

FUNCTIONAL DESCRIPTION

NOTE: The information contained in this Instruction Manual is designed to assist you in the safe operation and maintenance of the power tool.
Some illustrations in this Instruction Manual may show details or attachments that differ from those on your own power tool.

NAME OF PARTS

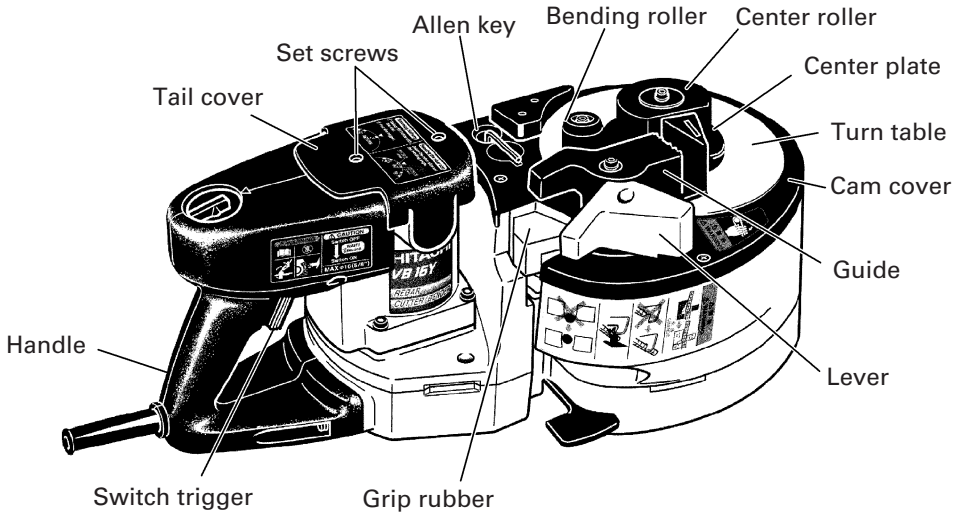


Fig. 1

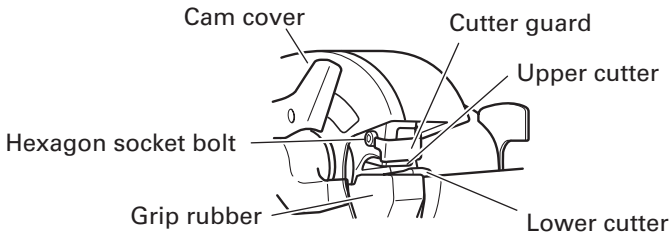


Fig. 2

ASSEMBLY AND OPERATION

APPLICATIONS

- Cutting of rebar
- Bending of rebar

PRIOR TO OPERATION

1. **Power source**
Ensure that the power source to be utilized conforms to the power source requirements specified on the product nameplate.
Also, avoid using DC power or engine generators. Not only will the tool get damaged but an accident can result.
2. **Power switch**
Ensure that the switch is in the OFF position. If the plug is connected to a receptacle while the switch is in the ON position, the power tool will start operating immediately and can cause serious injury.
3. **Extension cord**
When the work area is far away from the power source, use an extension cord of sufficient thickness and rated capacity. The extension cord should be kept as short as practicable.

⚠ WARNING: Damaged cord must be replaced or repaired.

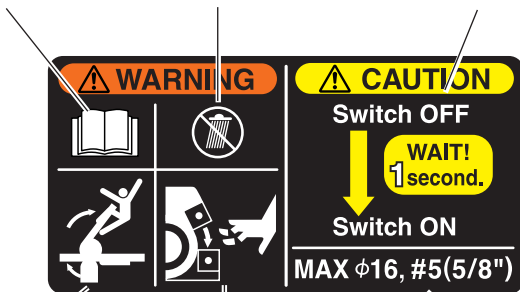
4. **Check the receptacle**
If the receptacle only loosely accepts the plug, the receptacle must be repaired. Contact a licensed electrician to make appropriate repairs.
If such a faulty receptacle is used, it may cause overheating, resulting in a serious hazard.
5. **Confirming condition of the environment**
Confirm that the work site is placed under appropriate conditions conforming to prescribed precautions.
6. **For safety sake, use the provided Allen key to make absolutely sure that the hexagon socket bolt is securely clamped. Use of the unit with the bolt in a loosely clamped condition can result in damage to the unit and cutter as well as accidents.**
7. **Confirm that the cutter is in sharp condition.**
Make certain that the cutter is in a sharp condition. Continued use of a worn out and deformed cutter with dull edges results in damage to the unit and cutter as well as accidents.

PICTGRAPH ILLUSTRATION AND EXPLANATION

Read handling instructions before use.

Do not use this electric power tool in wet weather conditions.

If the switch is turned off and then immediately turned on again, the motor may not start. Wait for at least one full second before attempting to turn the motor on again after it has been switched off.



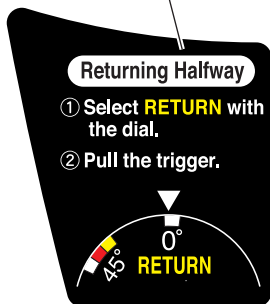
Begin operation only after ensuring that there are no people within the turning range of the material to be bent.

Never bring your hand close to the cutter during operation.

Avoid any work exceeding the maximum capacities. (Rebar diameter: #5 (5/8"))

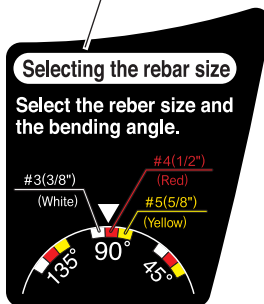
(Returning Halfway)

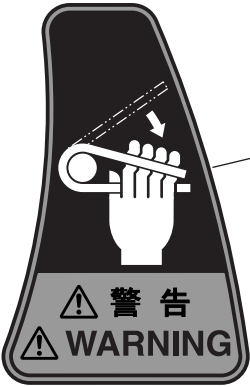
- ① Select RETURN with the dial.
- ② Pull the trigger.



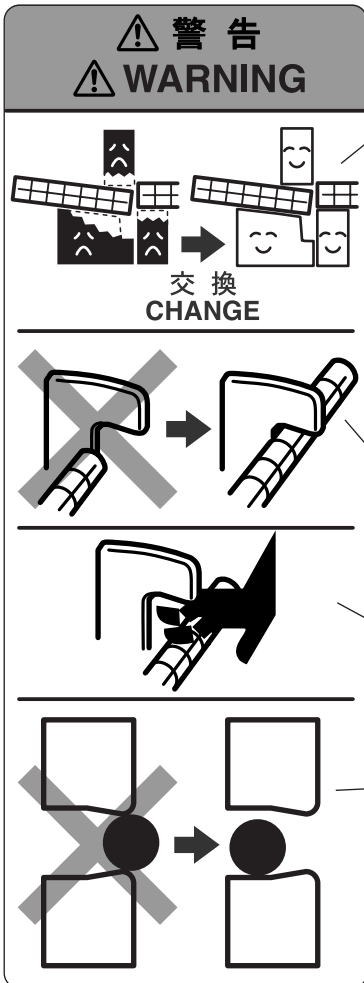
(Selecting the rebar size)

Select the rebar size and the bending angle.





- If you bend the rebar with a large angle while placing your hand onto it, there is a fear of getting your hand caught in by the fold-back reaction of the rebar. Never place your hand onto the position where the rebar may fold back.



- The cutter blade can get worn out by repeated rebar cutting. Continued use of a worn-out cutter can result in the damage and the broken pieces flying around. Replace it with a new cutter after no more than 5,000 times of cutting.
- The machine is so designed that the upper cutter and the grip rubber can support a rebar. If the grip rubber gets worn out, there is a fear that it cannot sufficiently hold the rebar and gets broken down with its parts flying around, etc. If the grip rubber cannot hold the rebar much longer, replace it with a new grip rubber. Also replace the worn grip rubber with new one when replacing the cutter.
- During cutting work, securely hook the rebar to the reaction stopper B. Furthermore, secure enough length of a rebar to be hooked to the reaction stopper B.
- Avoid bringing your hand near to the reaction stopper B during operation. If you do so, you may get your finger caught in or may run the hazard of other injuries.
- Set the rebar in the center or the recess of the cutter during cutting work. Any cutting work with the rebar set on corners or ends of the cutter can result in the pieces of broken rebar flying around or the damage to the cutter and the machine.

HOW TO USE (CUTTING)

1. Normal cutting (Fig. 5)

- (1) Turn the lever in the direction of the arrow mark and open the cover.
- (2) Set the setting dial at the "cut" position. (Turn the setting dial all the way clockwise.) (Fig. 6)
- (3) Set the unit in the position shown in Fig. 5.
- (4) Set the rebar to be cut on the lower cutter.
- (5) When the rebar is set, make sure that the reaction stopper B is hooked to the rebar.
- (6) Pull the switch trigger and cut the rebar.

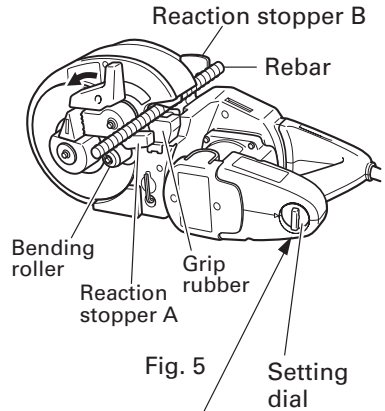


Fig. 5

⚠ WARNING:

- While turning switches, never put your hand close to the cutter, reaction stopper, or bending roller.
- Bringing your hand close to these components can result in serious injury.
- Do not cut any rebar exceeding the maximum capacities of the unit described in the specifications.
- Never cut any hard materials such as PC(Precast concrete) steel. Materials of this type are likely to scatter into pieces and cause injuries.
- The rebar you are cutting may have a hard spot in it. Quality may vary within each rebar. Do not attempt to cut NON-GRADE rebar.
- Replace the worn grip rubber with new one when replacing the cutter.
- Note that the unit is not a hand held tool. Be absolutely sure to use the unit only after placing it on stable spots such as floor, ground, etc.

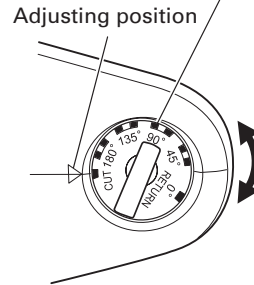


Fig. 6

⚠ CAUTION:

Even after the cutting has been completed, continue pulling the switch trigger until the motor starts to run in the reverse direction and the cutter starts to return. If the switch trigger is released too early, the cutter will not return and the trigger will have to be pulled again.

2. Removing the rebar during cutting operation. (Fig. 7)

If the switch trigger is released in the middle of cutting, the cutter can come to a stop at a halfway position, jamming the rebar in the unit.

When this occurs, you can either pull the switch trigger again and cut off the rebar, or you can free the rebar by bringing the upper cutter back up to the home position by carrying out the following procedure. (Fig. 7)

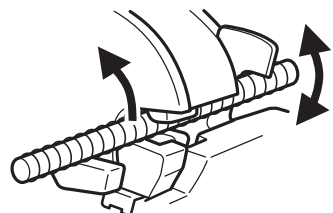


Fig. 7

- Removing (Fig. 8)
Set the setting dial to the "RETURN" position as shown in Fig. 8 and pull the switch trigger again.

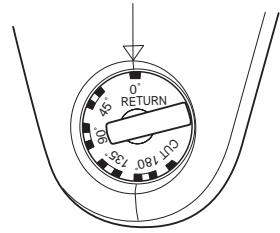


Fig. 8

SERVICE LIFE AND REPLACEMENT OF THE CUTTER

1. Service life of cutter (Fig. 9)

Repeated cutting of the rebar can result in the "wear and tear", "deformation", "nicked edges", etc. Using the cutter under such circumstances will not only damage the machine but also there will be a fear of the broken cutter fragments flying around.

Replace it with a new cutter after cutting no more than 5,000 pieces of rebar.

2. Before removing the cutter

(1) Pull the switch lightly and let the upper cutter move slowly. When the hexagon socket bolt that fixes the upper cutter comes out of the cam cover, turn the switch OFF and stop the motor.

(2) Unplug the power cord from the receptacle.

3. Removal

- If you remove the hexagon socket bolt using the provided Allen key, you can remove the cutter. (Pushing the cutter guard up in the direction of the arrow shown in Fig. 10, facilitates removal of the upper cutter.)
- Removal of the lower cutter can be easily made if the lower cutter is wrenched with a Phillips head screwdriver as shown in the following diagram. (Fig. 11)

Blade

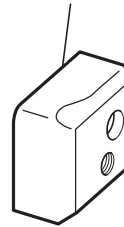


Fig. 9

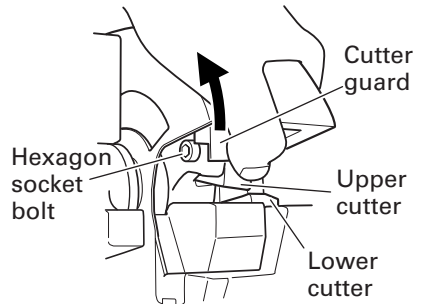


Fig. 10

⚠ WARNING:

- To prevent accidents, always be sure to turn the switch OFF and unplug the power cord from the receptacle.
- If you remove the hexagon socket bolt using the provided Allen key, you can remove the cutter. (Pushing the cutter guard up in the direction of the arrow shown in Fig. 10, facilitates removal of the upper cutter.)

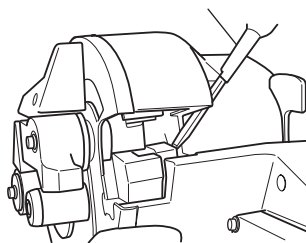


Fig. 11

4. Mounting

- (1) Get rid of dust around the cutter installing section and clean it up.
- (2) Align the hole of a new cutter and the position of a pin, and insert into the installing section.
- (3) Also replace the hexagon socket bolt (packed along with the cutter) with a new one simultaneously, completely tighten it using the attached Allen key, and then fix the cutter.

⚠ CAUTION:

- Install the cutter and accessories securely according to the instruction manual. If you fail to install them properly, they may come off and cause an injury.
- Be sure to unplug the power cord from the receptacle when the cutter is checked, cleaned, and replaced. Failure to do so can result in a serious injury.

HOW TO USE (BENDING)**1. Setting bending angles by setting dial**

The bar can be bent according to the angles indicated on the setting dial, as shown in Fig. 12.

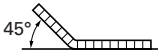
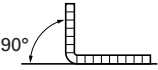
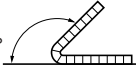
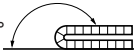
| Dial indication | 45° | 90° | 135° | 180° |
|--------------------|---|---|---|--|
| Condition of rebar |  |  |  |  |

Fig. 12

In bending the rebar of #3(3/8"), #4(1/2"), and #5(5/8") diameters, a difference takes place in the bending angle even in the same dial position depending upon the difference of rebar's thickness. Slightly change a position of the setting dial depending upon the rebar's diameter even with the same bending angle as shown in Fig. 13.

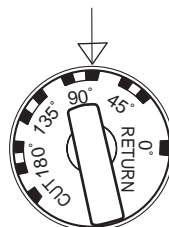
Adjusting position

Fig. 13

| Size of rebar | Colors of indicated marks |
|---------------|---------------------------|
| #3(3/8") | White |
| #4(1/2") | Red |
| #5(5/8") | Yellow |

NOTE: Even at the same dial setting position, the bending angle can sometimes differ if the diameter or hardness of the rebar is different. Use the angle marks merely as a rough guideline.

2. Ordinary bending

- (1) Set the unit in the position with the turntable up as shown in Fig. 14.
- (2) Make sure that the cover is closed.
- (3) Set the setting dial at the desired angle. (Fig. 13)
- (4) Place the rebar on the center plate and set it correctly as shown in Fig. 14.
- (5) Pull the switch trigger and bent the rebar.
- (6) Continue pulling the switch trigger until the motor makes reverse rotation and the bending roller starts to return. (Once the bending roller starts to return, it will automatically return all the way to the home position even if the switch trigger is released.)(Fig. 15)

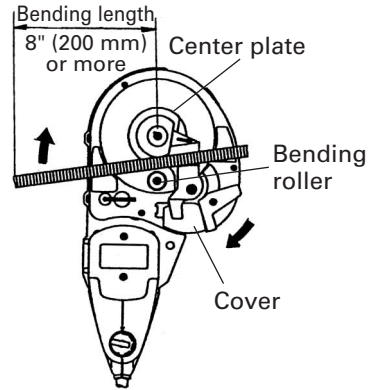


Fig. 14

! WARNING:

- **Make absolutely sure that the cutter cover is closed when you don't carry out the cutting work. If the cover is kept open, the cutter can jam on foreign objects and cause serious accidents. (Fig. 16)**
- **Never bring your hand close to the bending roller during operation.**
- **If you bend the rebar with a large angle while placing your hand onto it, there is a fear of getting your hand caught in by the fold-back reaction of the rebar. Never place your hand onto the position where the rebar may fold back.**
- **Do not bend any rebar exceeding the maximum capacities of the unit described in the specifications. Never bend any hard materials such as PC(Precast concrete) steel. Materials of this type are likely to scatter into pieces and cause injuries.**
- **The rebar you are bending may have a hard spot in it. Quality may vary within each bar. Do not attempt to bend NON-GRADE Rebar.**

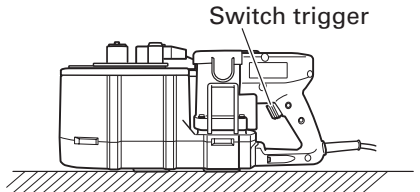


Fig. 15

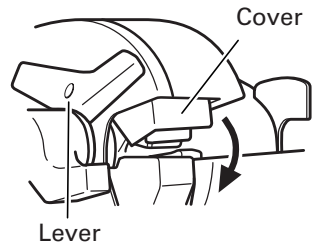


Fig. 16

- **Never place your hand onto the bending side of the rebar. If you do so, your hand may be caught in the mechanical parts.**
- **Install the deflection guard for operation with the bending length of a rebar 20" (inside dimension of the deflection guard) or less to protect the persons around the rebar cutter/bender in case rebar splinters into pieces and deflects during bending. (Fig. 21)**
- **Remove the deflection guard when bending a rebar whose bending length and the fixed length are more than 20" to prevent damage to the deflection guard.**
- **Replace the deflection guard with new one if it is damaged. Damaged deflection guard cannot protect the persons around the rebar cutter/bender in case a rebar splinters into pieces and deflects during bending.**
- **Note that the unit is not a hand-held tool. Be absolutely sure to use the unit only after placing it on a stable spots such as floor, ground, etc.**
- **Begin operation only after marking sure that there are no people within the turning range of the material to be bent.**
- **The minimum required bending length is 8" (200 mm).**
If the bending length is not long enough, the rebar can come off during bending operation, or it can break into fragments and scatter dangerously. (Fig. 14)
- **Place the rebar on the center plate and set it so that it is horizontal with the turntable surface.**
If the side that is to be bent is set inclined upward, the rebar can come loose from the bending roller while bending causing it to fly off. (Fig. 17)

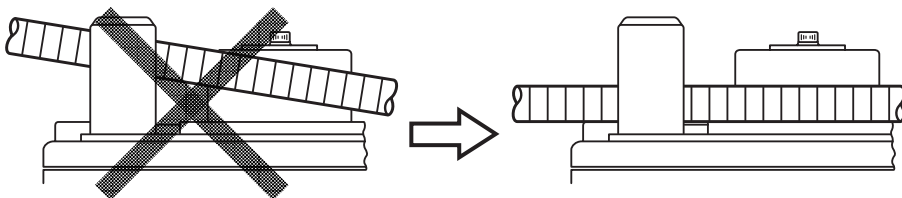


Fig. 17

- **When bending multiple rebars at one time, some may come off the bending roller and guide, etc., and therefore exercise caution and set them horizontally.**
- **Bend less than every 3 pieces of rebar with a #3(3/8") diameter, less than every 2 pieces with a #4(1/2") diameter, and every 1 piece with a #5(5/8") diameter.**
- **Remember that the cutter moves even during the bending operation, thereby, close the cutter cover without fail.**

3. How to install deflection guard

The deflection guard is provided to protect the persons around the rebar cutter/bender in case a rebar splinters into pieces and deflects during bending. Install the deflection guard to the VB16Y for operation with the bending length of a rebar 20" (inside dimension of the deflection guard) or less.

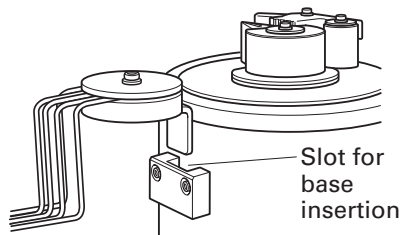


Fig. 18

- (1) Insert the base of the deflection guard into the slot of the rebar cutter/bender. (Fig. 18)
 - (2) Open the guard fully by pulling the arms as shown below until a click is heard. (Fig. 19)
4. How to remove deflection guard
- Reverse the installation procedure to remove the deflection guard.
5. How to use deflection guard

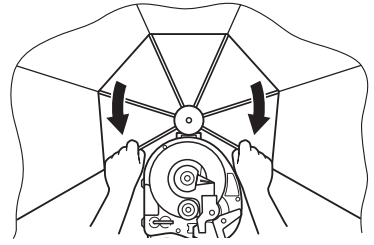


Fig. 19

- (1) Be sure to install the deflection guard when bending a rebar whose bending length and the fixed length are 20" (inside dimension of deflection guard) or less (Fig. 20)
- (2) Be sure to install the deflection guard when bending a rebar whose bending length is 20" (inside dimension of deflection guard) or less and the fixed length is more than 20". In this case, move the arm at the fixed end. (Fig. 21)

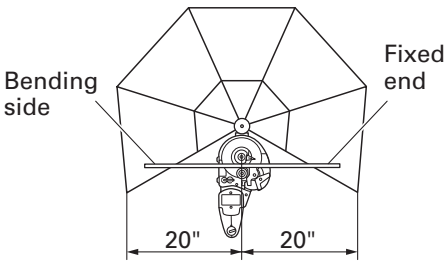


Fig. 20

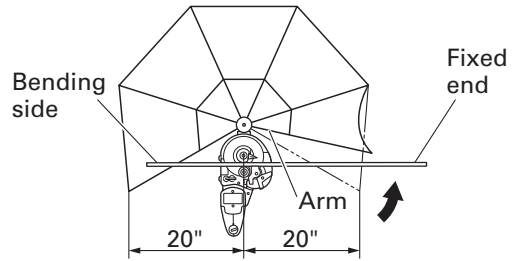


Fig. 21

- (3) Remove the deflection guard when bending a rebar whose bending length and the fixed length are more than 20" (inside dimension of the deflection guard).

⚠ CAUTION:

- **Set a rebar on the rebar cutter/bender so that the bending length is equal to or shorter than the fixed length.**

6. Bending by eye measurement

Since the unit uses a variable-speed switch, you can bend the rebar to your desired angle by eye measurement in addition to the dial setting.

- (1) Set the setting dial to a larger angle than you desire.
- (2) Pull the switch trigger lightly and bend the rebar slowly.
- (3) When the rebar is bent to the desired angle, stop pulling the switch. If the bar is still small of the desired angle, pull the switch again.
- (4) Remove the rebar after bending has been finished. Then, pull the switch once more and return the bending roller to the home position. (Continue pulling the switch until the bending roller begins reverse rotation.)

7. Removing rebar during bending operation

When bending out at a low speed in “bending by eye measurement”, the rebar can sometimes get caught in the bending roller due to its own flexure. If this occurs, you can return the bending roller to the home position by pulling the switch again after setting the setting dial to the “return” position. This is the same method used to remove the rebar when it gets caught during cutting operation. (Fig. 22)

8. Using hole to fix unit in place

A hole is provided at the center of the unit to fix and stabilize it. This hole comes in quite handy when used in the following manner. (Fig. 23)

- For bending operation when the unit is fixed to a work bench.

This hole will prove very convenient when the unit is bolted to a suitable work bench. (Bolt size M10, less than W3/8.)

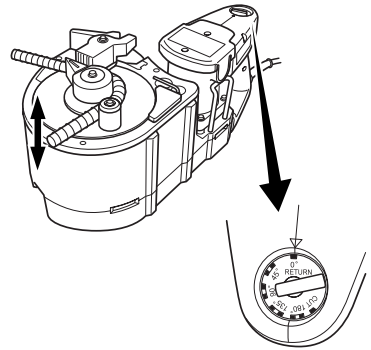


Fig. 22

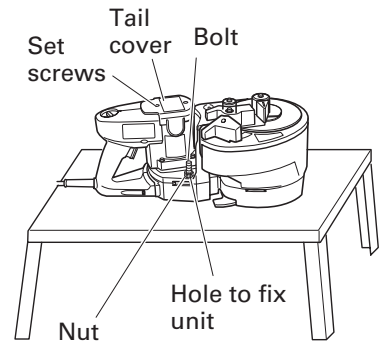


Fig. 23