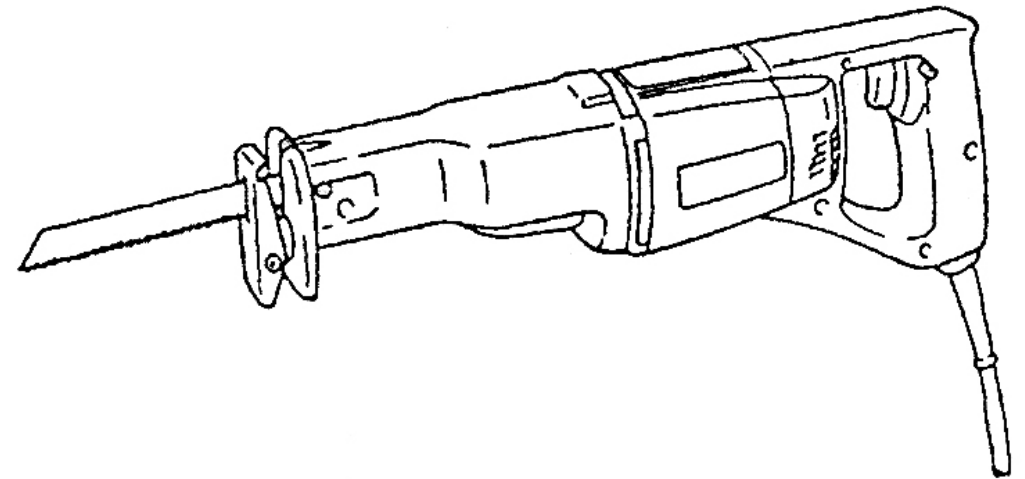




Reciprocating Saw

OPERATION INSTRUCTIONS




SSAWRP-001



Read through carefully and understand these instructions before use.

GENERAL POWER TOOL SAFETY WARNINGS

(For All Power Tools)

 **WARNING!** Read and understand all instructions. *Failure to follow all instructions listed below may result in electric shock, fire and/or serious personal injury.* Save all warnings and instructions for future reference.

The term “power tool” in the warnings refers to your mains-operated (corded) power tool or battery-operated (cordless) power tool.

Work Area Safety

1. **Keep work area clean and well lit.** *Cluttered or dark areas invite accidents.*
2. **Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases, or dust.** *Power tools create sparks which may ignite the dust or fumes.*
3. **Keep children and bystanders away while operating a power tool.** *Distractions can cause you to lose control.*

Electrical Safety

4. **Power tool plugs must match the outlet. Never modify the plug in anyway. Do not use any adapter plugs with earthed (grounded) power tools.** *Unmodified plugs and matching outlets will reduce risk of electric shock.*
5. **Avoid body contact with earthed or grounded surfaces, such as pipes, radiators, ranges and refrigerators.** *There is an increased risk of electric shock if your body is earthed or grounded.*
6. **Do not expose power tools to rain or wet conditions.** *Water entering a power tool will increase the risk of electric shock.*
7. **Do not abuse the cord. Never use the cord for carrying, pulling or unplugging the power tool. Keep cord away from heat, oil, sharp edges or moving parts.** *Damaged or entangled*
When operating a power tool outdoors, use an extension cord suitable for outdoor use. *Use of a cord suitable for outdoor use reduces the risk of electric shock.*
8. **If operating a power in a damp location is unavoidable, use a residual current device (RCD) protected supply.** *Use of an RCD reduces the risk of electric shock.*

NOTE: The term “residual current device (RCD)” may be replaced by the term “ground fault circuit interrupter (GFCI)” or “earth leakage circuit breaker (ELCB)”.

Personal Safety

9. **Stay alert, watch what you are doing and use common sense when operating a power tool. Do not use a power tool while you are tired or under the influence of drugs, alcohol, or medication.** *A moment of inattention while operating power tools may result in serious personal injury.*
10. **Use personal protective equipment. Always wear eye protection.** *Protective equipment such as dust mask, non-skid safety shoes, hard hat, or hearing protection used for appropriate conditions will reduce personal injuries.*
11. **Prevent unintentional starting. Ensure the switch is in the off-position before connecting to power source and /or battery pack, picking up or carrying the tool.** *Carrying power tools with your finger on the switch or energising power tools that have the switch on invites accidents.*
12. **Remove any adjusting key or wrench before turning the tool on.** *A wrench or a key left attached to a rotating part of the power tool may result in personal injury.*
13. **Do not overreach. Keep proper footing and balance at all times.** *This enables better control of the power tool in unexpected situations.*
14. **Dress properly. Do not wear loose clothing or jewellery. Keep your hair, clothing, and gloves away from moving parts.** *Loose clothes, jewellery or long hair can be caught in moving parts.*
15. **If devices are provided for the connection of dust extraction and collection facilities, ensure these are connected and properly used.** *Use of dust collection can reduce dust-related hazards.*
16. **Be careful and do not overlook these safety instructions due to your frequent use of this tool.** *Some careless operation may cause serious injury momentarily.*

Power Tool Use and Care

17. **Do not force the power tool. Use the correct power tool for your application.** *The correct power tool will do the job better and safer at the rate for which it was designed.*
18. **Do not use tool if switch does not turn it on or off.** *Any power tool that cannot be controlled with the switch is dangerous and must be repaired.*
19. **Disconnect the plug from the power source and/or the battery pack from the power tool before making any adjustments, changing accessories, or storing power tools.** *Such preventive safety measures reduce the risk of starting the power tool accidentally.*
20. **Store idle power tools out of the reach of children and do not allow persons unfamiliar with the power tool or these instructions to operate the power tool.** *Power tools are dangerous in the hands of untrained users.*
21. **Maintain power tools. Check for misalignment or binding of moving parts, breakage of**

parts and any other condition that may affect the power tool's operation. If damaged, have the power tool repaired before use. *Many accidents are caused by poorly maintained power tools.*

22. **Keep cutting tools sharp and clean.** *Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control.*
23. **Use the power tool, accessories and tool bits etc. in accordance with these instructions, taking into account the working conditions and the work to be performed.** *Use of the power tool for operations different from those intended could result in a hazardous situation.*
24. **Keep the handle and grabbing surfaces dry and clean, and far away from grease.** *In unexpected situations, wet and greasy handle cannot ensure the safety and the control of the tool.*

Service

25. **Have your power tool serviced by a qualified repair person using only identical replacement parts.** *This will ensure that the safety of the power tool is maintained.*

VOLTAGE WARNING:

Before connecting the machine to a power source (receptacle, outlet, etc.), be sure the voltage supplied is the same as that specified on the nameplate of the machine. A power source with voltage greater than that specified for the machine can result in SERIOUS INJURY to the user, as well as damage to the machine. If in doubt, DO NOT PLUG IN THE MACHINE. Using a power source with voltage less than nameplate rating is harmful to the motor.

SPECIFICATIONS

Rated Power Input	590 W
Strokes per Minute	0-2300 .../min
Length of Stroke	30 mm
Max. Cutting Capacity (Wood/Steel Pipe)	90 mm
Net Weight	3.2 kg

※ Due to the continuing program of research and development, the specifications herein are subject to change without prior notice.

ADDITIONAL SAFETY RULES

1. Hold the tool by insulated gripping surfaces when performing an operation where the cutting tool may contact hidden wiring or its own cord. Contact with a "live" wire will make exposed metal parts of the tool "live" and shock the operator.
2. Always wear safety goggles or eye protection. Ordinary eye or sun glasses are NOT safety glasses.
3. Avoid cutting nails. Inspect workpiece for any nails and remove them before operation.
4. Do not cut oversize workpiece.
5. Check for the proper clearance beyond the workpiece before cutting so that the blade will not strike the floor, workbench, etc.
6. Hold the tool firmly to avoid injuries.
7. Make sure the blade is not contacting the workpiece before switching on the tool.
8. Keep hands away from moving parts.
9. Do not leave the tool running. Operate the tool only when hand-held.
10. Always switch off and wait for the blade to come to a complete stop before removing the blade from the workpiece.
11. Do not touch the blade or the workpiece immediately after operation; they may be extremely hot and could burn your skin.
12. Some material contains chemicals which may be toxic. Take caution to prevent dust inhalation and skin contact. Follow material supplier safety data.

SAVE THESE INSTRUCTIONS.

WARNING! MISUSE or failure to follow the safety rules stated in this instruction manual may cause serious personal injury.

INSTRUCTIONS FOR OPERATION

CAUTION:

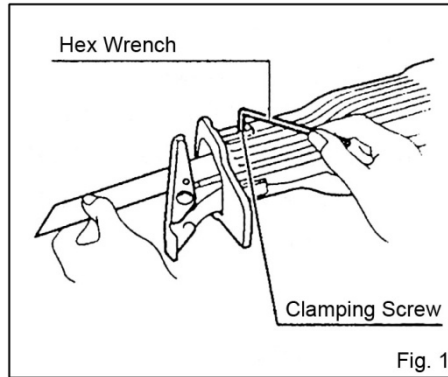
- Always unplug the tool from the power source before changing accessories or making any adjustments.

Installing or Removing Saw Blade

CAUTION:

- Always be sure that the tool is switched off and unplugged from the supply outlet before installing or removing saw blade.
- Always clean out all chips or foreign matter adhering to the blade, blade clamp and/or slider. Failure to do so may cause insufficient tightening of the blade, resulting in a serious injury.

To install the blade, loosen the clamping screw with the hex wrench. Insert the blade with its edge upward or downward between the blade clamp and the slider so that the pin on the slider fits into the hole in the blade shank. And then tighten the clamping screw securely. Make sure the blade cannot be extracted by trying to pull it out with your hand. (Fig. 1)



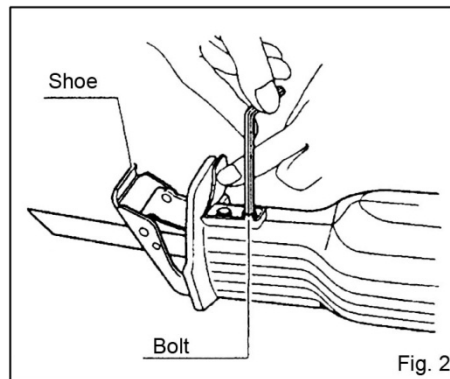
Adjusting the Shoe

CAUTION:

- Always be sure that the tool is switched off and unplugged from the supply outlet before adjusting the shoe.

When the blade loses its cutting efficiency in one place along its cutting edge, reposition the shoe to utilize a sharp, unused portion of its cutting edge. This will help to lengthen the life of the blade.

To reposition the shoe, loosen the two bolts holding the shoe and slide the shoe forward or backward to the desired position. Then tighten the two bolts firmly to secure the shoe. (Fig. 2)



Switch Action

CAUTION:

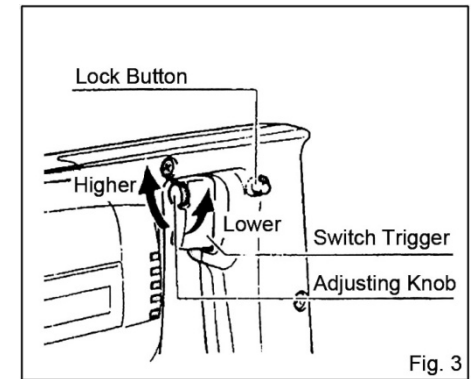
- Before plugging in the tool, always check to see that the switch trigger actuates properly and returns to

the "OFF" position when released.

- Switch can be locked in the "ON" position for ease of operator comfort during extended use. Apply caution when locking tool in the "On" position and maintain firm grasp on tool.

To start the tool, simply pull the switch trigger. Release the trigger to stop. For continuous operation, pull the trigger and then push in the lock button. To stop the tool from the locked position, pull the trigger fully and then release it. (Fig. 3)

Speed can be adjusted by turning the adjusting knob on the switch trigger. Turn the adjusting knob clockwise (+) to increase the speed and counterclockwise (-) to lower the speed. (Fig. 3)



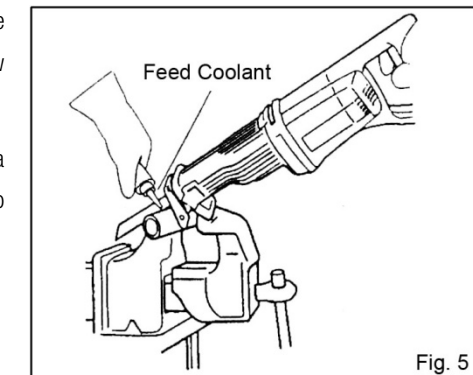
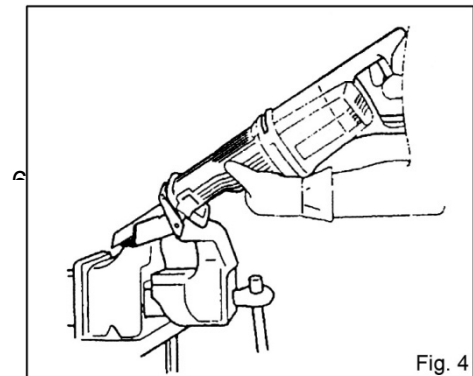
Cutting Operation

CAUTION:

- Always press the shoe firmly against the workpiece during operation. Overexert or if the shoe is held away from the workpiece during operation, strong vibration and/or twisting will be produced, causing the blade to snap dangerously.
- Always wear suitable eye protection.

Switch on the tool and wait until the blade attains full speed, then press the shoe against the workpiece and start cutting operation. Do not allow the tool to bounce. (Fig. 4)

For cutting precisely, first make a pilot groove with a slower speed and then use a faster speed to continue cutting.



Metal Cutting

CAUTION:

- Always wear gloves to protect your hands from hot flying chips when cutting metal.

Always use a suitable coolant (cutting oil) when cutting metal. Failure to do so will cause premature wear of the blade. (Fig. 5)

MAINTENANCE AND INSPECTION

CAUTION:

- Always be sure that the tool is switched off and unplugged before attempting to perform inspection or maintenance.

1. Maintenance of the Motor

The motor unit winding is the very "heart" of the power tool. Exercise due care to ensure the winding does not become damaged and /or wet with oil or water.

2. Inspecting and Replacing the Carbon Brushes

Remove and check the carbon brushes regularly. Replace when they wear down to the limit mark (Fig. 6). Keep the carbon brushes clean and free to slip in the holders. Both carbon brushes should be replaced at the same time. Use only identical carbon brushes.

Use a screwdriver to remove the handle cover. Unscrew the bolt on the brush holder and pull out the brush holder and disconnect it from the stator. Be careful not to overexert to break the lead of the stator coil. Then remove the worn carbon brush and inset new one. Replace the brush holder and connect it with the stator and then reinstall the handle cover with a screwdriver. (Fig. 7)

- ✘ To maintain product SAFETY and RELIABILITY, repairs, any other maintenance or adjustment should be performed by authorized service centers,
- ✘ always using original replacement parts.
- ✘ Damaged cord must be replaced by a special cord purchased from authorized service center.

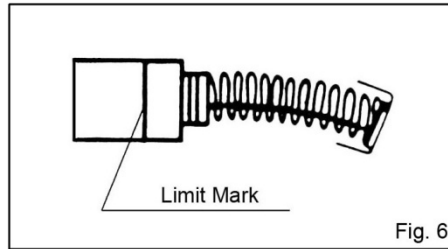


Fig. 6

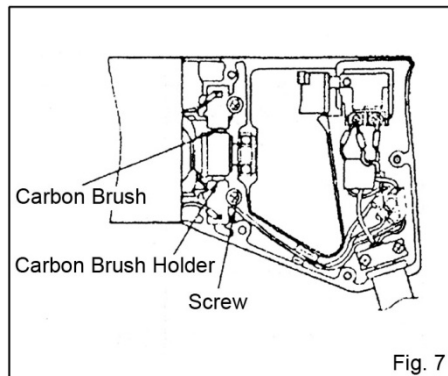
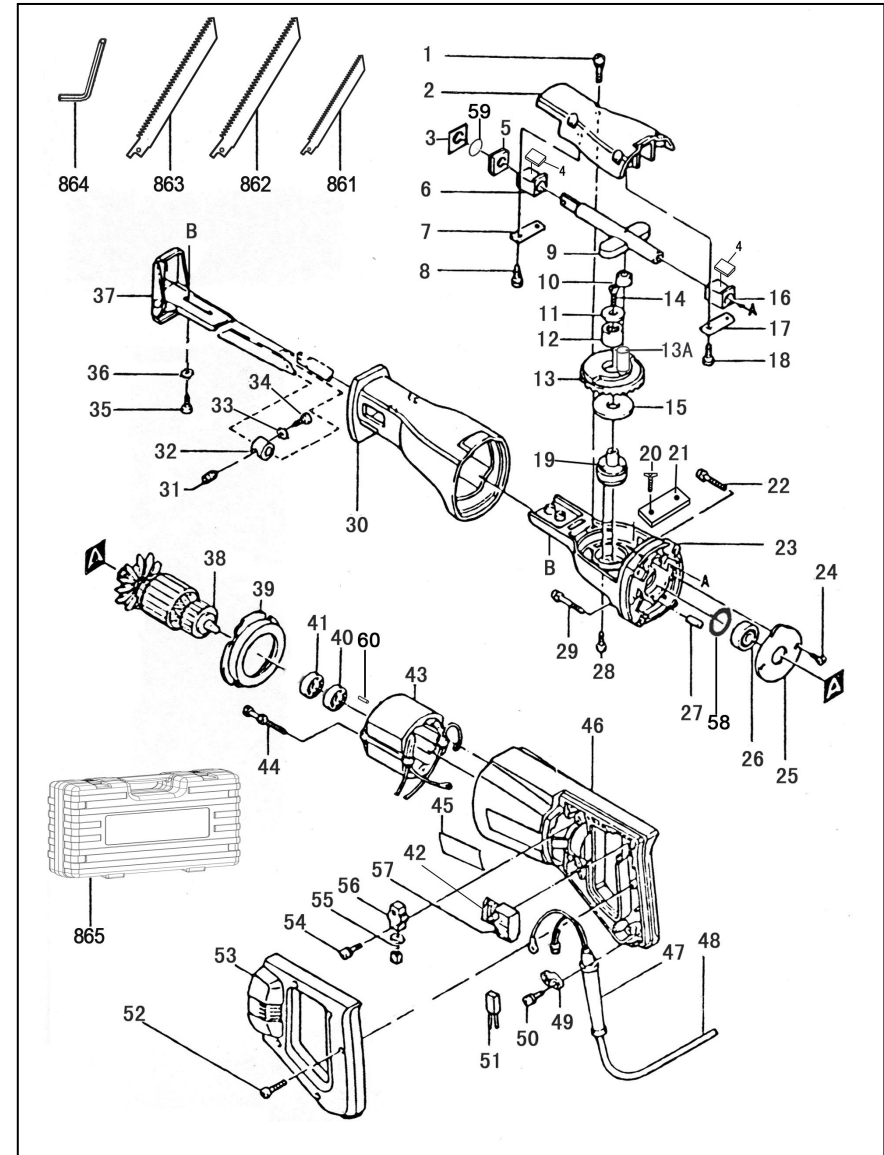


Fig. 7



EXPLANATION OF GENERAL VIEW

1	Pan Head Screw M5×23 (with Spring Washer)	33	Spring Washer 5
2	Gear Housing Cover	34	Hex Socket Head Bolt M5×14
3	Dustproof Cover	35	Hex Socket Head Bolt M5×12
4	Square Felt	36	Spring Washer 5
5	Felt	37	Base
6	Square Oil-Retaining Bearing	38	Armature Assembly
7	Bearing Retainer	39	Baffle Plate
8	Pan Head Screw M5×14 (with Spring Washer)	40	Ball Bearing 608ZZ
9	Slider	41	Insulation Washer
10	Needle Bearing NK7/8	42	Dust Cover
11	Flat Washer	43	Stator Assembly
12	Needle Bearing HK121816	44	Pan Head Tapping Screw ST5×55
13	Driven Spiral Bevel Gear	45	Nameplate
13A	Small Shaft	46	Motor Housing
14	Cross Recessed Countersunk Head Screw M5×10	47	Cord Guard
15	Washer	48	Cord
16	Square Oil-Retaining Bearing	49	Strain Relief
17	Bearing Retainer	50	Pan Head Tapping Screw ST4.2×14
18	Pan Head Screw M5×14 (with Spring Washer)	51	Capacitor
19	Gear Shaft	52	Pan Head Tapping Screw ST4×22
20	Cross Recessed Countersunk Head M5×10	53	Handle Cover
21	Square Plate	54	Pan Head Tapping Screw ST4.2×14
22	Pan Head Tapping Screw ST5×30	55	Carbon Brush
23	Gear Housing	56	Carbon Brush Holder
24	Cross Recessed Countersunk Head M4×10	57	Trigger Switch
25	Bearing Retainer	58	Circlip for Shaft 10
26	Ball Bearing 6200V	59	O Ring
27	Rubber Pin	60	Rubber Pin
28	Pan Head Screw M5×14 (with Spring Washer)	861	Saw Blade 21
29	Pan Head Tapping Screw ST5×35	862	Saw Blade 22
30	Rubber Sleeve	863	Saw Blade 23
31	Hex Socket Head Clamping Screw M8×9	864	Hex Wrench (4mm)
32	Blade Clamp	865	Plastic Carton