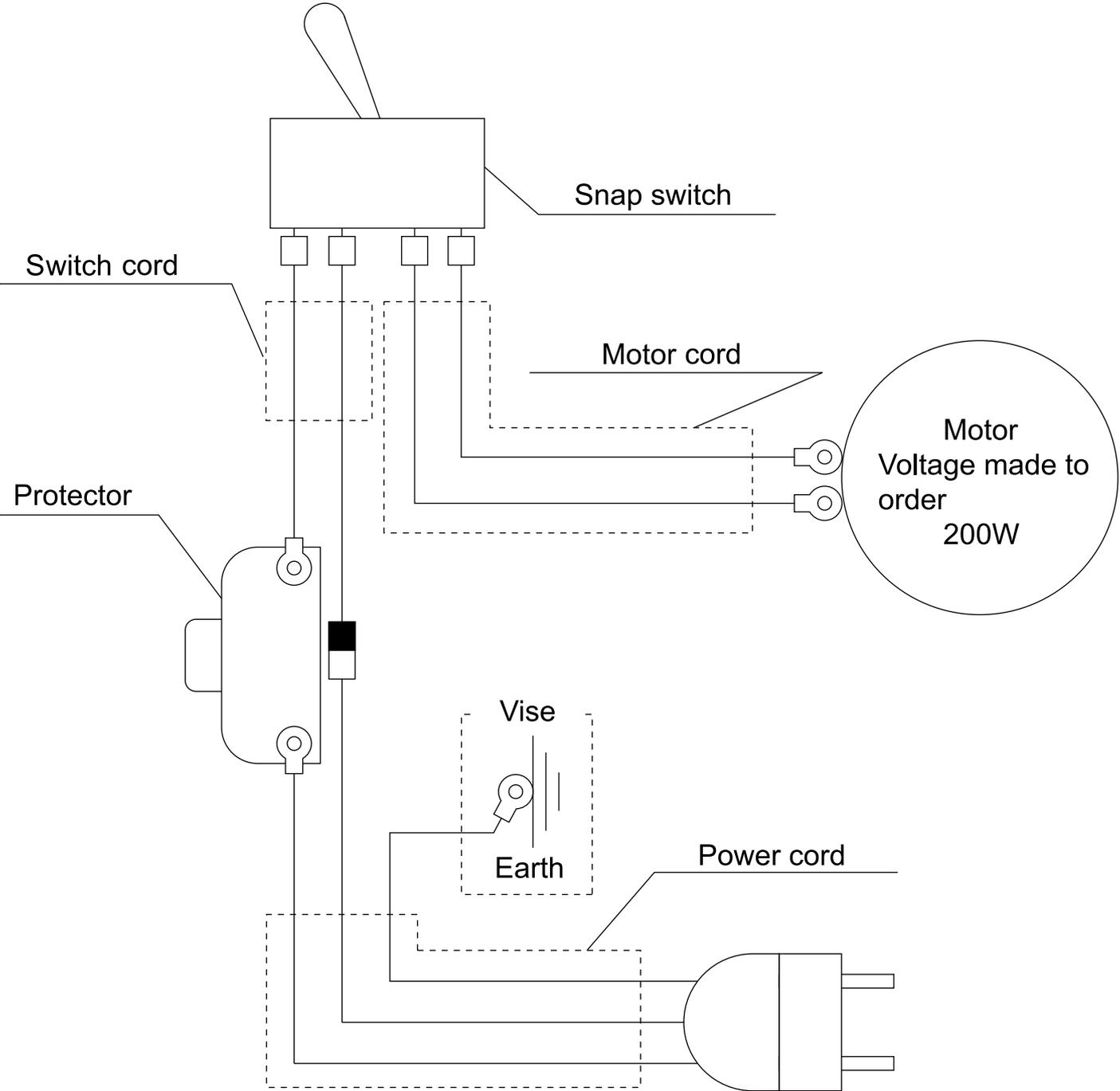
## 5. BEFORE ASKING FOR REPAIRS

Trouble	Possible Cause	Solution
Oblique cutting	Cutting load adjustment improper.	Set the cutting load adjustment according to a workpiece.
	Saw blade setting improper.	Securely set the saw blade into the blade guide bearings.
	Saw blade used caused oblique cut before, or saw blade is worn.	Replace the saw blade.
	T.P.I. not matching workpiece.	Select the saw blade having T.P.I. which matches the workpiece.
	Blade guides or bearings worn.	Replace the bearings. (Replace on both sides at the same time.)
	Workpiece moved during cutting.	Tighten the workpiece in contact with the V groove or flat surface.
	Workpiece tightening improper.	Tighten a rectangular workpiece so that it is as low as possible.
	Tension handle setting improper.	Securely set the tension handle in its tightening direction.
	Saw blade is not genuine.	Use the genuine saw blade.
	Test cuts not enough.	When a new saw blade is used, it is liable to cut obliquely and test cuts must be made. Cut the workpiece once or twice in position "1"
Cutting time long	Saw blade load light.	Set the cutting load adjustment according to the workpiece.
	T.P.I. and/or cutting load not matching workpiece.	Select the T.P.I. and/or cutting load according to the workpiece, saw blade and cutting load chart.
	Cutting load adjustment or slide rod deformed or scratched.	Change the slide rod. Remove scratches with a file or the like.
	Saw blade worn.	Replace the saw blade

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Trouble	Possible Cause	Solution
Saw blade chipping	Cutting load heavy.	Set the cutting load adjustment according to the workpiece.
	Workpiece moved during cutting.	Tighten the workpiece in contact with the V groove or flat surface.
	Saw blade hit the workpiece.	Put the saw blade onto the workpiece gently and release your hand from the Handle.
	T.P.I. not adequate.	Use the saw blade having T.P.I. adequate for the workpiece.
Vibration during cutting	Tension handle not set in tightening direction.	Set the tension handle in the tightening position.
	Front cover not closed securely.	Close and latch the front cover.
Saw blade coming off	T.P.I. not matching workpiece.	Select the saw blade having T.P.I. which matches the workpiece.
	Saw blade setting fault.	Re-set the saw blade until it makes contact with the back stopper ball bearing.
	Saw blade or Pulley rubber or Workpiece or Blade guide and bearing stained with oil.	Wipe oil off the Saw blade or Pulley rubber or Workpiece or Blade guide and bearing and re-set it.
	The movement of Following Pulley is poor.	Remove foreign matter to run the following pulley smoothly.
	Tension handle tightening fault.	Set the tension handle in position.
	Pulley rubber worn	Replace the pulley rubber.
Saw blade sinking	Saw blade lower than workpiece at end of cutting.	Adjust the stop bolt to raise the saw blade position.
Motor will not run	Overload protector activated.	Press the overload protector re-set button.
	Voltage dropped or long extension cord used. Various machines connected to the same receptacle.	Use an extension cord of large capacity. (Refer to page 13.)

## 6.ELECTRICAL WIRING DIAGRAM



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# CUSTOMER NOTE

Please enter the following for future use. This note will be useful in making inquiries and placing purchase orders for parts.

**SERIAL NO, :**

**DATE OF PURCHASE :**

**SALES REPRESENTATIVE :**

**Asada**  
ASADA CORPORATION

3-60, Kamiida, Nishi-Machi, Kita-Ku, Nagoya, Japan 462-8551

TEL +81-52-914-1206

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URL <http://www.asada.co.jp>

E-mail: [trade@asada.co.jp](mailto:trade@asada.co.jp)

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