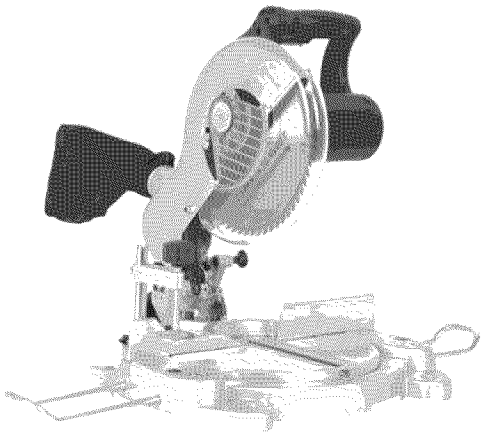
STEELE products

Owner's Manual

10" Miter Saw

With Laser Function



SP-PB113

WARNING! To Reduce The Risk Of Injury, User Must Read And Understand Instruction Manual.

FOR SERVICE CALL: PARA SERVICIO LLAME: 888-896-6881

www.steele-products.com

GENERAL SAFETY RULES

WARNING! *Read and understand all the instructions before attempting to assemble or operate the tool. Failure to follow the instructions listed below could result in electric shock, fire and/or serious personal injury.*

SAVE THESE INSTRUCTIONS.

Refer to them often and use them to instruct others.

WORK AREA

1. **KEEP YOUR WORK AREA CLEAN AND WELL LIT.** Cluttered benches and dark areas invite accidents. DO NOT leave tools or pieces of wood on the saw while it is in operation.
2. **DO NOT OPERATE POWER TOOLS IN EXPLOSIVE ENVIRONMENTS, SUCH AS IN THE PRESENCE OF FLAMMABLE LIQUIDS, GASES OR DUST.** Power tools create sparks, which could ignite dust or fumes.
3. **KEEP BYSTANDERS, CHILDREN AND VISITORS AWAY WHILE OPERATING A POWER TOOL.** Distractions could cause you to lose control.
4. **STORE IDLE TOOLS OUT OF THE REACH OF CHILDREN AND OTHER UNTRAINED PERSONS.** Tools are dangerous in the hands of untrained users.
5. **NEVER LEAVE THE TOOL RUNNING UNATTENDED. TURN THE POWER OFF.** Don't leave the tool until it comes to a complete stop.
6. **MAKE THE WORKSHOP CHILDPROOF** – with padlocks, master switches, or by removing starter keys.

ELECTRICAL SAFETY

1. **BEFORE PLUGGING IN THE TOOL, BE CERTAIN THE OUTLET VOLTAGE SUPPLIED IS COMPATIBLE WITH THE VOLTAGE MARKED ON THE NAMEPLATE WITHIN 10%.** An outlet voltage incompatible with that specified on the nameplate can result in serious hazards and damage to the tool.
2. **GROUNDING TOOLS ARE EQUIPPED WITH THREE-PRONG PLUG (THE GROUNDING BLADE IS THE LONGEST OF THE 3 BLADES).** This plug will fit into a three-hole electrical receptacle. Do not modify the plug provided. If the plug does not fit the outlet, have the proper outlet installed by a qualified electrician. Check with a qualified electrician or service personnel if the grounding instructions are not completely understood, or if in doubt as to whether the tool is properly grounded.
3. **AVOID BODY CONTACT WITH GROUNDED SURFACES SUCH AS PIPES, RADIATORS, RANGES AND REFRIGERATORS.** There is an increased risk of electric shock if your body is grounded.
4. **DO NOT EXPOSE POWER TOOLS TO RAIN OR WET CONDITIONS.** Water entering a power tool will increase the risk of electric shock.
5. **DO NOT ABUSE THE CORD.** Never use the cord to carry the tool or pull the plug from an outlet. Keep the cord away from heat, oil, sharp edges or moving parts. Replace damaged cords immediately. Damaged cords increase the risk of electric shock.
6. **WHEN OPERATING A POWER TOOL OUTSIDE, USE AN OUTDOOR EXTENSION CORD MARKED "W-A" OR "W".** These cords are rated for outdoor use and reduce the risk of electric shock.

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GENERAL SAFETY RULES

PERSONAL SAFETY

1. **STAY ALERT.** Watch what you are doing and use common sense when operating a power tool. Do not use a tool while tired or under the influence of drugs, alcohol or medication. A lack of attention while operating power tools could result in serious personal injury.
2. **DRESS PROPERLY.** Do not wear loose clothing or jewelry. Keep your hair, clothing and gloves away from moving parts. Loose clothes, jewelry, or long hair could get caught in moving parts. Roll long sleeves above the elbow. Rubber gloves and non-skid footwear are recommended when working outdoors.
3. **AVOID ACCIDENTAL STARTING.** Make sure the switch is "OFF" before plugging in. Carrying tools with your finger on the switch or plugging in tools that have the switch "ON" invites accidents.
4. **REMOVE ADJUSTING KEYS OR WRENCHES BEFORE TURNING ON THE TOOL.** A wrench or a key that is left attached to a rotating part of the tool could result in personal injury.
5. **DO NOT OVERREACH.** Keep proper footing and balance at all times. Proper footing and balance enables better control of the tool in unexpected situations.
6. **DO NOT STAND ON TOOL OR ITS STAND.** Serious injury may occur if the tool is tipped or if the cutting tool is accidentally contacted. Do not store materials on or near the tool such that is necessary to stand on the tool or its stand to reach them.
7. **USE SAFETY EQUIPMENT. ALWAYS WEAR EYE PROTECTION.** Dust masks, safety shoes, hard hat or hearing protection must be used for appropriate conditions. Everyday eyeglasses only have impact resistant lenses, they are NOT safety glasses. These safety glasses must conform to ANSI Z87.1 requirements. NOTE: Approved glasses have Z87 printed or stamped on them.

TOOL USE AND CARE

1. **USE CLAMPS OR OTHER PRACTICAL MEASURES TO SECURE AND SUPPORT THE WORK PIECE TO A STABLE PLATFORM.** Holding the work piece by hand or against your body is unstable and could lead to a loss of control.
2. **DO NOT FORCE THE TOOL.** Use the correct tool for your application. The correct tool will do the job better and safer at the rate for which it was designed. Do not use the tool for purpose for which it was not intended.
3. **DO NOT USE TOOL IF THE SWITCH DOES NOT TURN IT ON OR OFF.** Any tool that cannot be controlled with the switch is dangerous and must be repaired.
4. **DISCONNECT THE PLUG FROM THE POWER SOURCE BEFORE MAKING ANY ADJUSTMENTS, CHANGING ACCESSORIES OR STORING THE TOOL.** Such preventive safety measures reduce the risk of starting the tool accidentally.
5. **KEEP CUTTING TOOLS SHARP AND CLEAN.** Properly maintained tools, with sharp cutting edges, are less likely to bind and easier to control. When mounting saw blades be certain that the arrow on the blade matches the direction of the arrow marked on the tool and that the teeth are also pointing in the same direction.
6. **INSPECT THE GUARDS BEFORE USING A TOOL. KEEP GUARDS IN PLACE** and in working order. Never operate the tool with any guard or cover removed. Make sure all guards are operating properly before each use.

Owner's Manual

GENERAL SAFETY RULES

7. **CHECK MOVING PARTS FOR BINDING OR ANY OTHER CONDITION THAT MAY AFFECT THE NORMAL OPERATION OR SAFETY FEATURES OF THE TOOL.** If damaged, have the tool serviced before using the tool. Many accidents are caused by poorly maintained tools.
8. **DO NOT ALTER OR MISUSE THE TOOL.** Any alteration or modification is a misuse and may result in serious personal injury.
9. **THE USE OF ANY OTHER ACCESSORIES NOT SPECIFIED IN THIS MANUAL MAY CREATE A HAZARD.** Accessories that may be suitable for one type of tool, could create a risk of injury when used on an inappropriate tool.
10. **KEEP THE TOOL AND ITS HANDLE DRY, CLEAN AND FREE FROM OIL AND GREASE.** Always use a clean cloth when cleaning. Never use brake fluids, gasoline, petroleum-based products, or any strong solvents to clean your tool. Following this rule will reduce the risk or loss of control and deterioration of the plastic housing.
11. **INSPECT THE TOOL CORDS PERIODICALLY.** If your cord is damaged, have it repaired by a qualified service technician at an authorized service facility. Stay constantly aware of the cord location and keep it well away from the rotating blade.
12. **MAKE SURE YOUR EXTENSION CORD IS IN GOOD CONDITION.** When using an extension cord, be sure to use one heavy enough to carry the current your tool will draw. An undersized cord will cause a drop in line voltage resulting in loss of power and overheating. A wire gauge size (A.W.G.) of at least 14 is recommended for an extension cord 25 feet or less in length. If in doubt, use the next heavier gauge. The smaller the gauge number, the heavier the cord.
13. **THE DUST GENERATED** by certain woods and wood products can be injurious to your health. Always operate machinery in well ventilated areas and provide for proper dust removal. Use wood dust collection systems whenever possible.
14. **USE ONLY CORRECT BLADES.** Do not use blades with incorrect size holes. Never use blade washers or bolts that are defective or incorrect. The maximum blade capacity of your saw is 10" (254 mm).
15. **BEFORE MAKING A CUT, BE SURE ALL ADJUSTMENTS ARE SECURE.**
16. **AVOID CUTTING NAILS.** Inspect for and remove all nails from lumber before cutting.
17. **NEVER TOUCH THE BLADE** or other moving parts during use.
18. **NEVER START A TOOL WHEN ANY ROTATING COMPONENT IS IN CONTACT WITH THE WORKPIECE.**
19. **DOUBLE CHECK ALL SETUPS.** Make sure the blade is tight and not making contact with the saw or workpiece before connecting to a power supply.

ADDITIONAL SAFETY RULES FOR MITER SAWS

WARNING! *Read and understand all the instructions before attempting to assemble or operate the tool. Failure to follow the instructions listed below could result in electric shock, fire and/or serious personal injury.*

SAVE THESE INSTRUCTIONS.

Refer to them often and use them to instruct others.

1. **DO NOT OPERATE THIS MACHINE** until it is assembled and installed according to the instructions.
2. **OBTAIN ADVICE FROM YOUR SUPERVISOR,** instructor, or another qualified person if you are not familiar with the operation of this machine.
3. **FOLLOW ALL WIRING CODES** and recommended electrical connections.
4. **ALWAYS KEEP THE BLADE GUARD IN PLACE** and in working order.
5. **USE CLAMPS TO SUPPORT THE WORKPIECE WHENEVER POSSIBLE. IF SUPPORTING THE WORKPIECE BY HAND, YOU MUST ALWAYS KEEP YOUR HAND OUTSIDE OF THE "NO HAND" AREA AS MARKED WITH A SYMBOL ON THE BASE. DO NOT USE THIS SAW TO CUT PIECES THAT ARE TOO SMALL TO BE SECURELY CLAMPED.** Your hand, if placed inside the "No Hands" region, can easily slip or be pulled into the blade.
6. **DO NOT REACH IN BACK OF THE SAW BLADE BEHIND THE FENCE WITH EITHER HAND FOR ANY REASON.** The proximity of the spinning saw blade to your hand may not be obvious and you may be seriously injured.
7. **NEVER CROSS YOUR HAND OVER THE INTENDED LINE OF CUTTING.** Supporting the workpiece "cross handed" i.e. holding the left side of the workpiece with your right hand is very dangerous.
8. **ALWAYS DISCONNECT THE POWER CORD FROM THE POWER SOURCE BEFORE MAKING ANY ADJUSTMENTS OR ATTACHING ANY ACCESSORIES.** You may unintentionally start the saw, leading to serious personal injury.
9. **MITER SAWS ARE INTENDED TO CUT WOOD OR WOODLIKE PRODUCTS, THEY CANNOT BE USED WITH ABRASIVE CUTOFF WHEELS FOR CUTTING FERROUS MATERIAL SUCH AS BARS, RODS, STUDS, ETC. HOWEVER , IF CUTTING MATERIALS LIKE ALUMINUM OR OTHER NON-FERROUS METALS, USE ONLY SAW BLADES SPECIFICALLY RECOMMENDED FOR NON-FERROUS METAL CUTTING.** Cutting ferrous materials causes excessive sparking and will damage the lower guard and will overload the motor.
10. **INSPECT YOUR WORKPIECE BEFORE CUTTING.** If the workpiece is bowed or warped, clamp it with the outside bowed face toward the fence. Always make certain that there is no gap between the workpiece, fence and table along the line of the cut. Bent or warped workpieces can twist or lock and may cause binding on the spinning saw blade while cutting. Also, make sure there are no nails or foreign objects in the workpiece.
11. **DO NOT USE THE SAW UNTIL THE TABLE IS CLEAR OF ALL TOOLS, WOOD SCRAPS, ETC.** Small debris or loose pieces of wood or other objects that contact the revolving blade can be thrown with high speed at the operator.
12. **DO NOT FEED THE WORKPIECE INTO THE BLADE OR CUT "FREEHAND" IN ANY WAY. THE WORKPIECE MUST BE STATIONARY AND CLAMPED OR BRACED BY YOUR HAND.** The saw blade must be fed through the workpiece smoothly and at a rate which will not overload the saw's motor.

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ADDITIONAL SAFETY RULES FOR MITER SAWS

13. **CUT ONLY ONE WORKPIECE AT A TIME.** Multiple workpieces cannot be adequately clamped or braced and may bind on the blade or shift during cutting.
14. **BE CERTAIN THE MITER SAW IS MOUNTED OR PLACED ON A LEVEL, FIRM WORK SURFACE BEFORE USING.** A level and firm work surface reduces the risk of the miter saw becoming unstable.
15. **PLAN YOUR WORK.** Provide adequate support accessories such as tables, saw horses, table extension, etc. for workpieces wider or longer than the table top. Workpieces longer or wider than the miter saw table can tip if not securely supported. If the cutoff piece or workpiece tips it can lift the lower guard or be thrown by the spinning blade.
16. **DO NOT USE ANOTHER PERSON AS A SUBSTITUTE FOR A TABLE EXTENSION OR AS ADDITIONAL SUPPORT.** Unstable support for the workpiece can cause the blade to bind or the workpiece to shift during the cutting operation pulling you and the helper into the spinning blade.
17. **THE CUTOFF PIECE MUST NOT BE JAMMED AGAINST OR PRESSURED BY ANY OTHER MEANS AGAINST THE SPINNING SAW BLADE.** If confined, i.e. using length stops, it could get wedged against the blade and thrown violently.
18. **ALWAYS USE A CLAMP OR A FIXTURE DESIGNED TO PROPERLY SUPPORT ROUND MATERIAL SUCH AS DOWEL RODS, OR TUBING.** Rods have a tendency to roll while being cut, causing the blade to "bite" and pull the work with your hand into the blade.
19. **WHEN CUTTING IRREGULARLY SHAPED WORKPIECES, PLAN YOUR WORK SO IT WILL NOT SLIP AND PINCH THE BLADE AND BE TORN FROM YOUR HAND.** A piece of molding, for example, must be lie flat or be held by a fixture or jig that will not let it twist., rock or slip while being cut.
20. **LET THE BLADE REACH FULL SPEED BEFORE CONTACTING THE WORKPIECE.** This will help avoid thrown workpieces.
21. **IF THE WORKPIECE OR BLADE BECOMES JAMMED OR BOGGED DOWN, TURN THE MITER SAW "OFF" BY RELEASING SWITCH.** Wait for all moving parts to stop and unplug the miter saw, then work to free the jammed material. Continued sawing with a jammed workpiece could cause a loss of control or damage to the miter saw.
22. **THE BRAKING ACTION OF THE SAW CAUSES THE SAW HEAD TO JERK DOWNWARD.** Be ready for this reaction when making an incomplete cut or when releasing the switch before the head is completely in the down position.
23. **AFTER FINISHING THE CUT, RELEASE THE SWITCH, HOLD THE SAW ARM DOWN AND WAIT FOR BLADE TO STOP BEFORE REMOVING WORK OR CUTOFF PIECE.** Reaching with your hand under a coasting blade is dangerous.
24. **GUARD AGAINST KICKBACK.** Kickback occurs when the blade stalls rapidly and the workpiece is driven back towards the operator. It can pull your hand into the blade resulting in serious personal injury. Stay out of the blade path and turn the switch off immediately if the blade binds or stalls.
25. **AVOID KICKBACK (work thrown back toward you) by:**
    - Keeping the blade sharp and free of rust and pitch.
    - Never cut a workpiece that is twisted or warped, or does not have a straight edge to guide along the fence.
    - Never saw a large workpiece that cannot be controlled.
    - Never saw a workpiece with loose knots or other flaws.

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ADDITIONAL SAFETY RULES FOR MITER SAWS

26. **NEVER** attempt to free a stalled saw blade without first turning the machine "OFF".
27. **NEVER PERFORM LAYOUT,** assembly or set-up the workpiece on the table/work area when the machine is running.
28. **ALWAYS TURN THE MACHINE "OFF",** disconnect the machine from the power source, and clean the table/work area before leaving the machine. **LOCK THE SWITCH IN THE "OFF" POSITION** to prevent unauthorized use.
29. **DO NOT ALLOW FAMILIARITY GAINED FROM FREQUENT USE OF YOUR MITER SAW TO BECOME COMMONPLACE.** Always remember that a careless fraction of a second is sufficient to inflict severe injury.
30. **THINK SAFETY! SAFETY IS A COMBINATION OF OPERATOR'S COMMON SENSE, KNOWLEDGE OF THE SAFETY AND OPERATING INSTRUCTIONS AND ALERTNESS AT ALL TIMES WHEN THE MITER SAW IS BEING USED.**

WARNING! SOME DUST CREATED BY POWER SANDING, SAWING, GRINDING, DRILLING, AND OTHER CONSTRUCTION ACTIVITIES *contains chemicals known to cause cancer, birth defects or other reproductive harm Some examples of these chemicals are:*

- *Lead from lead-based paints,*
- *Crystalline silica from bricks and cement and other masonry products, and*
- *Arsenic and chromium from chemically-treated lumber.*

Your risk from these exposures varies, depending on how often you do this type of work, To reduce your exposure to these chemicals: work in a well ventilated area, and work with approved safety equipment, such as those dust masks that are specially designed to filter out microscopic particles.

31. **FOR YOUR OWN SAFETY, READ INSTRUCTION MANUAL BEFORE OPERATING THE TOOL.** Learn the tool's application and limitations as well as the specific hazards that accompany it.

32. SAFETY RULES FOR LASER LIGHTS

The laser guide used in the tool is Class I with a maximum output of ≤1mw and a wavelength of 650nm.The laser guide does not normally present an optical hazard, although staring at the beam may cause flash blindness.

CAUTION. The use of optical in struments with this laser product will increase the chance of eye damage.

- Do not stare into the laser beam.
- The laser shall be used and maintained in accordance with the manufacturer's instructions.
- Never aim the beam at any person or an object other than the work piece.
- Always ensure the laser beam is aimed at a sturdy work piece without a reflective surface, i.e. wood or rough coated surfaces are acceptable.Bright shiny reflective sheet or the like is not suitable for laser use as the reflective surface could direct the beam back at the operator.

Owner's Manual

ELECTRICAL

POWER CONNECTIONS

The saw has a precision-built electric motor. It should be connected to a power supply that is 120 volts, 60 Hz, AC only (normal household current). Do not operate this tool on direct current (DC). A substantial voltage drop will cause a loss of power and motor will overheat. Before connecting the motor to the power line, make sure the switch is in the "OFF" position and be sure that the electric current is of the same characteristics as indicated on the machine. All line connections should make good contact. Running on low voltage will damage the motor. If your tool does not operate when plugged into an outlet, double-check the power supply.

WARNING! *Do not expose the machine to rain or operate the machine in damp locations.*

SPEED AND WIRING

The no-load speed of this tool is approximately 4500 rpm. This speed is not constant and decreases under a load or with lower voltage. For voltage, the wiring in a shop is as important as the motor's horsepower rating. A line intended only for lights cannot properly carry a power tool motor. Wire that is heavy enough for a short distance will be too light for a greater distance. A line that can support one power tool may not be able to support two or three tools.

GROUNDING INSTRUCTIONS

WARNING! *This machine must be grounded while in use to protect the operator from electric shock.*

1. All grounded, cord-connected machines:

In the event of a malfunction or breakdown, grounding provides a path of least resistance for electric current to reduce the risk of electric shock. This machine is equipped with an electric cord having an equipment-grounding conductor and a grounding plug. The plug must be plugged into a matching outlet that is properly installed and grounded in accordance with all local codes and ordinances.

Do not modify the plug provided – if it will not fit the outlet, have the proper outlet installed by a qualified electrician.

Improper connection of the equipment-grounding conductor can result in risk of electric shock.

Check with a qualified electrician or service personnel if the grounding instructions are not completely understood, or if in doubt as to whether the machine is properly grounded.

ELECTRICAL

Repair or replace damaged or worn cord immediately.

This tool is intended for use on a circuit that has an outlet like the one shown in figure 1. It also has a grounding pin like the one shown.

2. Grounded, cord-connected machines intended for use on a supply circuit having a nominal rating less than 150 volts:

If the machine is intended for use on a circuit that has an outlet that looks like the one illustrated in Fig. 2, the machine will have a grounding plug. A temporary adapter, which looks like the adapter illustrated in Fig. 2, may be used to connect this plug to a matching 2-conductor receptacle as shown in Fig. 2 if a properly grounded outlet is not available. The temporary adapter should be used only until a properly grounded outlet can be installed by a qualified electrician. The green-colored metal "ear", extending from the adapter must be connected to a permanent ground such as a properly grounded outlet box. Whenever the adapter is used, it must be held in place with a metal screw.

NOTE: In Canada, the use of a temporary adapter is not permitted by the Canadian Electric Code.

WARNING! *In all cases, make certain the receptacle in question is properly grounded. To prevent possible electrical hazards, have a qualified electrician check the receptacle if you are not sure.*

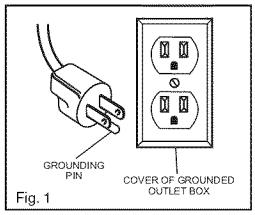


Fig. 1

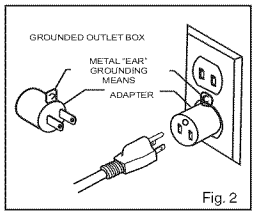


Fig. 2

ELECTRICAL

EXTENSION CORDS

Use proper extension cords. Make sure your extension cord is in good condition and is a 3-wire extension cord which has a 3-prong ground type plug and matching receptacle which will accept the machine's plug. When using an extension cord, be sure to use one heavy enough to carry the current of the machine. An undersized cord will cause a drop in line voltage, resulting in loss of power and causing the motor to overheat. Use the chart provided below to determine the minimum wire size required in an extension cord. Only round jacketed cords listed by Underwriter's Laboratories (UL) should be used. If in doubt, use the next heavier gauge. The smaller the gauge number, the heavier the cord.

**Ampere rating (on tool faceplate)

	0-2.0	2.1-3.4	3.5-5.0	5.1-7.0	7.1-12.0	12.1-16.0
Cord Length	Wire Size (A.W.G.)					
25'	16	16	16	16	14	14
50'	16	16	16	14	14	12
100'	16	16	14	12	10	-

NOTE: AWG = American Wire Gauge

When working with the tool outdoors, use an extension cord that is designed for outside use. This is indicated by the letters "WA" on the cord's jacket.
Before using an extension cord, inspect it for loose or exposed wires and cut or worn insulation.

WARNING! *Keep the extension cord clear of the working area. Position the cord so that it will not get caught on lumber, tools or other obstructions while you are working with a power tool. Failure to do so can result in serious personal injury.*

WARNING! *Check extension cords before each use. If damaged replace immediately. Never use tool with a damaged cord since touching the damaged area could cause electrical shock resulting in serious injury.*

UNPACKING AND CLEANING

This product requires assembly.

1. Remove the packing materials from around your tool. Do not discard the packing material until you have carefully inspected and satisfactorily operated the tool.
2. Separate and remove all loose parts from the shipping container(s). Check parts against the list of loose parts.
3. Carefully lift the tool from the carton by using the carrying handle and place it on a firm, level work surface.
4. Remove the protective oil that is applied to all unpainted metal surfaces. This coating may be removed with a soft cloth moistened with kerosene or WD-40® (do not use acetone, gasoline or lacquer thinner for this purpose).
5. After cleaning, cover the unpainted surfaces with a good quality household floor paste wax.
6. Inspect the tool carefully to make sure no breakage or damage occurred during shipping.
7. The saw is factory set for accurate cutting. After assembling it, check for accuracy. If shipping has influenced the settings, refer to specific procedures explained in this manual.
8. When boxed or during storage and transportation the saw head is locked in the down position. To release the head apply downward pressure to the handle and pull out the lock pin and allow the head to rise gently to its upper position.

WARNING! *If any parts are missing do not operate this tool until the missing parts are replaced. Failure to do so could result in serious personal injury.*

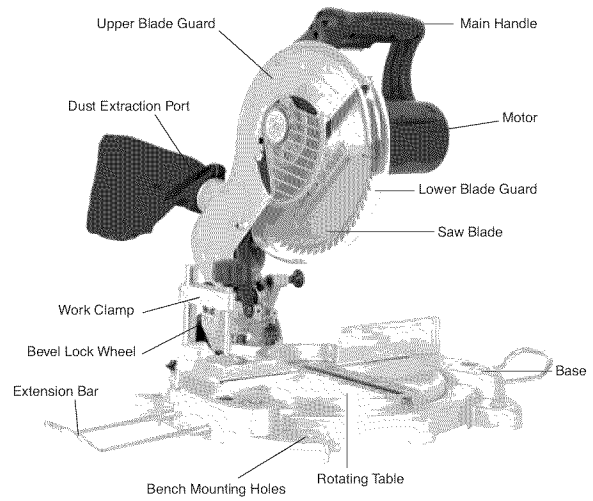
WARNING! *Do not connect to power supply until assembly is complete. Failure to comply could result in accidental starting and serious personal injury.*

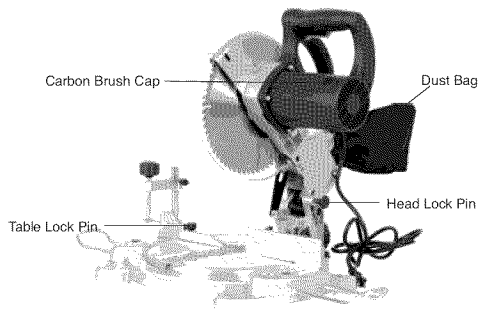
WARNING! *Before moving the saw: Lock the miter lock knob in 45° position. Lock bevel lock lever. Pull the head assembly completely toward you and tighten the slide rail lock knob. Lock head assembly in the down position.*

Never carry the tool by the slide rails, this may cause blade damage.
Never carry the tool by the cord or head assembly power switch handle. Damage to insulation could cause an electric shock. Damage to wire connections could cause a fire.

MITER SAW PARTS

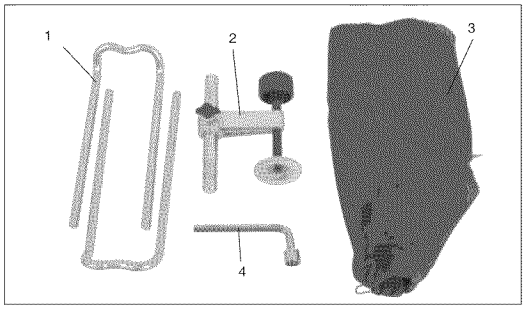
Before attempting to use this product, familiarize yourself with all operating features and safety rules.





MITER SAW PARTS

Fig. 4 illustrates all the loose parts packed with the saw.



Key No.	Description	Qty
1	Extension Bar	2
2	Work Clamp	1
3	Dust Bag	1
4	Socket Wrench	1

SPECIFICATIONS

Rating	120 V, 60 Hz, AC Only, 15 A
No Load Speed	4500 /min.
Blade Diameter	10" (254 mm)
Blade Arbor	1" (25.4 mm)
Cutting Capacity 90° x 90°	2-15/16" x 5-1/3"
90° x 45°	2-15/16" x 3-3/4"
45° x 90°	1-1/3" x 5-1/3"
45° x 45°	1-1/3" x 3-3/4"
Net weight	24.2 lbs

ASSEMBLY AND OPERATING

SAFETY RULES

WARNING! *Prior to performing any assembly and/or adjustment procedures, make sure the Power Cord of the Miter Saw is unplugged from its electrical outlet. Make sure the unit has completely cooled, and wear heavy-duty work gloves.*

1. When replacing the Saw Blade, make sure the new Saw Blade has a **diameter of 10", an RPM rating of at least 7000, and an arbor hole of 1" diameter.**
2. DOWN When installing a Saw Blade, make sure the teeth of the Saw Blade point downward, and that the direction of the arrow shown on the Saw Blade matches the direction of the arrow shown on the Cover Case. *(See Figure 5.)*
3. Lock the Saw Blade in its upward position. To do so, pull out on the Cross Pin. Raise and hold the Cover Case of the Miter Saw fully upward. Turn the Cross Pin 90 degrees. Then, insert the Cross Pin into the deep slot in its locked position. *(See Figures 6 and 7)*

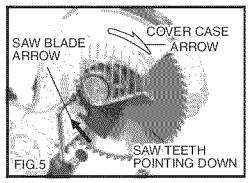


FIG.5

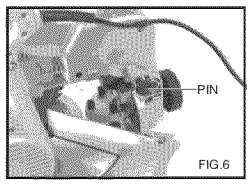


FIG.6

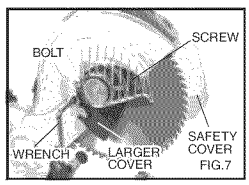


FIG.7

ASSEMBLY AND OPERATING

CAUTION! ***The Cross Pin should always be activated in the "locked down" position when the Saw is not being used and when the Saw is being transported. The Cross Pin should be activated in the "locked up" position only when changing Saw Blades. NEVER use the Cross Pin in any cutting operation.*** *The Cross Pin allows the operator to lock the Saw Blade in position, preventing the Saw Blade from being raised or lowered. (See Figures 6 and 7.)*

4. Loosen the Screw that holds the Large Cover in place. Then, use the Wrench to remove the Bolt. (See Figure 8.)
5. Rotate the Large Cover and Safety Cover up and out of the way. (See Figure 8.)
6. Depress the Spindle Lock to keep the Saw Blade from turning. (See Figure 9.)

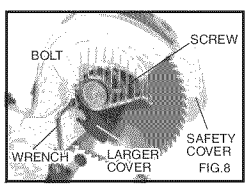


FIG.8

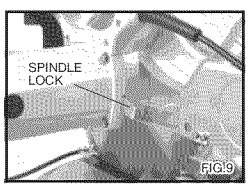


FIG.9

7. Use the Wrench to unscrew and remove the Spindle Bolt. NOTE: The Spindle Bolt unscrews in a clockwise direction. Then, remove the Outer Flange. (See Figure 10.)

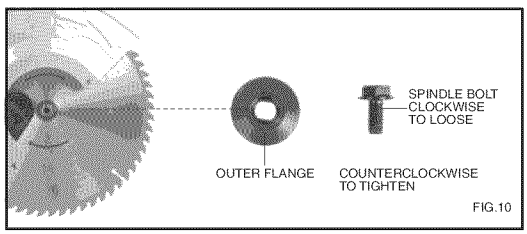


FIG.10

ASSEMBLY AND OPERATING

8. Release pressure on the Spindle Lock. (See Figure 9.)
9. Wearing heavy duty work gloves to avoid accidental cuts, remove the old Saw Blade. (See Figure 11)
10. Install the new Saw Blade, make sure the teeth of the Saw Blade are pointing downward. (See Figure 5)
11. Reassemble the Outer Flange, and Spindle Bolt firmly. (See Figure 10)
12. Swing the Large Cover and Safety Cover back in place, make sure the Safety Cover covers the Saw Blade. (See Figure 8)
13. Reinstall the Bolt, and retighten the Screw. (See Figure 8)
14. Make sure the Safety Cover returns to its original position prior to operating the Miter Saw.

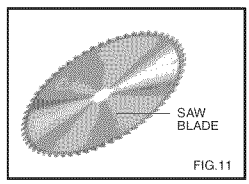


FIG.11

CAUTION! *Make sure to pull out on the Cross Pin. Turn the Cross Pin 90 degrees. Then, insert the Cross Pin into the shallow slot in its unlocked position. NEVER use the Cross Pin in any cutting operation. (See Figure 6.)*

TO ASSEMBLE ADDITIONAL ACCESSORIES

1. A workpiece Clamp Assembly can be installed by inserting the Assembly into the hole located in the Guide Fence. Once inserted, lock the Assembly in place with the Thumb Screw. To clamp the workpiece to the Base of the Miter Saw, turn the Adjusting Knob on the Clamp Assembly clockwise. (See Figure 12.)
2. A workpiece Holder can be inserted into each side of the Base, adjusted for the desired length. The Holders should be used as supports when cutting longer length workpieces. (See Figure 12.)

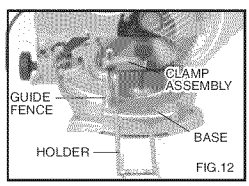


FIG.12

ASSEMBLY AND OPERATING

TO SAFETY COVER

1. The transparent Safety Cover automatically rotates to cover the Saw Blade when the Cover Case is lifted. When the Cover Case is lowered, the Safety Cover rotates back out of the way. (See Figure 13)
2. Do not disconnect or remove the Safety Cover. Do not operate the Miter Saw if the Safety Cover is damaged or missing. (See Figure 13)
3. If the transparent Safety Cover becomes so dirty that the Saw Blade cannot be seen clearly, disconnect the electrical Power Cord from its electrical outlet and clean the Safety Cover with a soft, damp, cloth. A mild detergent may be used, but do not use solvents which may damage the Safety Cover. (See Figure 13.)

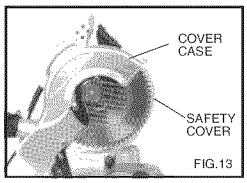


FIG.13

THE POWER SWITCH

1. Before plugging in the Miter Saw, check the operation of the Power Switch. Do not operate the Miter Saw if the Power Switch is not operating properly. To turn on the Miter Saw, simply squeeze the Power Switch. To turn off the tool, release pressure on the Power Switch. (See Figure 14.)

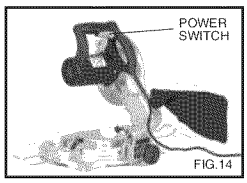


FIG.14

THE DUST BAG

1. The Dust Bag catches and holds the wood chips and saw dust when the Miter Saw is in operation. (See Figure 15)
2. The outside diameter of the Dust Tube is 1-3/4" to which the Dust Bag or a vacuum hose (not included) may be attached. It is recommended that only a qualified technician perform this procedure. (See Figure 15)

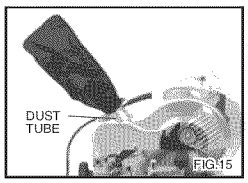


FIG.15

ASSEMBLY AND OPERATING

TO ADJUST THE CUTTING DEPTH

WARNING! *Prior to performing this procedure, make sure the Power Cord of the Miter Saw is unplugged from its electrical outlet.*

1. The depth of cut may be adjusted to a maximum of 5-1/3" at 90, and 3-3/4" at 45°.
2. Slightly loosen the Screw and pull the Miter Saw's Cover Case down- ward as far as it will go. Observe whether the edge of the Saw Blade passes completely through the Kerf Board. (See Figure 16)
3. If the Saw Blade does not pass completely through the Kerf Board, lower the Saw Blade further by loosening the Screw. (See Figure 16)
4. After adjusting the Screw, press down on the Miter Saw and make sure the Saw Blade does not contact the bottom of the Table or any other part of the Saw Base. (See Figure 16)
5. If the Saw Blade touches the Table or any other part of the Saw Base, tighten the Screw to raise the Saw Blade slightly until it clears. (See Figure 16)

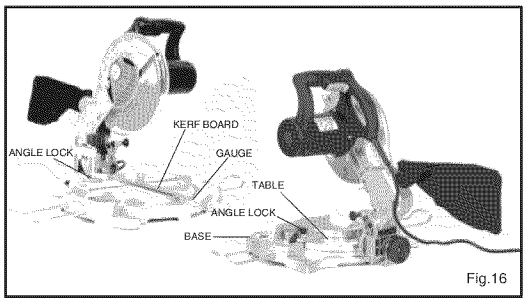


Fig.16

TO ADJUST THE MITER ANGLE

WARNING! *Prior to performing this procedure, make sure the Power Cord of the Miter Saw is unplugged from its electrical outlet.*

1. The miter angle of a cut may be adjusted 0 - 45 degrees to the right or left. To do so, turn the Angle Lock located at the back board. (See Figure 16)
2. While the Angle Lock is turned on, move the Handle to the right or left until the desired miter angle of cut is indicated by the Gauge located on the Base.Then, screw down the Angle Lock to lock the Miter Saw in place. (See Figure 16)

ASSEMBLY AND OPERATING

TO ADJUST THE BEVEL OF CUT

WARNING! *Prior to performing this procedure, make sure the Power Cord (102) of the Miter Saw is unplugged from its electrical outlet.*

1. The bevel angle (or Saw Blade tilt capacity) may be adjusted from 0 - 45 to the left. To do so, loosen the wheel located at the rear of the Miter Saw. (See Figure 17)
2. Tilt the Back Rack until the desired bevel angle of cut is achieved as indicated on the Gauge. Then, re-tighten the Wheel to lock the Back Rack in place. (See Figure 17)

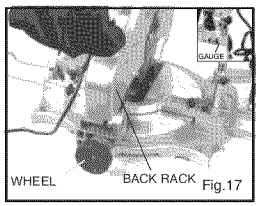


Fig.17

BASIC OPERATION

1. Make sure the Power Cord of the Miter Saw is unplugged from its electrical outlet. Then, if necessary, make adjustments to the workpiece Holder, cutting depth, miter angle, and bevel angle.
2. Raise the Saw Blade up to allow positioning of the workpiece.
3. Check to make sure the Power Switch is operating properly.
4. Place the workpiece on the Table and against the Guide Fence.
5. Use the Clamp Assembly to hold the workpiece in place.
6. Plug the Power Cord into the nearest 120 volt, grounded, electrical outlet.
7. Squeeze the Power Switch to turn on the Miter Saw.
8. When the Saw Blade is turning at full speed, slowly bring down the Motor Housing to complete the cut. NOTE: Feed the Saw Blade into the workpiece gradually. Do not force the machine to remove material faster than it was designed to cut.
9. When cutting a large workpiece, make sure its entire length is properly supported. If necessary, use a roller stand (not included) with a larger workpiece.
10. Never attempt to remove material stuck in the moving parts of the Miter Saw while it is plugged in and running.
11. Turn off the Miter Saw if the workpiece is to be backed out of an uncompleted cut.
12. When the cut is complete, release the Power Switch to turn off the Miter Saw.
13. Wait until the Saw Blade comes to a complete stop. Raise the Motor Housing. Then, unplug the Power Cord from its electrical outlet.
14. Loosen the Clamp Assembly, and remove the workpiece and scrap material from the Table.

ASSEMBLY AND OPERATING

WARNING! *Always make sure the Power Switch (98) is in its "OFF" position, and unplug the Power Cord from its 120 volt electrical outlet before performing any inspection, adjustments, maintenance, or cleaning.*

1. Make sure the power tool is cool to the touch before inspection, maintenance, and cleaning begin. Always protect your hands by wearing work gloves.
2. Before each use, inspect the general condition of the Miter Saw. Check for loose screws, misalignment or binding of moving parts, cracked or broken parts, damaged electrical wiring, loose, cracked, or bent Saw Blade, and any other condition that may affect its safe operation. If abnormal noise or vibration occurs, have the problem corrected before further use. Do not use damaged equipment. Never work with a dull saw blade.
3. Daily: With a soft brush, cloth, or vacuum, remove all dust and debris from the Miter Saw. Then, use a premium quality, lightweight machine oil to lubricate all moving parts except the Saw Blade.
4. To replace the Motor Carbon Brushes: It may become necessary at sometime to replace the two Carbon Brushes when the Motor performance de- creases, or stops working completely. The Carbon Brushes are located on each side of the Motor Housing. To do so, remove the two Brush Covers. Then, remove the two Carbon Brushes from the Brush Holders. If the Carbon Brushes are worn down more than 1/2, replace both Carbon Brushes. If, however, the Carbon Brushes are just dirty they may be cleaned by rubbing them with a pencil eraser. When installing the Carbon Brushes, make sure the carbon portion of the Carbon Brushes contact the Motor Armature, and that the springs face away from the Motor. Also, make sure the springs operate freely. After cleaning or replacement, replace the Brush Holders. NOTE: New Carbon Brushes tend to arc or spark when first used until they wear and conform to the Motor's Armature. (See Figure 18)

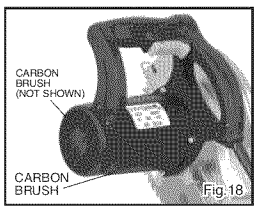


Fig.18

5. **NOTE:** With the exceptions of Steps #1, #2, #3, and #4 all other maintenance and servicing should be performed only by a qualified service technician.

MAINTENANACE

WARNING! *When servicing, use only replacement parts recommended by the manufacturer of this tool. Use of any other parts may create a hazard or cause product damage.*

WARNING! *Always wear safety goggles or safety glasses with side shields during power tool operation or when blowing dust. If operation is dusty, also wear a dust mask.*

WARNING! *Before performing any maintenance, make sure the tool is unplugged from the power supply and the switch is in the "OFF" position. Failure to heed this warning could result in serious personal injury.*

CARBON BRUSHES

See Fig. 19.

The brushes and commutator in your tool have been engineered for many hours of dependable service. To maintain peak efficiency of the motor, we recommend every two to six months the brushes be examined.

Motor Brush Replacement

To inspect or replace brushes:

1. Unplug the saw.

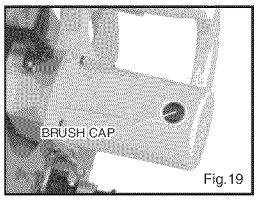


Fig.19

WARNING! *The brush cap is spring loaded by the brush assembly.*

2. Remove the brush cap on the motor using a wide flat blade screwdriver.
3. Pull out the brush. Repeat for the opposite side.
   NOTE: If installing the existing brush or brushes, make sure the brush goes in the same way it came out. Otherwise a break-in period will occur that will reduce motor performance and increase brush wear.
4. Inspect the brushes for wear. On the wide flat side of the brush is a wear limit line. If the brush contact face is at or beyond (no line visible) the limit replace brushes as a set.
5. Install the new brush. The two tabs on the brush terminal go in the same hole the carbon part fits into.
6. Tighten the brush cap but do not overtighten.

Owner's Manual

MAINTENANCE

GENERAL MAINTENANCE

1. Periodically check all clamps, nuts, bolts, and screws for tightness and condition. Make sure the table insert is in good condition and in position.
2. Check the blade guard assembly.
3. Clean your cutting tools with a gum and pitch remover.
4. To maintain the table surfaces, periodically apply paste wax to them and buff to provide smooth functioning. To prevent work from slipping during cutting operations, **DO NOT** wax the working face of the miter gauge.
5. Protect the saw blade by cleaning out sawdust from underneath the saw table and in the blade teeth. Use a resin solvent on the blade teeth.
6. Clean plastic parts only with a soft damp cloth. **DO NOT** use any aerosol or petroleum solvents.

WARNING! *Do not at any time let brake fluids, gasoline petroleum-based products, penetrating oils, etc., come in contact with the plastic parts. Chemicals can damage, weaken or destroy plastic which may result in serious personal injury.*

LUBRICATION

This saw's motor bearings have been packed at the factory with proper lubrication.

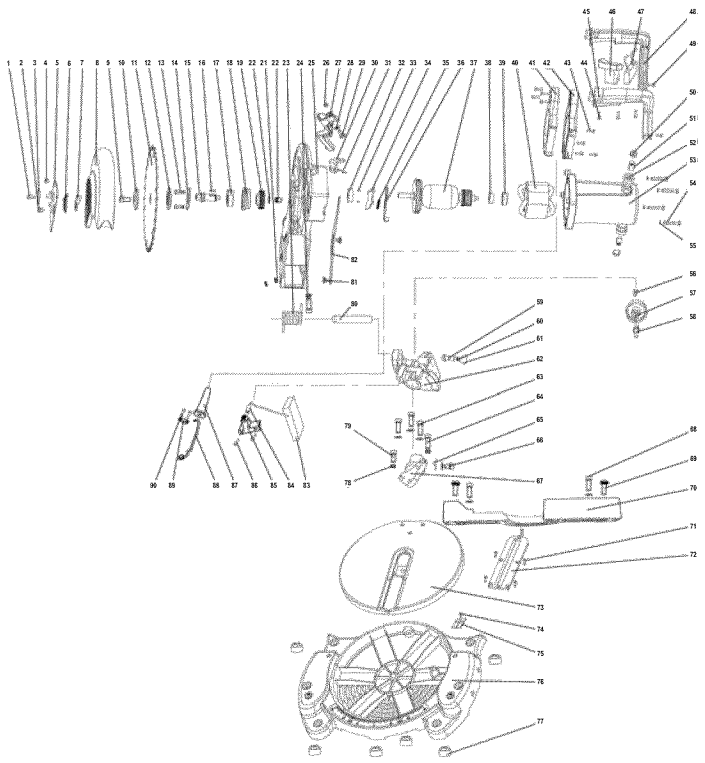
1. Clean the screw threads and nuts with a solvent recommended for gum and pitch removal.
2. Lubricate the screw threads, nuts and bearing points (including those on the blade guard assembly and miter gauge).

PLIEASE READ THE FOLLIOWING CAREFULLIY

The manufacturer and/or distributor has provided the parts list and assembly diagram in this manual as a reference tool only. Neither the manufacturer or distributor makes any representation or warranty of any kind to the buyer that he or she is qualified to make any repairs to the product, or that he or she is qualified to replace any parts of the product. In fact, the manufacturer and/or distributor expressly states that all repairs and parts replacements should be undertaken by certified and licensed technicians, and not by the buyer. The buyer assumes all risk and liability arising out of his or her repairs to the original product or replacement parts thereto, or arising out of his or her installation of replacement parts thereto.

Owner's Manual

Exploded view



Owner's Manual

Parts Listing

APA Parts No.	No.	Description	QTY
PB113 -01-ZY	01	SCREW (M5X20)	1
PB113 -02-ZY	02	SOCKET HEAD SCREW M8X12	1
PB113 -03-ZY	03	BIG WASHER	1
PB113 -04-ZY	04	SCREW M6X12	1
PB113 -05-ZY	05	LOCATING PLATE	1
PB113 -06-ZY	06	SPRING	1
PB113 -07-ZY	07	WASHER	1
PB113 -08-ZY	08	GUARD COVER	1
PB113 -09-ZY	09	PRESSBOARD SCREW M8X16-L	1
PB113 -10-ZY	10	UPPER PRESSBOARD	1
PB113 -11-ZY	11	SAW BLADE	1
PB113 -12-ZY	12	LOWER PRESSBOARD	1
PB113 -13-ZY	13	SCREW M6X12	2
PB113 -14-ZY	14	BEARING PRESSBOARD	1
PB113 -15-ZY	15	OUTPUT SPINDLE	1
PB113 -16-ZY	16	WOODRUFF KEY	1
PB113 -17-ZY	17	BEARING 6203	1
PB113 -18-ZY	18	GEAR BOX COVER	1
PB113 -19-ZY	19	BIG GEAR	1
PB113 -20-ZY	20	CIRCLIP FOR SHAFT Φ17	1
PB113 -21-ZY	21	SCREW M4X10	2
PB113 -22-ZY	22	SLIDING BEARING	1
PB113 -23-ZY	23	BIG SPRING	1
PB113 -24-ZY	24	STRETCHING SCREW	1
PB113 -25-ZY	25	SAW COVER	1
PB113 -26-ZY	26	LOCKNUT M6	1
PB113 -27-ZY	27	CONTROL KNOB	1
PB113 -28-ZY	28	SPRING	1
PB113 -29-ZY	29	SCREW	1
PB113 -30-ZY	30	CONTROL KNOB SEAT	1
PB113 -31-ZY	31	SCREW M5X14	2
PB113 -32-ZY	32	BEARING 6201	1
PB113 -33-ZY	33	SCREW M4X10	1
PB113 -34-ZY	34	SELFT-LOCKING PRESSBOARD	1
PB113 -35-ZY	35	SPRING	1
PB113 -36-ZY	36	SELF-LOCKING POLE	1
PB113 -37-ZY	37	ROTOR	1
PB113 -38-ZY	38	BEARING 629	1
PB113 -39-ZY	39	BEARING COVER	1
PB113 -40-ZY	40	STATOR	1
PB113 -41-ZY	41	HANDLE 1	1
PB113 -42-ZY	42	HANDLE 2	1
PB113 -43-ZY	43	SELF-TAPPING SCREW ST4X20	8
PB113 -44-ZY	44	SELF-TAPPING SCREW ST4X20	3
PB113 -45-ZY	45	HANDLE 3	1

APA Parts No.	No.	Description	QTY
PB113 -46-ZY	46	SWITCH	1
PB113 -47-ZY	47	CAPACITANCE 0.33UF	1
PB113 -48-ZY	48	HANDLE 4	1
PB113 -49-ZY	49	SELF-TAPPING SCREW ST4X14	2
PB113 -50-ZY	50	BRUSH HOLDER CAP	2
PB113 -51-ZY	51	CARBON BRUSH	2
PB113 -52-ZY	52	BRUSH HOLDER	2
PB113 -53-ZY	53	HOUSE	1
PB113 -54-ZY	54	SCREW M6X30	4
PB113 -55-ZY	55	PLANE WASHER	4
PB113 -56-ZY	56	SCREW M5X12	1
PB113 -57-ZY	57	HANDLE OF BENDED ARM	1
PB113 -58-ZY	58	SCREW	1
PB113 -59-ZY	59	SHAFT	1
PB113 -60-ZY	60	O-RING Φ 6.7X Φ 1.8	1
PB113 -61-ZY	61	LOCKING SHAFT KNOB	1
PB113 -62-ZY	62	BENDED ARM	1
PB113 -63-ZY	63	SCREW M8X30	3
PB113 -64-ZY	64	NUT M6	1
PB113 -65-ZY	65	BENDED ARM FINGER	1
PB113 -66-ZY	66	SCREW M5X8	1
PB113 -67-ZY	67	BASE OF BENDED ARM	1
PB113 -68-ZY	68	SCREW M12X21	2
PB113 -69-ZY	69	SOCKET HEAD SCREW M8X30	2
PB113 -70-ZY	70	BACKBOARD	1
PB113 -71-ZY	71	SUNK SCREW M4X10	5
PB113 -72-ZY	72	PROTECTIVE BOARD FOR SAW BLADE	1
PB113 -73-ZY	73	SWIVEL TABLE	1
PB113 -74-ZY	74	SCREW	1
PB113 -75-ZY	75	FINGER	1
PB113 -76-ZY	76	BASE	1
PB113 -77-ZY	77	FOUNDATION	6
PB113 -78-ZY	78	LOCKNUT M6	1
PB113 -79-ZY	79	STRETCHING SCREW M6X20	1
PB113 -80-ZY	80	SPINDLE	1
PB113 -81-ZY	81	SCREW & COVER	2
PB113 -82-ZY	82	HANDSPIKE	1
PB113 -83-ZY	83	BATTERY COVER	1
PB113 -84-ZY	84	LASER	1
PB113 -85-ZY	85	LASER HOLDER	1
PB113 -86-ZY	86	BATTERY COVER SCREW	2
PB113 -87-ZY	87	CABLE JACKET	1
PB113 -88-ZY	88	CABLE	1
PB113 -89-ZY	89	CABLE PRESSBOARD	1
PB113 -90-ZY	90	CABLE PRESSBOARD SCREW	2

Limited Warranty

Steele® warrants to the original purchaser who uses the product in a consumer application (personal, residential or household usage) that all products covered under this warranty are free from defects in material and workmanship for one year from the date of purchase. All products covered by this limited warranty which are used in commercial applications (i.e. income producing) are warranted to be free of defects in material and workmanship for 90 days from the date of original purchase. Products covered under this warranty include air compressors, tools, service parts, pressure washers and generators.

Steele® will repair or replace, at Steele®'s sole option, products or components which have failed within the warranty period. Service will be scheduled according to the normal work flow and business hours at the service center location, and the availability of replacement parts. All decisions of Steele® with regard to this limited warranty shall be final.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

RESPONSIBILITY OF ORIGINAL PURCHASER (initial User):
To process a warranty claim on this product, DO NOT return item to the retailer. The product must be evaluated by an Authorized Warranty Service Center. For the location of the nearest Authorized Warranty Service Center contact the retailer or place of purchase.

Retain original cash register sales receipt as proof of purchase for warranty to work.

Use reasonable care in the operation and maintenance of the product as described in the Owner's Manual(s).

Deliver or ship the product to the Authorized Warranty Service Center. Freight costs, if any must be paid by the purchaser. If the purchaser does not receive satisfactory results form the Authorized Warranty Service Center, the purchaser should contact Steele® toll free 888-896-6881.

THIS WARRANTY DOES NOT COVER:

Merchandise sold as reconditioned, used as rental equipment, or floor or display models.

Merchandise that has become damaged or inoperative because of ordinary wear, misuse, cold, heat, rain, excessive humidity, freeze damage, use of improper chemicals, negligence, accident, failure to operate the product in accordance with the instructions provided in the Owner's Manual(s) supplied with the product, improper maintenance, the use of accessories or attachments not recommended by Steele®, or unauthorized repair or alterations.

• Repair and transportation costs of merchandise determine not to be defective.

• Costs associated with assembly, required oil, adjustments or other installation and start-up costs. Expendable parts or accessories supplied with the product which are expected to become inoperative or unusable after a reasonable period of use.

Merchandise sold by Steele® which has been manufactured by and identified as the product of another company, such as gasoline engines. The product manufacturer's warranty, if any, will apply.

ANY INCIDENTAL, INDIRECT OR CONSEQUENTIAL LOSS, DAMAGE, OR EXPENSE THAT MAY RESULT FROM ANY DEFECTS, FAILURE OR MALFUNCTION OF THE PRODUCT IS NOT COVERED BY THIS WARRANTY. Some states do not allow the exclusion, so it may not apply to you.

IMPLIED WARRANTIES, INCLUDING THOSE OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, ARE LIMITED TO ONE YEAR FROM THE DATE OF ORIGINAL PURCHASE. Some states do not allow limitations on how long an implied warranty lasts, so the above limitations may not apply to you.

NOTES