



CX112N

PORTABLE METAL BAND SAW

User Manual



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1. General Safety Rules

WARNING

FOR YOUR OWN SAFETY READ INSTRUCTION MANUAL BEFORE OPERATING BAND SAW

1. Always wear approved safety glasses /face shields when using the machine.
2. KEEP GUARDS IN PLACE and in working order.
3. REMOVE ADJUSTING KEYS AND WRENCHES. Form habit of checking to see that keys and adjusting wrenches are removed from tool before turning it on.
4. KEEP WORK AREA CLEAN. Cluttered areas and benches invite accidents.
5. DON'T USE IN DANGEROUS ENVIRONMENT. Don't use power tools in damp or wet locations, or expose them to rain. Keep work area well lighted.
6. KEEP CHILDREN AWAY. All visitors should be kept safe distance from work area.
7. MAKE WORKSHOP KID PROOF with padlocks, master switches, or by removing starter keys.
8. DON'T FORCE TOOL. It will do the job better and safer at the rate for which it was designed.
9. USE RIGHT TOOL. Don't force tool or attachment to do a job for which it was not designed.
10. USE PROPER EXTENSION CORD. 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 product will draw. An undersized cord will cause a drop in line voltage resulting in loss of power and overheating. Table A shows the correct size to use depending on cord length and nameplate ampere rating. If in doubt, use the next heavier gage. The smaller the gage number, the heavier the cord.
11. WEAR PROPER APPAREL. Do not wear loose clothing, gloves, neckties, rings, bracelets, or other jewelry which may get caught in moving parts. Nonslip footwear is recommended. Wear protective hair covering to contain long hair.
12. ALWAYS USE SAFETY GLASSES. Also use face or dust mask if cutting operation is dusty. Everyday eyeglasses only have impact resistant lenses, they are NOT safety glasses.
13. SECURE WORK. Use clamps or a vise to hold work when practical. It's safer than using your hand and it frees both hands to operate tool.
14. DON'T OVERREACH. Keep proper footing and balance at all times.
15. MAINTAIN TOOLS WITH CARE. Keep tools sharp and clean for best and safest performance. Follow instructions for lubricating and changing accessories.
16. DISCONNECT TOOLS before servicing; when changing accessories, such as blades, bits, cutters, and the like.
17. REDUCE THE RISK OF UNINTENTIONAL STARTING. Make sure switch is in off position before plugging in.
18. USE RECOMMENDED ACCESSORIES. Consult the owner's manual for recommended accessories. The use of improper accessories may cause risk of injury to persons.
19. NEVER STAND ON TOOL. Serious injury could occur if the tool is tipped or if the cutting tool is unintentionally contacted.
20. CHECK DAMAGED PARTS. Before further use of the tool, a guard or other part that is damaged should be carefully checked to determine that it will operate properly and perform its intended function - check for alignment of moving parts, binding of moving parts, breakage of parts, mounting, and any other conditions that may affect its operation. A guard or other part that is damaged should be properly repaired or replaced.
21. DIRECTION OF FEED. Feed work into a blade or cutter against the direction of rotation of the blade or cutter only.
22. NEVER LEAVE TOOL RUNNING UNATTENDED. TURN POWER OFF. Don't leave tool until it comes to a complete stop.
23. Do not remove jammed cutoff pieces until blade has stopped.
24. Maintain proper adjustment of blade tension, blade guides, and thrust bearings.
25. Adjust upper guide to just clear workpiece.
26. Make certain the motor switch is in "off" position while connecting the machine into the power supply.
27. Never hold a material with this saw in the horizontal position. Please be sure always use the vise to clamp it securely.
28. Always keep hands & fingers away from the blade when this machine is running.
29. Always provide necessary support for long and heavy material.
30. Use a sharp blade and always keep machine clean for a best and safest performance.
31. Make certain the machine is properly grounded.

Table A						
Ampere Rating		Volts	Total length of cord in feet			
		120	25	50	100	150
		240	50	100	150	300
More Than	Not More Than		Minimum gage for cord			
0 6			18	16	16	14
6 10			18	16	14	12
10 12			16	16	14	12
12 16			14	12	Not Recommended	

Grounding Instructions

- 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 tool 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 a risk of electric shock. The conductor with insulation having an outer surface that is green with or without yellow stripes is the equipment-grounding conductor. If repair or replacement of the electric cord or plug is necessary, do not connect the equipment-grounding conductor to a live terminal.
- 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.
- Use only 3-wire extension cords that have 3-prong grounding plugs and 3 pole receptacles that accept the tool's plug.
- Repair or replace damaged or worn cord immediately.
- This tool is intended for use on a circuit that has an outlet that looks like the one illustrated in Sketch A in Fig. A. The tool has a grounding plug that looks like the plug illustrated in Sketch A in Fig. A. A temporary adapter, which looks like the adapter illustrated in Sketch B and C, may be used to connect this plug to a 2 pole receptacle as shown in Sketch B 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. **This adapter is not applicable in Canada.** The green-colored rigid ear, lug, and the like, extending from the adapter must be connected to a permanent ground such as a properly grounded outlet box.

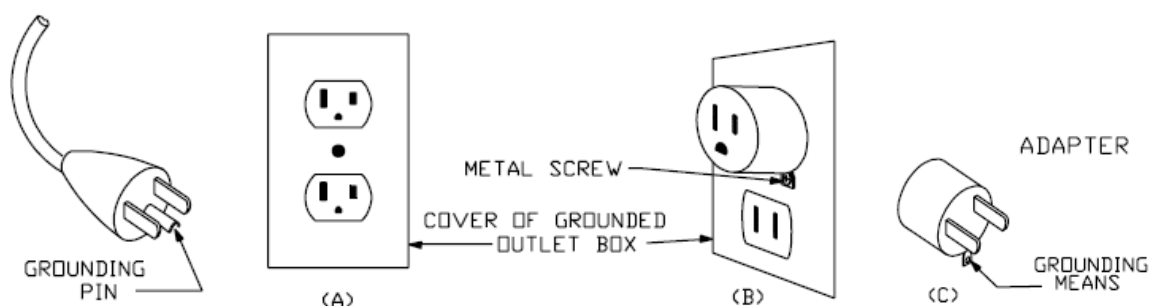
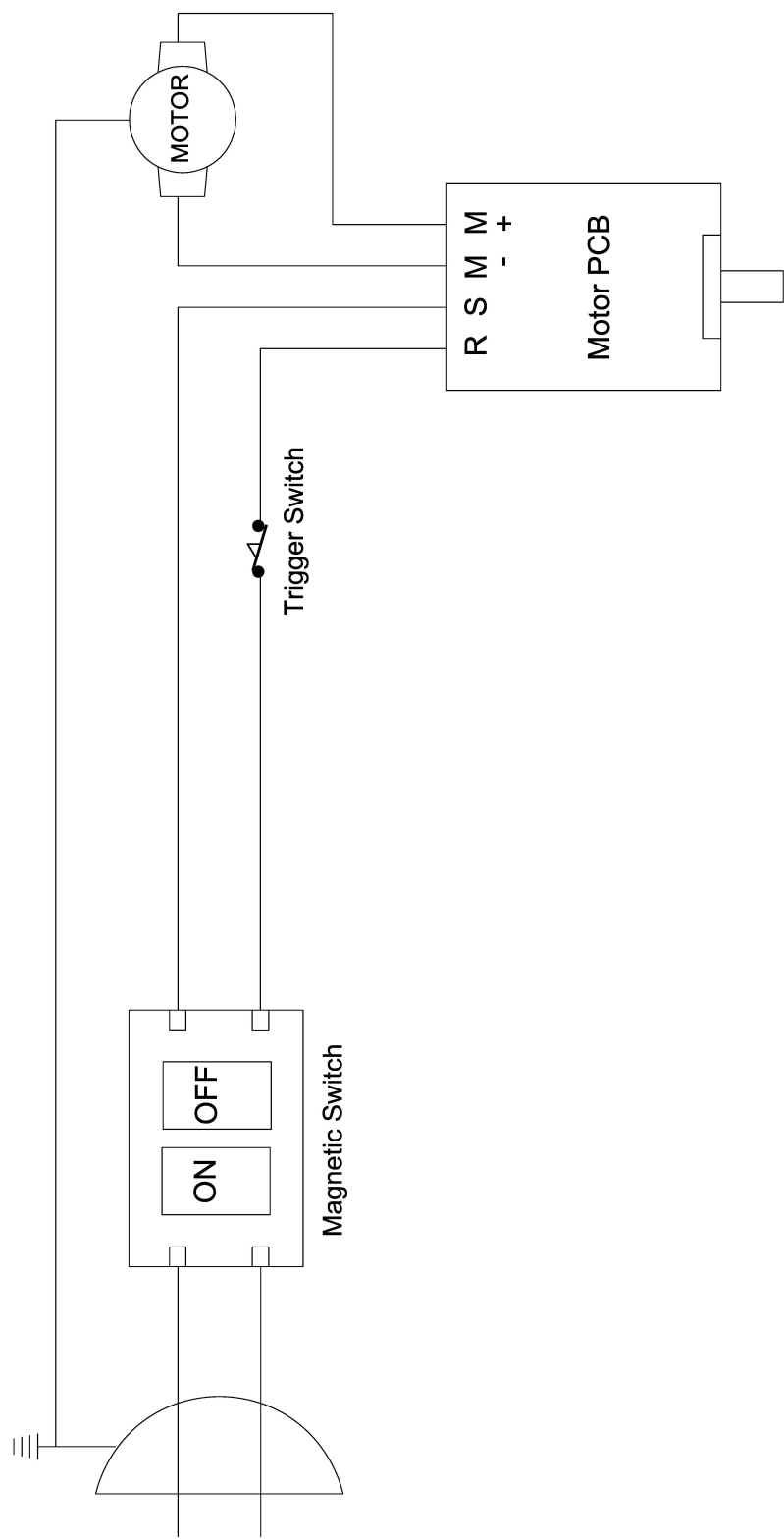


Fig. A

Electrical Schematic





BEFORE CUTTING

Release the lock pin (A) in Fig.1 to release the saw. After service, must relock the saw properly for your safety and carry. Failure to comply with the warning could result in personal injury and damage to the machine.

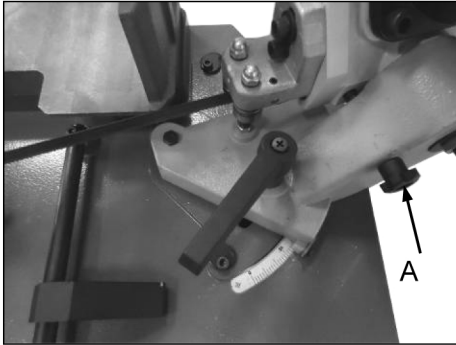


Fig. 1

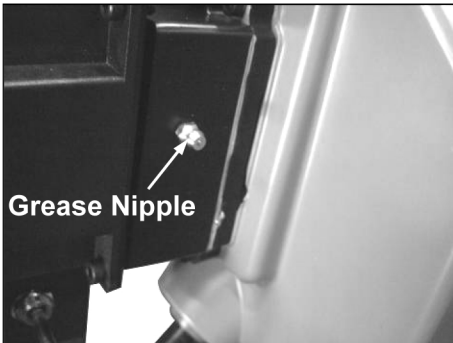
Before Cutting and Pump Grease



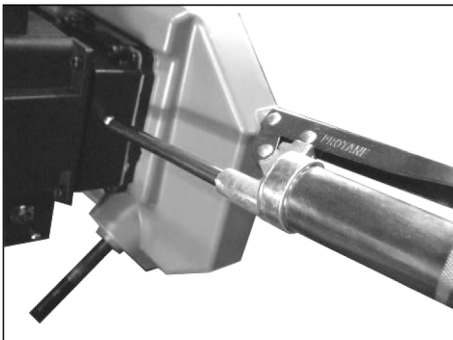
ATTENTION

Apply grease into the gear reducer every week to lubricate the gears.

Choose super high-density grease.



Grease location located at rear of gear reducer.



Use grease gun to pump in grease from grease nipple.

2. The Vise and Work Set Up

Usage of the Vise

The vise is mounted on the machine base. Follow the following steps to open or close the vise.

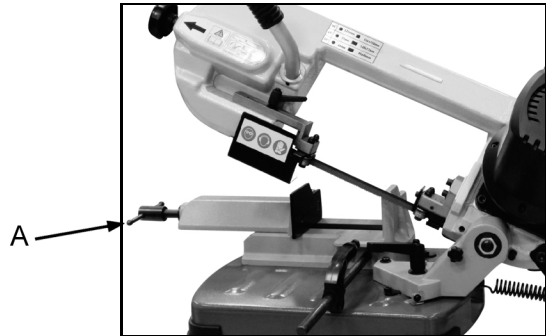


Fig. 2

1. Turn the handle (A) in Fig.2 counter clock-wise to open the vise jaw allowing the width of vise to load work piece.
2. Make sure the work piece is placed properly between the jaws. Turn the handle (A) in Fig.2 clock-wise to close the vise jaw clamping the work piece.

CAUTION !

NEVER OPERATE SAW WITHOUT BLADE GUARDS IN PLACE.

Work Set Up

1. Raise the saw head to proper position in Fig.3.
2. Open vise to accept the work piece by pulling the hand lever at the end of the base.
3. Place the work piece on saw bed if the piece is long, support the end.

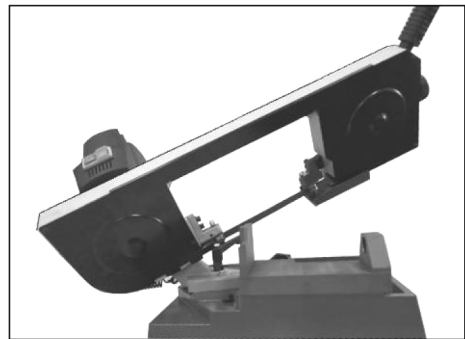


Fig.3

3. Special Safety Rules for Metal Saw



WARNING: Make sure not to operate the band saw until it is completely assembled and until you have read and understood all the safety instructions given in this user manual.

Before Using the Saw

1. Assembly and alignment.
2. Learn the function and proper use of:
 - A. The on-off start switch, trigger switch, blade speed knob and stop button.
 - B. The blade guards.
 - C. The fixing saw bow latch.
 - D. The swivel head, material length stop, metal lock handle and assistant plate.
3. Read and understand all safety instructions and operating procedures throughout the manual.
4. Read the warning labels on the metal saw.

Before Each Use

1. Inspect your saw. If any part of this metal saw is missing, or bent, or has failed in any way, or any electrical parts do not work properly, turn the saw off and unplug the saw. Replace damaged, missing, or failed parts before using the saw again.
2. Always wear safety devices for the protection of your eyes, hands and ears.
 - A. Wear safety goggles (not glasses) that comply with DIN 58214. Using any power tool can result in foreign objects being thrown into the eyes, which can result in permanent eye damage. Goggles are available at stores. Use of glasses or use of goggles not in compliance with DIN 58214 could result in severe injury from breakage of the eye protection.
 - B. For dusty operations, wear a face shield along with safety goggles.
 - C. To avoid injury from jams, slips or thrown piece:
 - It is important to choose the right blade for the material and the type of cutting you plan to do. This saw is equipped with a bi-metallic blade which can be used to cut

stainless steel, steel, iron, brass, aluminum and so on.

- Make sure the direction of rotation arrow on the blade matches the direction arrow on the saw. The blade teeth should always point downward at the front of the saw.
- Make sure the blade is sharp, undamaged and properly aligned. With the saw unplugged, push the power-head all the way down. Head spin the blade and check for clearance. If the blade hits anything, make the adjustments shown in the Maintaining Maximum Cutting Capacity section.
- Make sure the blade and arbor collars are clean.
- Make sure all clamps and locks are tight and there is no excessive play in any parts.
- Never cut freehand:
 - a. Brace your work piece solidly against the fence and table top so it will not rock or twist during the cut. Make sure no debris is caught beneath the work piece.
 - b. Make sure no gaps between the work piece, fence and table will let the work piece shift after it is cut in two.
 - c. Use jigs, fixture or a different tool for unstable work pieces.
 - Never cut more than one work piece at a time.
 - Make sure the cut-off piece can move sideways after it is cut off. Otherwise, it could get wedged against the blade and thrown violently.
 - Make sure bystanders are clear of the tool and work piece. Keep them clear of the area behind the saw where debris will be thrown.
 - Never turn your metal saw "ON" before clearing everything except the work piece and related support devices off the table.
 - D. To avoid risk of hearing damage, wear ear plugs or muffs during extended period of operation.
 - E. To avoid being suddenly pulled into the blade:
 - Do not wear gloves.
 - Remove all jewelry and loose clothing.
 - Tie back long hair.
 - Roll long sleeves above the elbow.

- F. To avoid injury from accidental starting, always unplug saw before disconnecting the guard, installing or removing any blade, accessory or attachment, or making any adjustment.
- G. To avoid an electrical shock, make sure your fingers do not touch the metal prongs on the plug when inserting or removing the plug to or from a live outlet.
- H. Never put lubricants on the blade while it is spinning.
- I. To avoid burns or other fire damage, never use the saw near flammable liquids, vapors or gases.



DANGER

- Keep hands out of saw blade path.
- Never cut anything freehand.
- Never reach behind or beneath blade.
- To avoid electric shock, do not expose to rain.



DANGER

- Tighten arbor screw and all clamps before turning power on.

Whenever Saw is Running



WARNING: Do not allow familiarity (gained from frequent use of your metal saw) to cause a careless mistake. Always remember that a careless fraction of a second is enough to cause a severe injury.

1. Before actually cutting with the saw, let it run for a while. If your saw makes an unfamiliar noise or if it vibrates excessively, stop immediately. Turn the saw off. Unplug the saw. Do not restart until you find and fix the problem.
2. Never confine the piece being cut out. Never hold it, clamp it, touch it, or use length stops against it. It must be free to move sideways. If confined, it could get wedged against the blade and thrown violently.
3. Avoid awkward hand positions where a sudden slip could cause a hand to move into the blade.
4. Let the blade reach full speed before cutting.
5. Feed the saw into the work piece only fast enough to let the blade cut without bogging down or binding.
6. Before freeing jammed material, turn the switch off and unplug the saw. Wait for all moving parts to stop.
7. After finishing a cut, keep holding the power head down, release the switch, and wait for all moving parts to stop before moving your hands.

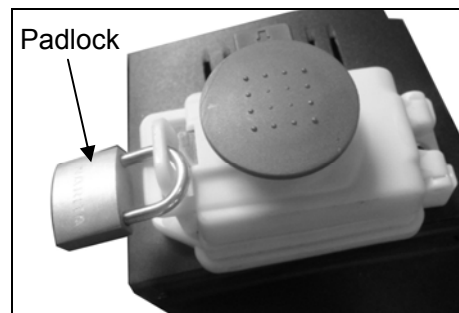


WARNING

Read the following warning labels found on the front of the saw.

Saw Safeguard - Pad Lock

To prevent the band saw from unauthorized operation and to avoid accidental starting by children or others not qualified to use, the use of padlock is required. To lock out the on-off switch, open the padlock, insert through the hole of the switch cover and close the padlock. Place the key in a location that is inaccessible to children and others not qualified to use the tool.



Blade teeth selection and speed recommendation

The following photo is not expected to be exactly correct for all cases. It is intended as a general guide to good sawing practices. Your blade supplier or the qualified engineers should be your most reliable source of correct information for operational details of saw blades and their use.

Sezione Werkstück Section	Material-Material-	S(mm.)	Z 1"	MPM
	Mild and special steels	<50	10/14	50
	Normal und Spezialstahl	>50	6T	40
	Aluminium, Brass, Bronze	<50	10/14	65
	Aluminium, Messing, Bronze	>50	8T	65
	Stainless steel	<50	10/14	30
	Edelstahl	>50	8T	30
	Iron pipes Stahlrohre	<5	10/14	60
		>5<20	10/14	60
		>20	8T	50
	Section Profile	<5	10/14	65
		>5	10/14	60

4. Power Supply

Motor Specifications

The DC motor used with this saw features the following specifications:

Maximum capacity (kW)	0.30
Voltage (V dc)	90
Saw blade speed (MPM)	23~75
Blade rotating direction	counter-clockwise



WARNING: To avoid electrical hazards, fire hazard, or damage to the tool, use proper circuit protection or circuit breaker to avoid shock or fire, if power cord is worn or cut, or damaged in any way, have it replaced immediately.

Noise information according to DIN 45635
No load under 60 dB
Working 60-65 Db

Grounding

This metal saw is single insulated tool, so the Grounding system is provided to protect you from being shocked. The appropriate grounding system should be set up as soon as this machine is plugged into the proper power supply system. Therefore, the standard power supply system shall be provided for this machine in order to protect you from the risk of shock.



DANGER: To avoid electric shock

1. Do not change the power cord and plug to another specification not provided by the manufacturer.
2. Do not use in rain or where floor is wet. This tool is intended for indoor residential use only.

Motor Safety Protection



CAUTION: To avoid motor damage, this motor should be blown out or vacuumed frequently to keep sawdust from interfering with normal motor ventilation.

1. Connect this tool with a fuse or circuit breaker. Using the wrong size fuse can damage the motor.

2. If the motor does not start, press the stop button down immediately. UNPLUG THE TOOL. Check the saw blade to make sure it turns freely. If the blade is free, try to start the motor again.
3. If the motor still does not start that have to check the motor's carbon brushes which can be used 600~800 hours if carbon brush has been worn, please change the new one.
4. If the motor suddenly stalls while cutting material, turn the band saw OFF, unplug the power cord and remove the work-piece. Make sure the blade is not in contact with the work piece, then you may start the saw and finish the cut.
5. Fuses may "blow" or circuit breakers may trip frequently if:
 - a. Motor is overloaded-overloading can occur if you feed too rapidly or make too many start/stops in a short time.
 - b. Voltage not more than 10% above or below the nameplate voltage can handle normal loads. For heavy loads, however, the voltage (caused by a small size wire in the supply circuit or an overly long supply circuit wire) may drop too low for the motor to operate. Always check the connections, the load and the supply circuit whenever motor does not work well. Check wire sizes and length with the Wire Size Chart below.
6. Most motor troubles may be trace to loose or incorrect connections, overload, low voltage (such as small size wire in the supply circuit) or to overly long supply circuit wire. Always check the connections, the load and the supply circuit whenever motor doesn't work well. Check wire size and length with the Wire Size Chart below.

5. Unpacking and Checking Contents

The Metal Saw is shipped complete in one carton. Separate all parts from packing material and check each item with illustration and Make certain all items are accounted for, before discarding any packing material.



WARNING: If any parts are missing, do not try to assemble the metal saw, plug in the power cable or turn the switch on until the missing parts are obtained and installed correctly.

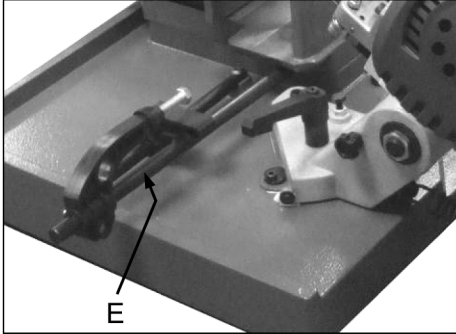


Fig. 4

Item	Attached Parts	Q'TY
1	Stop Rod Assembly (E) Fig.4	1set
2	Instruction Manual	1

6. Description and Characteristics

1. This CX112N portable band saw is made as light as 23 kg by weight allowing easy transport to any worksites.
2. The machine frame is cast aluminum. The base is formed by the steel so that body construction becomes stronger and smoother.
3. During operation, the noise level of the machine is about 60 db, which is much less than any of the other band saws, and of course, it features a comfortable working environment.
4. This machine features easy blade tension adjustment. Hold the handle to give a little turn for the tension increasing, or decreasing as you wish while changing blade or when the machine in operation. It also has compression spring attached which is for reducing vibration produced when cutting defective work piece. It permits the blade to be used much longer.
5. The drive of this machine is through gear transmission that gives steadier, stronger, and smoother cuts superior to any of pulley drive band saws, and make less trouble after service. Note: If anything unusual happens on your gear transmission system, do not try to fix or restore it personally. Send it back to your dealer for check-up or repair. Failure to comply can result in machine damage.
6. The machine combines miter, and horizontal cutting and is designed for full efficiency and operator's convenience in each position.



WARNING

SHUT OFF THE POWER SOURCE ALL THE TIME, BEFORE THIS MACHINE IS IN MAINTENANCE, OPERATION, ADJUSTMENT, OR REPAIRMENT.



WARNING

Disconnect machine from the power source! No matter when, where, or how. Pay extra attention to the saw during it in transportation, operation, maintenance, or adjustment. Failure to comply may cause serious injury!

7. Operating

Information before Operation

Be sure the blade isn't in contact with the work when the motor is started.

Run the motor allow the saw to come to full speed. Begin the cut by letting the head down slowly onto the work.

DO NOT DROP. Use the handle of trigger switch operating by hand.

Press green button down (Fig. 5) to turn on the power and press and hold the trigger switch (Fig.6) for manual cutting.

Finish cutting or stop the cutting by pressing down the red button or release the trigger switch.

ON/OFF switch

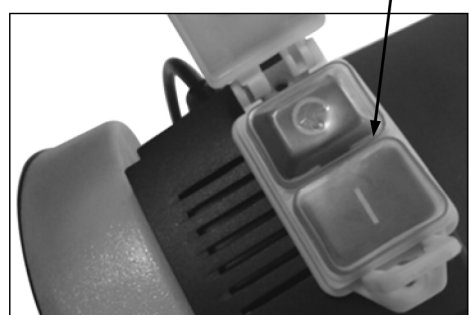


Fig. 5

Trigger switch



Fig. 6

Manual Cutting Feed Rate by Handle with Trigger Switch

Push down the handle of trigger switch in for cutting material by hand.

Angle Cutting

The machine uses a swivel miter base for angle cutting from 0 ~ 60 degree. On the saw arm, there is an attached scale (Q) in Fig.7. This machine is preset zero degree before leaving the factory. Angle cutting is adjusted as follows.

1. Loosen handle (R) Fig.7 to release the arm.
2. Move this swivel arm forward along the scale to search a right index for the work piece being cut.
3. If the pointer matches the right index on the scale. Tighten the handle, and a perfect angle cut will be given.

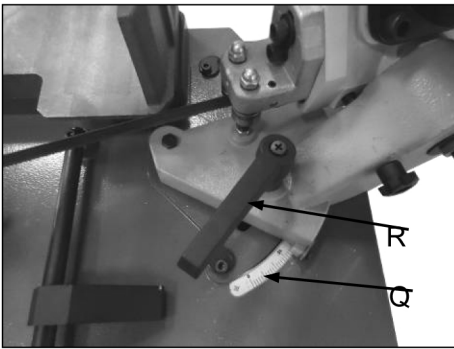


Fig. 7



WARNING

Disconnect machine from the power source when servicing, adjusting or installing and uninstalling any parts. Failure to do so could result in serious personal injury or damage to the machine.

Changing Blade

1. Raise the saw arm up, to proper position as shown in Fig. 8.



Fig. 8

2. Remove the blade guard by loosening two screws (U) in Fig. 9 on the saw frame.

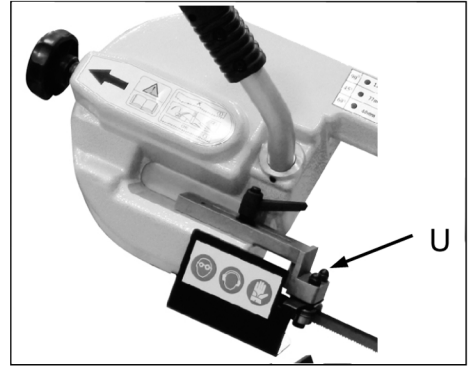
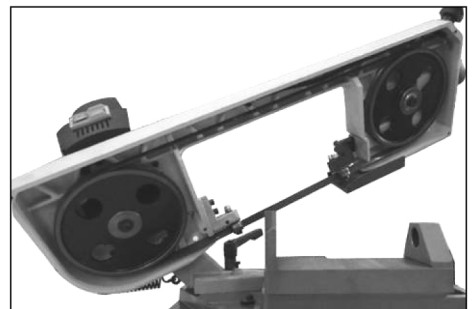


Fig. 9

3. Remove blade cover by loosening four screws (V) in Fig.10 on the saw frame.



Fig. 10



4. Turn the blade tension knob (W) in Fig.11, Counter-clockwise and loosen the tension.

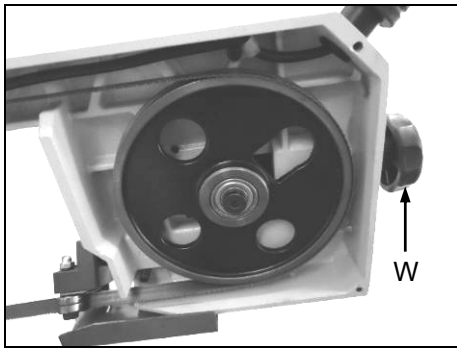


Fig. 11

5. Remove blade from both wheels and blade guides bearings (X) in Fig.12.

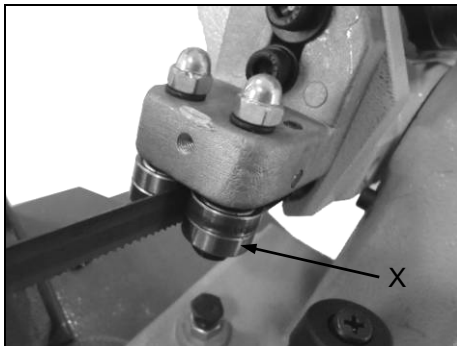
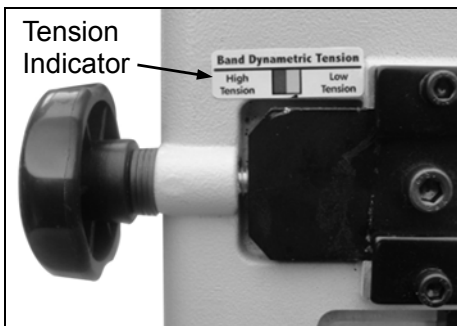


Fig. 12

6. Place a new blade on the wheels but not too tight, twist blade slightly and let it slip into between each of guide bearings. Make sure the teeth of blade face down towards the bed.
7. Turn the blade tension knob clockwise to tension the blade properly. There is an indicator in tension device, just adjust indicator to central location as following photo show.



8. Replace blade cover (V) in Fig.10 and guards Fig.9.
9. Start the machine to see that the blade runs properly.

CAUTION: Make sure that the machine is disconnected from the power source before attempting to service the machine or installing and uninstalling any parts.

Magnetic Switch

The band saw is equipped with magnetic switch. (see Fig.13) designed for safe operation. After power failure, the machine has to be restarted by pushing the green "ON" button.

There is a red OFF button, which is pressed to stop all machine functions.

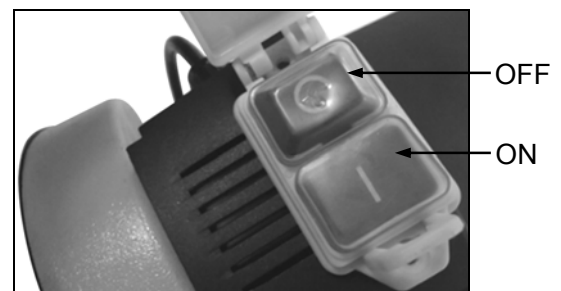


Fig. 13

8. Adjusting

Adjusting Blade Guide

For the blade guide adjustment the band saw features an adjustment lever (A) (Fig.14) mounted on the unit.

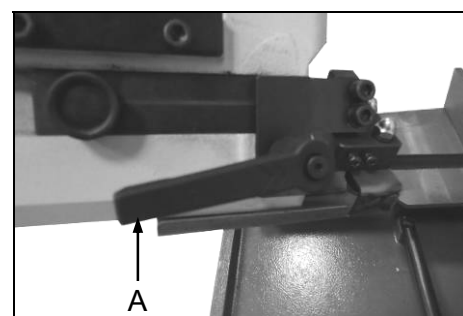


Fig. 14

It's designed for your convenience to adjust blade guide easily and quickly at any time. Adjustment of this blade guide is in accordance with the sizes of work pieces. The one located at the left of the saw head can be adjusted and the other is fixed.

When cutting a small work, move the guid toward the work as close as possibl.



WARNING

Do not make any adjustments, or load, unload work from vise when machine is running!

Adjusting Poor Cutting

The machine has been adjusted and power-tested with several test cuts before leaving the factory to insure proper cutting. If the machine gives poor cuts, correct it as follows.

1. Bad cuts due to blade worn, replace a new blade.
2. The saw uses fixed ball bearings and can be adjusted ball bearing by eccentric bearing shaft (B) in Fig.15, 16 (A) is to keep the tolerance with the blade. For keeping proper cutting, the best way is to replace them every three or six months depending on the frequency of service.
3. Poor cuts can be made because the nuts (A) in Fig.15, 16 are getting loose. Then tighten it properly.

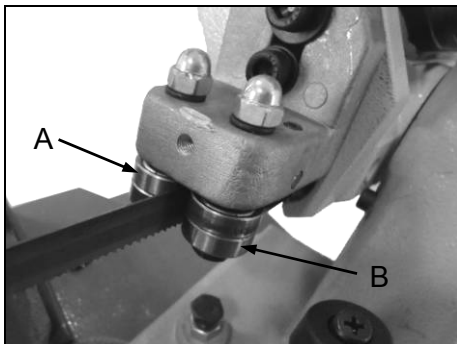


Fig. 15

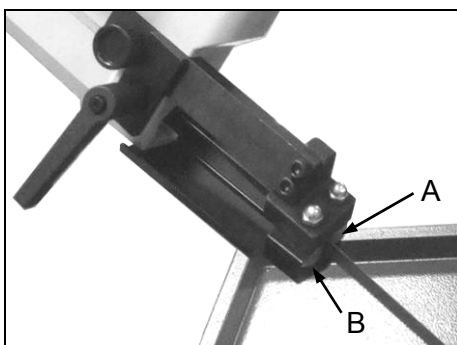


Fig. 16



WARNING

SHUT OFF THE POWER SOURCE BEFORE MAKING ADJUSTMENT, MAINTENANCE, OR INSTALLING OR UNINSTALLING PARTS.

Changing the Motor Carbon Brushes

If the motor is making an unusual noise then the carbon brushes may need to be replaced.

1. Disconnect machine from power supply.
2. Remove two tap screws connected with on/off switch box, and three Phillips head screws around cover base. (Fig. 17)
3. There are two plastic covers on the motor (Fig.18) after uncovering the motor's cover. Remove plastic covers.
4. There are coppers sheet with wiring covered on the carbon brushes (Fig.19).
5. Slide copper sheet to the one way (Fig.20), the carbon brush will jumps out (Fig.21).
6. Replace the carbon brushes (Fig. 22). Both brushes must be replaced at the same time.
7. Replace the carbon brushes' cover and motor cover.



Fig. 17





Fig. 18



Fig. 19

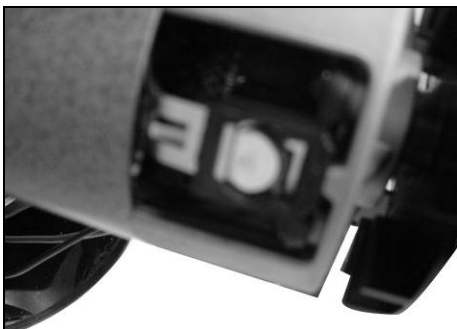


Fig. 20



Fig. 21

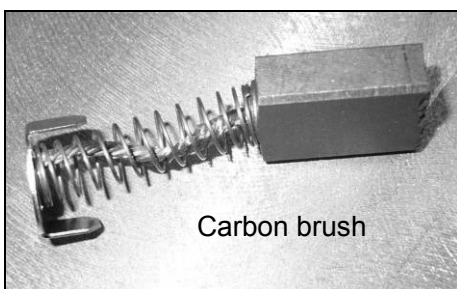


Fig. 22

Adjust Assistant Plate

The assistant plate offers support while cutting. It can move depending on the material length. If the working piece is longer than vise, adjust the assistant plate (Fig. 23, A) location to support the work piece. This plate makes cutting more stable and easy. While miter cutting, it will cut the plate slightly. It won't damage with plate. This plate is replaceable.

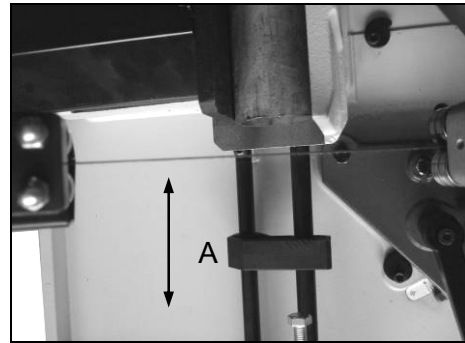


Fig. 23

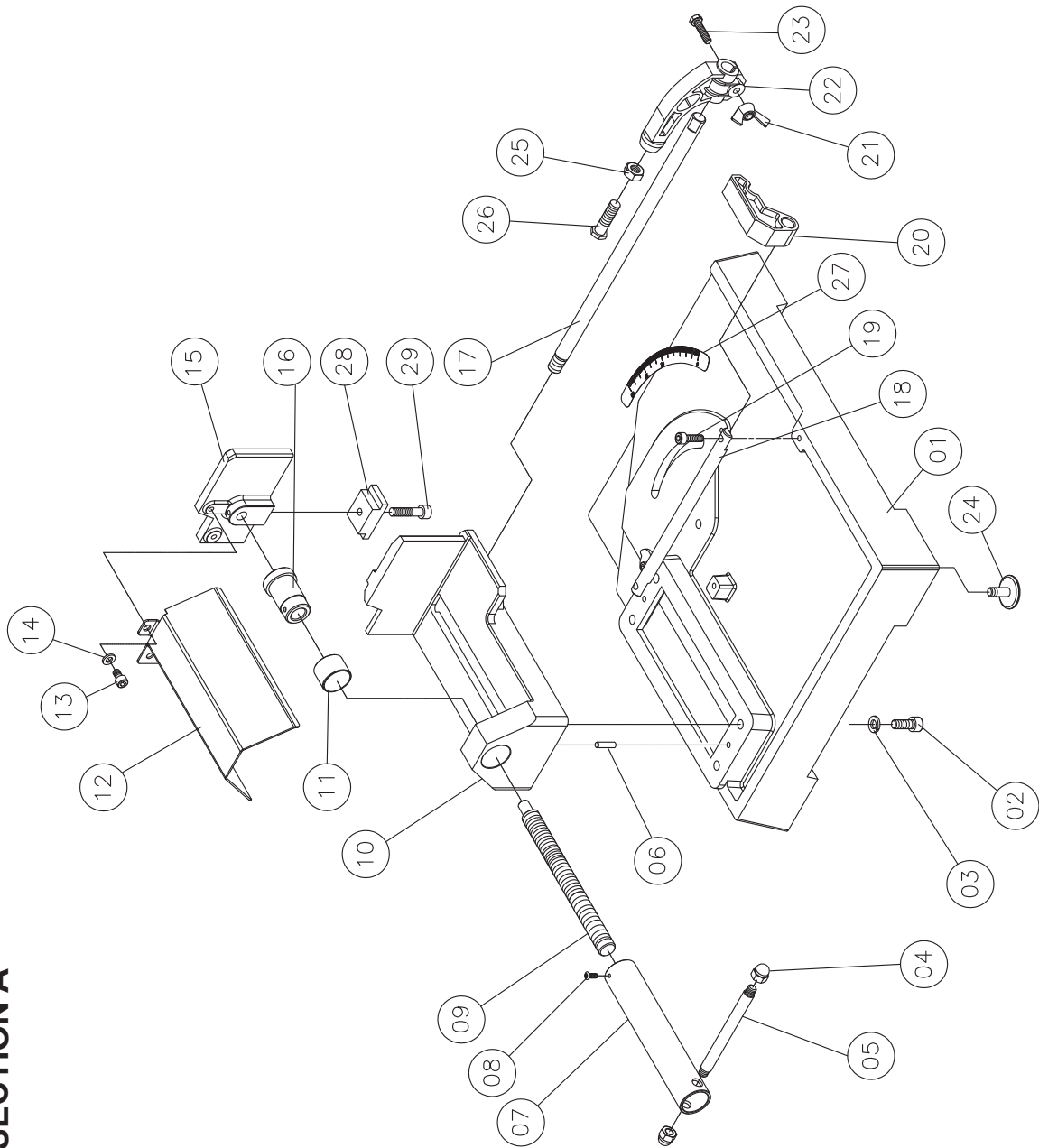


Fig. 24

SECTION A

PARTS LIST

Part No.	Description	Size No.	Q'ty
A01	Table Base		1
A02	Hex. Socket Cap Screw	M8x20	4
A03	Spring Washer	M8	4
A04	Nut	M8	2
A05	Handle		1
A06	Spring Pin	ø6x20	2
A07	Handle Base		1
A08	Round Head Screw	M4x6	2
A09	Lead Screw		1
A10	Vise Table		1
A11	DU Bushing	25x28x25	1
A12	Vise Cover Plate		1
A13	Hex. Socket Cap Screw	M6x10	2
A14	Washer	M6x13x1.5	2
A15	Vise Plate		1
A16	Screw Nut		1
A17	Length Rod		1
A18	Assistant Rod		1
A19	Hex. Socket Cap Screw	M5x10	2
A20	Assistant Plate		1
A21	Wing Nut	M6	1
A22	Plastic Stopper		1
A23	Hex. Cap Bolt	M6x20	1
A24	Foot Pad		4
A25	Nut	M8x13x6	1
A26	Hex. Cap Bolt	M8x13x25	1
A27	Angle Scale		1
A28	T type Block		1
A29	Hex. Socket Cap Screw	M8x25	1



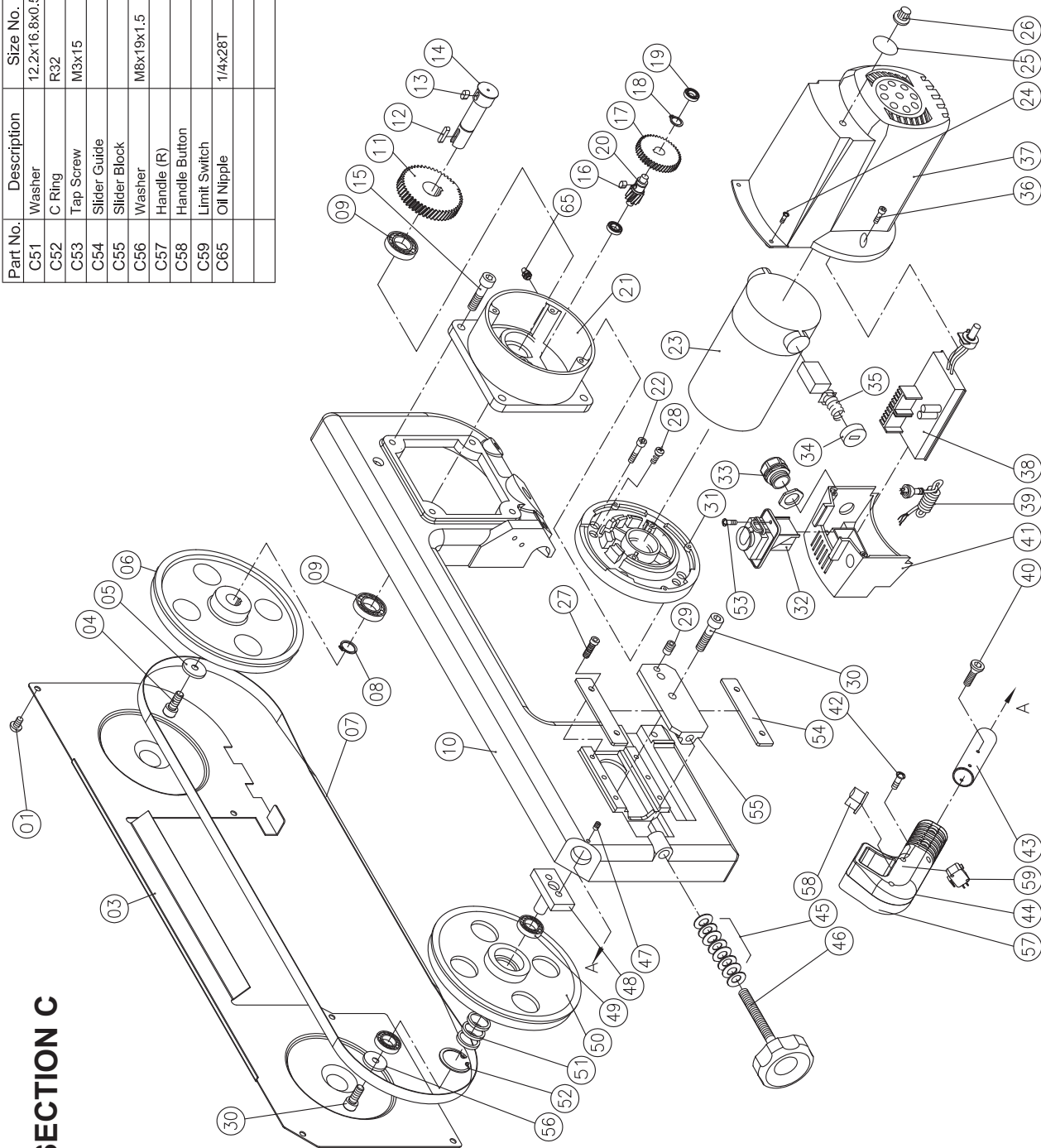
SECTION B

Exploded view diagram of a mechanical assembly, likely a power tool or machine component. The diagram shows various parts numbered 01 through 52, including structural frames, mounting brackets, fasteners (screws, bolts, nuts, washers), and internal components. A parts list table is provided on the right side of the diagram.

Part Number	Description	Quantity	Notes
B49	Washer	M6x13x1.5	
B50	Nut	1/4	
B51	Set Screw	M5x8	
B52	Blade Guard		

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SECTION C



Part No.	Description	Size No.	Qty	Part No.	Description	Size No.	Qty
C51	Washer	12.2x16.8x0.5	3	C01	Half Round Head Scrw	M5x10	5
C52	C Ring	R32	1	C03	Blade Cover		1
C53	Tap Screw	M3x15	2	C04	Hex. Socket Cap Scrw	M6x16	1
C54	Slider Guide		2	C05	Washer	M6x22x2	1
C55	Slider Block		1	C06	Driver Wheel		1
C56	Washer	M8x19x1.5	1	C07	Blade	1440x13x0.65	1
C57	Handle (R)		1	C08	C Ring	S-15	1
C58	Handle Button		1	C09	Bearing	6202	2
C59	Limit Switch		1	C10	Saw Head		1
C65	Oil Nipple	1/4x28T	1	C11	Output Gear		1
				C12	Key	4x4x20	1
				C13	Key	5x5x10	1
				C14	Driver Wheel Shaft		1
				C15	Hex. Socket Cap Scrw	M8x25	4
				C16	Key	4x4x6	1
				C17	Connect Gear		1
				C18	C Ring	S-11	1
				C19	Ball Bearing	607	2
				C20	Motor Gear		1
				C21	Gear Case		1
				C22	Hex. Socket Cap Scrw	M5x25	4
				C23	Motor		1
				C24	Tap Screw	M3x15	2
				C25	Speed Scale		1
				C26	Speed Knob		1
				C27	Hex. Socket Cap Scrw	M6x20	4
				C28	Big Round Head Scrw	M4x6	2
				C29	Set Screw	M8x10	1
				C30	Hex. Socket Cap Scrw	M8x15	3
				C31	Motor Front Cover		1
				C32	Magnetic Switch	KJD17	1
				C33	Wire Fastener	PG-9	1
				C34	Brush Cover		2
				C35	Carbon Brush		2
				C36	Hex. Socket Cap Scrw	M4x12	3
				C37	Motor Case		1
				C38	IC Control Board		1
				C39	Power Cable		1
				C40	Flat Head Scrw	M5x8	4
				C41	Switch Cover		1
				C42	Tap Screw	M3x10	3
				C43	Cutting Handle		1
				C44	Handle (L)		1
				C45	Disc Washer	M10x20x0.8	8
				C46	Tension Bolt		1
				C47	Set Screw	M5x8	1
				C48	Shaft Seat		1
				C49	Ball Bearing	6201	2
				C50	Idle Wheel		1



WARRANTY

CRAFTEX 3 YEARS LIMITED WARRANTY

Craftex warrants every product to be free from defects in materials and agrees to correct such defects where applicable. This warranty covers **three years** for parts and 90 days for labor (unless specified otherwise), to the original purchaser from the date of purchase but does not apply to malfunctions arising directly or indirectly from misuse, abuse, improper installation or assembly, negligence, accidents, repairs or alterations or lack of maintenance.

Proof of purchase is necessary.

All warranty claims are subject to inspection of such products or part thereof and Craftex reserves the right to inspect any returned item before a refund or replacement may be issued.

This warranty shall not apply to consumable products such as blades, bits, belts, cutters, chisels, punches etceteras.

Craftex shall in no event be liable for injuries, accidental or otherwise, death to persons or damage to property or for incidental contingent, special or consequential damages arising from the use of our products.

RETURNS, REPAIRS AND REPLACEMENTS

To return, repair, or replace a Craftex product, you must visit the appropriate Busy Bee Tools showroom or call 1-800-461-BUSY. Craftex is a brand of equipment that is exclusive to Busy Bee Tools.

For replacement parts directly from Busy Bee Tools, for this machine, please call 1-800-461-BUSY (2879), and have your credit card and part number handy.

- All returned merchandise will be subject to a minimum charge of 15% for re-stocking and handling with the following qualifications.
- Returns must be pre-authorized by us in writing.
- We do not accept *collect* shipments.
- Items returned for warranty purposes must be insured and shipped pre-paid to the nearest warehouse
- Returns must be accompanied with a copy of your original invoice as proof of purchase. Returns must be in an un-used condition and shipped in their original packaging a letter explaining your reason for the return. Incurred shipping and handling charges are not refundable.
- Busy Bee will repair or replace the item at our discretion and subject to our inspection.
- Repaired or replaced items will be returned to you pre-paid by our choice of carriers.
- Busy Bee reserves the right to refuse reimbursement or repairs or replacement if a third party without our prior authorization has carried out repairs to the item.
- Repairs made by Busy Bee are warranted for 30 days on parts and labour.
- Any unforeseen repair charges will be reported to you for acceptance prior to making the repairs.
- The Busy Bee Parts & Service Departments are fully equipped to do repairs on all products purchased from us with the exception of some products that require the return to their authorized repair depots. A Busy Bee representative will provide you with the necessary information to have this done.
- For faster service it is advisable to contact the nearest Busy Bee location for parts availability prior to bringing your product in for repairs.