Save This Manual For Future Reference

# owners manual

# Dust Collection System

Serial Number

Model and serial number may be found on the machine name plate.

You should record both model and serial number in a safe place for future use.

# **CAUTION:**

READ GENERAL and ADDITIONAL SAFETY INSTRUCTIONS carefully.



# DUST COLLECTION SYSTEM

- assembly
- operation
- repair parts

Printed in Taiwan

# IMPORTANT SAFETY INSTRUCTIONS

When using your Dust Collection System, follow basic safety precautions including the following.

# **WARNING:** To reduce the risk of fire, electric shock, or injury:

 Read and understand this owner's manual and all labels on the Dust Collection System before operating. Use only as described in this manual. To avoid personal injury or damage to Dust Collection System, use only recommended accessories.

Sparks inside the electrical parts, can ignite flammable vapors or dust. To avoid fire or explosion:

- Do not vacuum, or use this Dust Collection System near flammable or combustible liquids, gases, gasoline or other fuels, lighter fluid, cleaners, oil-based paints, natural gas, hydrogen, or explosive dusts like coal dust, magnesiumdust, grain dust, or gun powder.
- Do not vacuum anything that is burning or smoking, such as cigarettes, matches, or hot ashes.
- To avoid health hazards from vapors or dusts, do not vacuum toxic materials.
- · Do not use store near hazardous materials.
- Do not use outdoors or on wet surfaces.
- Put unit on a stable, level surface.
- Route vacuum hose and electric cord out of traffic areas.
- Do not allow to be used as a toy. Close attention is necessary when used by or near children.
- Do not leave appliance plugged in. Unplug from outlet when not in use and before servicing.
- Use extra care when cleaning on stairs.
   "Do not pick up anything that is burning or smoking, such as cigarettes, matches, or hot ashes."

- To avoid from accidental starting, unplug power cord before changing or cleaning filter/dust bag or chip bag.
- Do not use without filter/dust bag and/or chip bag in place.
- Do not unplug by pulling on cord. To unplug, grasp the plug, not the cord.
- Tum off controls before unplugging.
- Do not use with damaged cord, plug other parts. If your Dust Collection System is not working as it should, has missing parts, has been dropped, damaged, left outdoors, or dropped into water, return it to Service Center.
- Do not pull or carry by cord, use cord as handle, close a door on cord, or pull cord around sharp edges or corners. Do not run Dust Collection System over cord. Keep cord away from heated surfaces.
- Do not handle plug of the Dust Collection System with wet hands.
- Do not put any object into ventilation openings.
   Do not vacuum with any ventilation openings blocked; keep free of dust, lint, hair or anything that may reduce air flow.
- Keep hair, loose clothing, fingers, and all parts of body away from openings and moving parts.
- Extension cords in poor condition or that are too small can pose fire and shock hazards. When using an extension cord, be sure it is in good condition. See "Extension Cords" in the "Operation" section for proper wire sizes.
- Connect to properly grounded outlet only. (See "Grounding Instructions")

# SAVE THESE INSTRUCTIONS FOR FUTURE REFERENCE

A CAUTION: If using this Dust Collection System to help keep airborne wood dust heavy usage with in acceptable limits, you must regularly monitor air borne dust and maintain **Dust Collection System to avoid exceeding dust** limits. Each application is unique. Your maintenance schedule must, there-fore, be tailored your specific use of this Dust Collection System.

Safety is a combination of common sense, staying alert and knowing how your Dust Collection System

BEFORE USING THE DUST COLLECTION SYSTEM:

A WARNING: TO AVOID MISTAKES THAT COULD RESULT IN SERIOUS, PERMANENT INJURY, DO NOT CONNECT POWER CORD UNTIL THE FOLLOWING STEPS HAVE BEEN SATISFACTORILY COMPLETED:

- Assembly, mounting and alignment.
- 2. Learn the function and proper use of the ON-OFF switch
- 3. Read and understand all safety instructions and operating procedures throughout the manual.
- 4. Read the following labels which appear on the top and bottom of ration housing and sides of motor.

#### WARNING **AVERTISSEMENT**



Metal shavings or dust can set sawdust on fire.
Collect wood materials only.
Do not collect metal shavings or dust.
See manual for details.
La Poussière ou les rognures de métal
peuvent mettre le feu à la sciure de bois.
Ramasser les matériaux en bois seulement.ne
pas ramasser la poussière ou les rognure de
métal voir le manuel pour détail.



Risk of electrical shock.
Use indoors in dry area.
Do not use outdoors or no wet surfaces.
Risque de choc électrique.
Utiliser à l'intérieur dans les endroit sec.
Ne pas utiliser à l'extérieur ou sur des surface



Sparks can ignite vapors from flammable Sparks can ignite vapors from naminable products.
Do not use around flammable prducts.
Des étincelles peuvent enflammer des vapeurs de produits inflammavles. Ne pas untiliser près de produits inflammable.

If connected to a circuit proteced by fuses, use time delay fuses with this appliance.
En cas de raccordement à un circuit protégé par des fusibles, utilisez des fusibles à retardement avec cet appareil.

#### **BEFORE EACH USE:**

- 1.Inspect your Dust Collection System. If any parts are missing, bent, or fail in any way, or any electrical components do not work properly, turn off the Dust Collection System, remove switch key, and remove power supply cord from power supply. Replace damaged, missing or failed parts before using the Dust Collection System again.
- 2. Plan your work to protect your eyes, hands, face, ears and body.



- A. WEAR SAFETY GOGGLES, FORESIGHT IS BETTER THAN NO SIGHT. Wear safety goggles, not glasses, that comply with ANSIZ87.1 (shown on label). Operating any power tool can result in foreign objects being thown into the eyes which can result in permanent eye damage. Safety goggles are available at stores. Use of glasses or goggles not in compliance with ANSIZ87.1 couls result severe in injury from breakage of the eye protection.
- B. When cleaning collection bags, wear a dust mask.



#### WARNING AVERTISSEMENT

DO NOT OPERATE WITOUT HOSE CONNECTED TO SUCTION CHUTE. HAZARDOUS MOVING PARTS INSIDE. UNPLUG BEFORE REMOVING SUCTION CHUTE. ATTACH SUCTION CHUTE BEFORE PLUGGING IN.

BEFORE PLUGGING IN.

BEFORE FONCTIONNER SI LE TUYAU N'EST PAS BRANCHE À LA GOULOTTE
D'ASPIRATION. PIECES EN MOUVEMENT DANGEREUSES À L'INTÉRIEUR.

DÉBRANCHER AVANT D'ENLEVER LA GOULOTTE D'ASPIRATION. POSER LA GOULOTTE
D'ASPIRATION AVANT D'EN BRANCHER.



# WARNING 🛕 AVERTISSEMENT

DO NOT EXPOSE TO RAIN OR USE IN DAMP LOCATIONS/NE PAS EXPOSER A LA PLUIE ET NE PAS UTILISER DANS LES EMPLACEMENTS HUMIDES.

## **GENERAL SAFETY INSTRUCTIONS FOR POWER TOOLS**

#### 1. KNOW YOUR TOOL

Read and understand owner's manual and labels affixed to the tool. Learn its application and limitations as well as its specific potential hazards pecualiar to this tool.

#### 2. GROUND THE TOOL

This tool is equipped with an approved 3-conductor cord and a 3-prong grounding type plug to fit the proper grounding type receptacle. The green conductor in the cord is the grounding wire. Never CONNECT THE GREEN WIRE TO A LIVE TERMINAL.

#### 3: KEEP GUARDS PLACE

-in working order, and in proper adjustment and alignment.

REMOVE ADJUSTING KEYS AND WRENCHES
 Form habit of checking to see that keys and adjusting wrenches are removed from tool before turning it on.

#### 5. KEEP WORK AREA CLEAN

Cluttered areas and benches invite accidents. Floor must not be slippery due to wax or sawdust.

#### 6. AVOID DANGEROUS ENVIRONMENT

Don't use ;power tools in damp or wet locations or expose them to rain. Keep work area well lighted.

Provide adequate surrounding work space.

#### 7. KEEP CHILDREN AWAY

All visitors should be kept a safe distance from work area.

#### 8. MAKE WORKSHOP CHILD-PROOF

-with padlocks, master switches, or by removing starter keys.

#### 9 USE PROPER SPEED

This tool will do the job better and safer when operated at the proper speed.

#### 10 USE RIGHT TOOL

Don't force tool or attachment to do a job for which it was not designed.

#### 11. WEAR PROPER APPAREL

Do not wear loose clothing, gloves, neckties or jewelry (rigs, wristwatches) to get caught in moving parts. Non-slip footwear is recommended. Wear protective hair covering to contain long hair. Roll long sleeves above the elbow.

#### 12. USE SAFETY GOGGLES (Hand Protection)

Wear safety goggles (must comply with ANSIZ87.1) at all times. Everyday eyeglasses only have impact resistant lenses, they are NOT safety glasses. Also, use face or dust mask if cutting operation is dusty, and ear protectors (plug or muffs) during extended periods or operation.

#### 13 DON'T OVERREACH

Keep proper footing and balance at all times.

#### 14. MAINTAIN TOOLS WITH CARE

Keep tools sharp and clean for best and safest performance. Follow instructions for lubricating and changing accessories.

#### 15. DISCONNECT TOOLS

Before servicing, when changing accessories or at-tachments.

#### 16. AVOID ACCIDENTAL STARTING

Make sure switch is in "OFF" position before plugging in.

#### 17. USE RECOMMENDED ACCESSORIES

Consult the owner's manual for recommended accessories. Follow the instructions that accompany the accessories. The use of improper accessories may cause hazards.

#### 18. NEVER STAND ON TOOL

Serious iniury could occur if the tool tips over. Do not store materials such that it is necessary to stand on the tool to reach them.

#### 19. CHECK DAMAGED PARTS

Before further use of the tool, a guard or other part that is damaged should be carefully checked to ensure that it will operate properly and perform its intended function. Check for alignment of moving parts, binding or 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.

# 20.NEVER LEAVE MACHINE RUNNING UNATTENDED

Turn power "OFF" Don't leave Dust Collection System until it comes to a complete stop.

Your dust collector is designed for use in attended use.

## introduction

This Dust Collection System is specifically designed to capture sawdust and wood chips at the source. The fine dust is filtered by the upper bag while heavy particles settle in the lower bag for easy removal. Do not use as a vacuum.

A CAUTION: The blower bousing contains high speed fan blade that can amputate fingers, grab loose clothing and neckties, or propel dust at high velocities. DO NOT OPERATE WITHOUT ALL PARTS IN PLACE.

Do not attempt to clean, remove dust bags or service unit while in operation. Disconnect from power source.

This Dust Collection System is intended either commercial or household use.

# IMPORTANT NOTE Please Read Carefully

**Static Shocks Are Common-**in dry areas or where the relative humidity of the air is low. To reduce the

frequency of static shocks in your home, the best remedy is to add moisture to the air with a console or installed humidifier.

The safety information in this manual is highlighted by the following safety alert symbol.



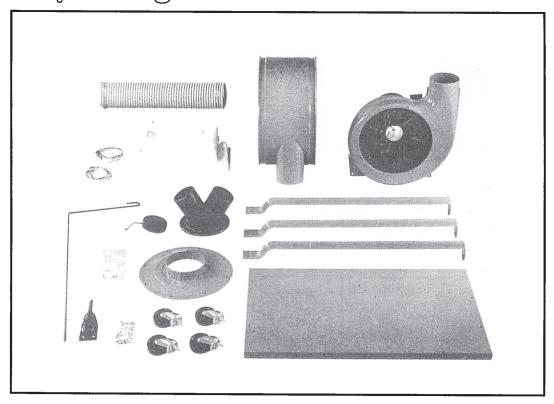
The following signal words are used to indicate the level of risk.

▲ DANGER: Means that if the safety information is not followed, someone will be seriously injured or killed.

**A** WARNING: Means that if the safety information is not followed, someone **could** be seriously injured or killed.

**WARNING:** Means that if the safety information is not followed, someone **may** be seriously injured or killed.

# Unpacking



## **№ WARNING**

Read and understand the entire contents of this manual before attempting assembly or operation of the dust collector!

Failure to comply may cause serious injury!

#### Unpacking

- 1. Finish removing all contents from the shipping carton.
- 2. Report any damage to your distributor.
- Do not discard any shipping material until after the dust collector has been assembled and is running properly.

#### **Contents of the Shipping Carton**

1 Bag Hanger

4 Casters

1 Base

1 Inlet Cover

1 Hanger Bracket

1 Hose Adapter

1 Hose

1 Operator's Manual

3 Support Legs

1 Motor/Fan Assembly

1 Collector Bag

2 Hose Clamp

2 Retainer Straps

1 Filter bag

1 Bag of Assembly Hardware

#### **Assembly**

 Install four rollers to under side as pictured in Fig.
 Do not remove lock washer and nut from roller shaft; these act as spacers. Insert roller shaft into threaded hole on underside of base, turn until snug, and tighten nut with wrench.



Fig. 1

2. Place base with rollers on the ground and attach motor and fan assembly to base using 4 hex cap bolts (M8x16) and 4 flat washers (5/16) (Fig. 2).

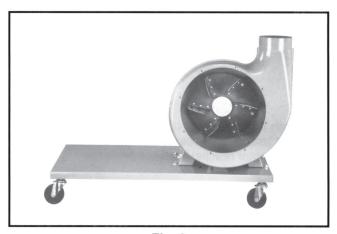
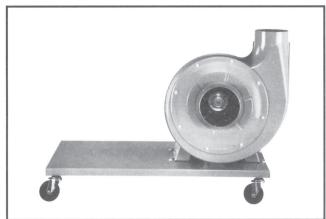


Fig. 2

3. Attach inlet cover to fan housing using eight pan head screws (M6x12). (Fig. 3).



4. Attach there support brackets (A, Fig. 4) to base using six hex cap bolts (M8x16) and six flat washers (5"x16"). Hand tighten only at this time.

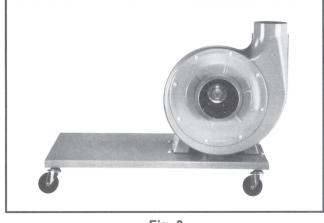


Fig. 3

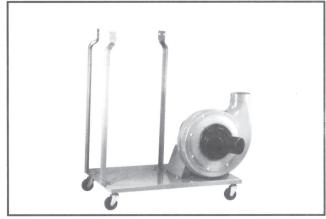


Fig. 4

5. Install housing (A, Fig. 5) to three support brackets using six hex cap bolts (M8x16), twelve flat washers (5/16"), and six hex nuts (M8). Be sure hose opening faces fan housing. Before attaching third support bracket (B, Fig. 5), place hanger bracket between the support bracket and the housing, as pictured in Fig. 6. Tighten all bracket nuts and bolts at this time.



Fig. 5

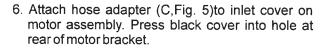




Fig. 6

Slide hose clamps (A. Fig.7) onto each end of hose. Attach hose between fan hose and collector housing. Tighten clamps to secure hose.

8. Slide hook on bag hanger through top keeper on filter bag and insert hanger into hanger bracket. Thread retainer strap through keeper straps on filter bag and fasten to collector housing. (See Fig. 8)



Fig. 7

Thread second retainer strap through keepers on collector bag and attach to collector housing. (See Fig.8)

#### **Electrical Connections**

## **№ WARNING**

All electrical connections must be done by a qualified electrician. Failure to comply may result in serious injury!

All adjustments or repairs must be done with the dust collector disconnected from the power source. Failure to comply may result in serious injury!

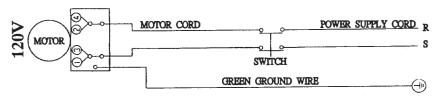
This dust collector is rated at 120/240Vand Comes from the factory prewired 120V.

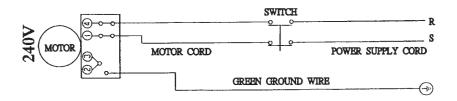
Before hooking up to the power source, make sure that the switch is in the position.



Fig. 8

#### **Electrical Schematic**





#### **Operational Hints**

During first use and after cleaning, the filter bag may allow some dust to escape. This is normal and will stop after a short period of time.

### **№ WARNING**

Wearing a particle mask/respirator for protection against fine dust particles during cleaning is highly recommended.

Clean both filter and collector bags frequently to keep the collector's performance at its optimum. To clean:

- 1. Disconnect the machine from the power source.
- 2. Loosen the retaining strap, remove the bag from the housing, and empty contents.
- 3. Turn the bag inside out and shake vigorously.
- 4. Turn the bag outside in and re-attach to the housing using the retainer strap to secure.
- 5. Connect the machine to the power source.

Use the proper type hose to connect the dust collector to the machine being operated. Dryer vent hose is not acceptable for this purpose.

## **ON/OFF SWITCH**

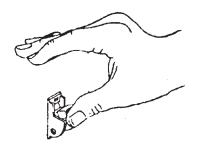
On the rear of the *Motor Housing* above the *Handle*, is the *Switch Box*. The ON/OFF Switch has ability to be turned "ON" when the *Red Key* is properly installed Switch to the "ON" position by moving the switch upward. Turn the switch "OFF" by moving downward. Remove the *Key* from the switch whenever the saw is turned "OFF" and keep if out of the reach of children.

A WARNING: THE DUST COLLECTION SYSTEM CAN START ACCIDENTALLY OR USED BY CHILDREN OR OTHERS WHEN THE KEY IS LEFT IN THE SWITCH. ALWAYS REMOVE KEY WHEN THE DUST COLLECTION SYSTEM IS "OFF", AND KEEP IT OUT OF THE REACH OF CHILDREN.

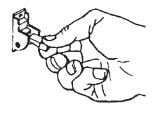
WARNING: THE DUST COLLECTION SYSTEM WILL START IMMEDIATELY WHEN THE POWER COMES BACK ON AFTER A BLACK OUT IF THE KEY IS LEFT "ON" IN THE SWITCH. ALWAYS TURN THE SWITCH "OFF" AND REMOVE THE KEY.



Turning Switch "OFF"



Turning Switch "ON"



Removing Switch Key

**NOTICE:** The type of Switch on your dust collector might be defferent to the above ON/OFF switch for your country.

## operation

**POWER SUPPLY** 

WARNING: YOUR DUST COLLECTION SYSTEM IS WIRED AT THE FACTORY FOR 120V OPERATION. CONNECT TO A 120V, 15-AMP, BRANCH CIRCUIT AND USE A 15-AMP, TIME DELAY FUSE OR CIRCUIT BREAKER. FAILURE TO CONNECT IN THIS WAY CAN RESULT IN INJURY FROM SHOCK OR FIRE.

Your Dust Collection System must be properly grounded. Not all outlets are properly ground. If you are not sure that your outlet is properly grounded, have it checked by a qualified electrican.

A WARNING: IF NOT PROPERLY GROUND, THIS DUST COLLECTION SYSTEM CAN CAUSE ELECTRICAL SHOCK, PARTICULARLY WHEN USED IN DAMP LOCATIONS.

WARNING: TO AVOID SHOCK OR FIRE, IF POWER CORD IS WORN, CUT, OR DAMAGED IN ANY WAY, HAVE IT REPLACED IMMEDIATELY.

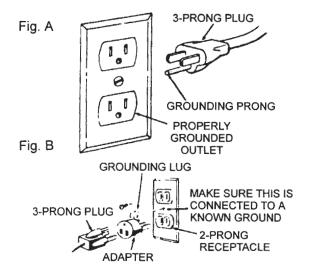
#### **GROUNDING INSTRUCTIONS**

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

WARNING: TO MAINTAIN PROPER DUST COLLECTION SYSTEM GROUNDING, WHENEVER THE OUTLET YOU ARE PKANNING TO USE FOR THIS POWER TOOL IS OF THE TWO PRONG TYPE, DO NOT REMOVE OR ALTER THE GROUNDING PRONG IN ANY MANNER.

This appliance is for use on a nominal 120v-volt circuit and has a grounded plug that looks like the plug illustratted below. A temporary adapter may be used to connect this plug to a 2-pole receptacle, as shown below, if a properly grounded outlet is not available. The temporary adapter sould be used only until a properly grounded outlet can be installed by a qualified electrican. The green colored rigid ear, lug, or the like, extending from the adapter must be connected to a permanent ground such as a properly grounded outlet box cover. Whenever the adapter is used, it must be held in place by a metal screw.

WARNING: IMPROPER CONNECTION OF THE EQUIPMENT GROUNDING CONDUCTOR CAN RESULT IN A RISK OF ELECTRIC SHOCK. CHECK WITH A QUALIFIED ELECTRICAN OR SERVICEPERSON IF YOU ARE IN DOUBT AS TO WHETHER THE OUTLET IS PROPERLY GROUNDED. DO NOT MODIFY THE PLUG PROVIDED WITH THE APPLICANCE IF IT WILL NOT FIT THE OUTLET, HAVE A PROPER OUTLET INSTALLED BY A QUALIFIED ELECTRICIAN.



WARNING: THE ADAPTER ILLUSTRATED IS FOR USE ONLY IF YOU ALREADY HAVE A PROPERLY GROUNDED 2-PRONG RECEPTACLE.

#### 120 Volt Operation

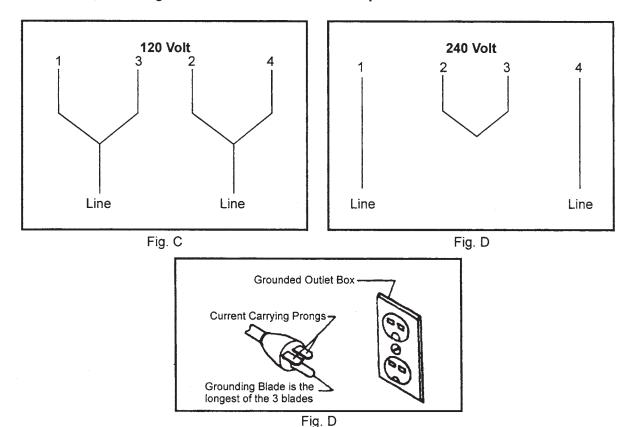
As received from the factory, your dust collector is ready to run at 120 volt operation. This dust collector when wired for 120 volt, is intended for use on a circuit that has an outlet and a plug that looks the one illustrated in Figure A. A temporary adapter, which locks like the adapter as illustrated in Figure B, may be used to connect this plug to a two-pole receptacle, as shown in Figure B if a properly grounded outlet is not available. The temporary adapter should only be used until a properly grounded outlet can be installed by a qualified electrician. **This adapters is not applicable in Canada.** The green colored rigid ear, lug, or tab, extending from the adapter, must be connected to a permanent ground such as a properly grounded outlet box, as shown in Figure B.

#### 240 Volt Operation

If 240V, single phase operation is desired, the following instructions must be followed:

- 1. Disconnect the machine from the power source.
- 2. This dust collector is supplied with four motor leads that are connected for 120V operation, as shown in Figure C. Reconnect these four motor leads for 240V operation, as shown in Figure D.
- 3. The 120V attachment plug supplied with the dust collector must be replaced with a UL/CSA listed plug suitable for 240V operation. This plug is illustrated in Fig. E. Contact your local Authorized Service Center or qualified electrician to install the plug and change the connection from 120V to 240V. The dust collector must comply with all local and national codes after the 240V plug is installed.
- 4. The dust collector with a 240V plug should only be connected an outlet having the same configuration as illustrated by the grounded outlet box in Figure E. No adapter is available or should be used with the 240V plug.

Important: In all cases (120 or 240 volts), make certain the receptacle in question is properly grounded. If you are not sure, have a registered electrician check the receptacle.



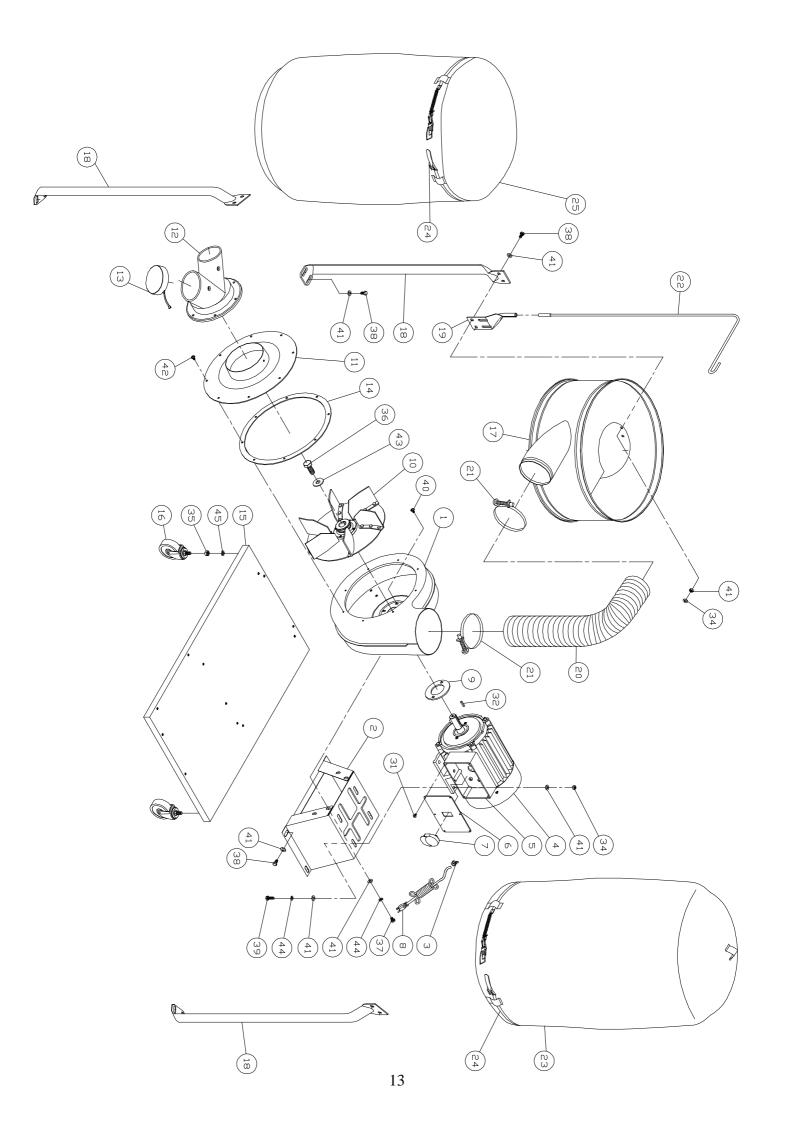
#### **EXTENSION CORDS**

The use of any extension cord will cause some loss of power. Use the following table to determine the minimum wire size (A.W.G) extension cord. Use only 3-wire extension cords which have 3-prong grounding type plugs and 3-pole receptacles which accept the tool's plug.

For circuits that are father away from electrical

circuit box, the wire size must be increased proportionately in order to deliver ample voltage to the saw motor.

Saw IIIOlui.	
Length of	Wire Sizes Required
Conductor	(American Wire Gage)
0-25 feet	<u>120 Lines</u>
26-50 feet	No. 16
51-100 feet	No. 14
	No. 12



## PART LIST

ITEM	PART NO.	DESCRIPTION	SIZE	Q`TY	NOTE
1	411035	IMPELLER HOUSING		1	
2	AB411026	MOTOR BRACKET		1	
3	998621	STRAIN RELIEF		1	
4	MA411001	MOTOR	2HP/1PH/50HZ/240V	1	CAST-IRON
	MA411001-3	MOTOR	2HP/3PH/50HZ/415V	1	CAST-IRON
5	411051	SWITCH BOX		1	
6	411053	SWITCH PLATE	BLACK	1	
7	994542	SWITCH	ON/OFF SWITCH(1PH)	1	
	994543	SWITCH	ON/OFF SWITCH(3PH)	1	
8	IC411001	POWER CORD	1.0x3C(SAA PLUG)	1	
	IC411001-3	POWER CORD	1.5x4C	1	
9	420051	MOTOR PACKING		1	
10	AB411049	IMPELLER ASS'Y	(φ12)	1	
	430006	BLADE BEARING	(1 )	1	
	411049	BUSHING	φ19	<u>·</u> 1	
	SH089400	HEX HEAD BOLT	M8x16	4	
	WS080000	SPRING WASHER	M8	4	
11	411036	INLET FLANGE	φ6"	1	
12	427028	HOSE ADAPTER	2-φ4"	1	
13	420203	ADAPTER CAP	Δ ΨΤ	1	
14	430034	INLET FLANGE PACKING		1	
15	411041	BASE		1	
16	402036	PIVOTING CASTER		4	
		HOUSING		-	
17	420002			1	
18	402004	SUPPORT TUBING		3	
19	523011	HANGER BRACKET	FIL OF (ONA)	1	0041/
20	420009	HOSE	φ5"x65(CM)	1	GRAY
21	420010	RING CLAMP	φ5"	2	
22	402040	HANGER		1	
23	402013B	FILTER BAG		1	_
24	AB410012	REATINER STRAP		2	Α
	410012A	STEEL STRAP	0.5x12.5x1630	1	
	423003B	BACKLER		1	
	423003C	BACKLE		1	
	423003D	HOOKY HOLDER		1	
	423003E	HOOK		1	
	423003F	SPRING HOLDER		1	
	423003G	SPRING		1	
	VS025043	RIVET	φ2.5x4.3	2	
	VS025170	RIVET	φ2.5x17	1	
25	XP402021	PLASTIC BAG		1	
31	ST039304	TAPPING SCREW	M3.5x12(AB)	6	
32	KS050525	KEY	5x5x25	1	
34	NH081300	NUT	M8	10	H(6)
35	NH581400	NUT	3/8"-16UNC	4	
36	SH080400	HEX HEAD BOLT	M8x20	1	
37	SH089300	HEX HEAD BOLT	M8x12	4	
38	SH089400	HEX HEAD BOLT	M8x16	16	Н
39	SH080500	HEX HEAD BOLT	M8x25	4	
40	SF069300	PAN HEAD BOLT W/FLANGE	M6x12	2	
41	WF081818	FLAT WASHER	Μ8xφ18	34	H(22)
42	SF069300	PAN HEAD BOLT W/FLANGE	M6x12	8	Н
43	WF083030	FLAT WASHER	Μ8xφ30	1	
44	WS080000	SPRING WASHER	M8	8	
	WS100000	SPRING WASHER	M10	4	

## maintenance

#### MOTOR

Excessive dust in motor could cause excessive heat in motor.

Every effort should be made to prevent foreign material from entering the motor. When operated under conditions likely to permit accumulations of dust, dirt, or waste within the motor, a visual inspection should be made at frequent intervals. Accumulations of dry dust can usually be blown out successfully.

NOTE: Motors used on wood-working tools are particularly susceptible to the accumulation of sawdust and wood chips and should be blown out or "vacuumed" frequently to prevent interference with normal motor ventilation.

T remove dust, blow off motor with a low pressure air hose.

A CAUTION: To avoid eye Injury or adverse reaction to dust, high air pressure should not be used especially in poorly ventilated areas.

The operator performing this cleaning function should wear safety goggles and filter mask.

Do not use unit if power cord becomes worn or frayed.

If any servicing (other than the above cleaning) becomes necessary, it should be performed by an authorized Service Center.

**NOTE:** The speed of this motor cannot be regulated or changed.

# troubleshooting

#### **MOTOR**

PROBLEM	PROBABLE CAUSE	REMEDY SUGGESTED
Motor will not run.	Defective cord, plug switch and/or motor.     Blown fuse.	Consult Service. Any attempt to repair this motor may create a hazard unless repair is done by a qualified service technician. Repair services is available at your nearest service center.      Check for blown fuses and replace with fuse of proper capacity.
Excessive sawdust in air.	Loose connectors     Filter/dust bag and/or chip collection bag releasing sawdust.	Tight connections.     a. Sawdust trapped between clamp bag and housing.     b. Lower bag is hung up on sawdust shoot extension.     Reposition chip bag properly. See "Maintenance Chip Bag".
Excessive impeller noise.	Picked up large wood chips or debris.     Loose impeller.     Rubbing impeller.	<ol> <li>Do not pick up metal or ferrous materials. Stop the machine and the material will fall to the bottom of inlet tube.</li> <li>Unplug nuit prior to disassembly. Hazardous moving parts inside. Attach inlet guard before plugging in. Use a piece of wood to free impeller.</li> <li>Consult Service to repair loose or rubbing impeller.         <ul> <li>A repair to the housing may create a hazard unless if is done by a qualified service technician. Repair service is available at your nearest center.</li> </ul> </li> </ol>

PROBLEM	PROBABLE CAUSE	REMEDY SUGGESTED
Excessive noise	1. Motor	Have motor checked qualified service technician. Repair service is available at your nearest service center.
Motor fails to bevelop full power. NOTE: LOW VOLTAGE: (Power output of motor decreases repidly with decrease in voltage at motor terminals. For example, areduction of 19% in maximum power output of which the motor is capable and a reduction of 20% in voltage causes a reduction of 36% in maximum power output.)	Circuit overloaded with lights, appliances and other motors.     Undersize extension cord or extension cord too long.     General overloading of power company facilities.	<ol> <li>Do not use other appliances or motors on same circuit when using the Dust Collection System.</li> <li>Increase the wire size on extension cords, or reduce length of extension cords. See "Motor Specifications and Electrical Requirement" section.</li> <li>Request a power check from the power company.</li> </ol>
Motor starts slowly or fails to come up to full speed.	Lower voltage.     Windings burned out or open.     Starting switch will not operate. (Switch contacts working properly.)     Capacitor is bad.	Request voltage check from the power company.     Have motor repaired or replaced a qualified service. technician.     Have capacitor replaced by a qualified service technician.
Motor overheats	Motor overloaded.     Improper cooling. (Air circulation restricted through motor due to sawdust, accumulating inside of motor.)	Clean out sawdust to provide normal air circulation through motor. See "Maintenance" section.
Motor stalls (resulting in blown fuses or tripped circuit breakers).	Voltage too low to permit motor to reach operating speed.     Fuses or circuit breakers do not have sufficient capacity.	Request voltage check from the power company.     Install proper size fuses or circuit breakers.
Frequent opening of fuses or circuit breakers.	Motor overloaded.     Fuses or circuit breakers do not have sufficient capacity.	Install proper size fuses or circuit breakers.

**NOTE:** Motors used on wood-working tools are particularly susceptible to the accumulation of saw dust and wood chips and should be blown out or "vacuumed" frequently to prevent interference with normal motor ventilation and proper operation of the centrifugally-operated starting switch.

