

# ***DUST COLLECTION SYSTEM***

***MODEL DM-525B DM-525BS DM-535B***

Model

Number: \_\_\_\_\_

Serial

Number: \_\_\_\_\_

Model and serial number may be  
found on the motor cover.

You should record both model  
and serial number in a safe

Place for future use.

Save this manual for future reference.

## ***Owners manual***

- Assembly
- Operation
- Repair parts

### ***CAUTION:***

READ GENERAL AND ADDITIONAL  
SAFETY INSTRUCTIONS CAREFULLY.

# GENERAL SAFETY INSTRUCTIONS

## 1. KNOW YOUR TOOL

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

## 2. GROUND THE TOOL

The tool is equipped with a 3 or 4 wire lead. It should always be connected into a 3 or 4 wire power source. Never connect the third (green/yellow or green ) wire to a live terminal.

## 3. KEEP GUARDS IN PLACE

In working order, and in proper adjustment and alignment.

## 4. REMOVE ADJUSTING KEYS AND WRENCHES

Check to see that keys and adjusting wrenches are removed from tools before turning them on.

## 5. KEEP WORK AREA CLEAN

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

## 6. AVOID DANGEROUS ENVIRONMENTS

Do not 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 more safely when operated at the proper speed.

## 10. USE THE RIGHT TOOLS

Do not force tools or attachment to do a job for which they were not designed.

## 11. WEAR PROPER APPAREL

Do not wear loose clothing, gloves, neckties or jewelry (rings, wristwatches) as they may 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 (HEAD PROTECTION)

Wear safety goggles. 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 (plugs or muffs) during extended periods or operation.

## 13. DO NOT 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 attachments, disconnect from electricity.

## 16. AVOID ACCIDENTAL STARTING

Make sure switch is in "OFF" position before plug 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 injury 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". Do not leave the tool until it comes to a completes stop.

## **SAFETY INSTRUCTIONS BEFORE USING**



### **CAUTION:**

If using this Dust Collection System to help keep airborne wood dust in heavy usage within acceptable limits, you must regularly monitor air borne dust and maintain the Dust Collection System to avoid exceeding dust limits. Each application is unique. Your maintenance schedule must, therefore, be tailored to your specific use of this Dust Collection System.

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

## **BEFORE USING THE DUST COLLECTION SYSTEM:**



### **CAUTION:**

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

1. 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 all the labels which appear on the top and bottom of filtration housing and sides of motor.

## **BEFORE EACH USE:**

1. Inspect your Dust Collection System. If any parts are missing, bent, or fail in anyway, 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.

3. WEAR SAFETY GOOGLES, FORESIGHT IS BETER THAN NO SIGHT. Wear safety goggles, not glasses. Operating any power tool can result in foreign objects being thrown into the eyes which can result in permanent eye damage.
4. When cleaning collection bags, wear a dust mask.

## INTRODUCTION

The Dust Collection System is specifically designed to capture sawdust and wood chips at the source. Do not use as vacuum.

	<b>CAUTION:</b>
<p>The blower housing contains a high speed fan blade that can amputate fingers, grab loose clothing and neckties, or propel dust at high velocities.  <b>DO NOT OPERATE WITHOUT ALL PARTS IN PLACE.</b>  <b>DO NOT ATTEMPT TO CLEAN, REMOVE DUST BAGS OR SERVICE UNIT WHILE IN OPERATION.</b>          This Dust Collection System is intended for either commercial or household use.</p>	


## IMPORTANT NOTE :

### ***PLEASE READ CAREFULLY***

Static shocks are common in dry areas or when 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 or risk.

	<b>DANGER:</b>
<p>means that if the safety information is not followed, someone will be seriously injured or killed.</p>	

	<b>CAUTION:</b>
<p>means that if the safety information is not followed, someone may be seriously injured.</p>	

	<b>WARNING:</b>
<p>means that if the safety information is not followed, someone could be seriously injured or killed.</p>	

## IMPORTANT SAFETY INSTRUCTIONS

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

	<b>WARNING:</b>
<p>To reduce the risk of fire, electric shock, or injury:</p>	

1. 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 your Dust Collection System, use only recommended accessories.
2. Sparks inside the electrical parts can ignite flammable vapors or dust. To avoid fire or other

possible danger, do not vacuum or use this Dust Collection System near flammable or combustible liquids, gases, gasoline or other fuels like lighter fluid, cleaners, oil-based paints, natural gas, hydrogen, or explosive dusts like coal dust, magnesium dust, grain dust, or gun powder.

3. Do not vacuum anything that is burning or smoking such as cigarettes, matches or hot ashes.
4. To avoid health hazards from vapors or dusts, do not vacuum toxic materials.
5. Do not use or store near hazardous materials.
6. Do not use outdoors or on wet surfaces.
7. Put unit on a stable, level surface.
8. Route vacuum hose and electric cord out of traffic areas.
9. Do not allow to be used as a toy. Close attention is necessary when children are present.
10. Do not leave appliance plugged in. Unplug from outlet when not in use and before servicing.
11. To avoid injury from accidental starting, unplug power cord before changing or cleaning filter-dust bag or chip bag.
12. Do not use without filter/dust bag and / or chip bag in place.
13. Do not unplug by pulling on the cable. To unplug, grasp the plug, not the cable.
14. Turn off controls before unplugging.
15. Do not use with damaged cable, plug or 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.
16. Do not pull or carry by cable, use cable as handle, close a door on cable, or pull cable around sharp edges or corners. Do not run Dust Collection System over the cable. Keep cable away from heated surfaces.
17. Do not handle plug of the Dust Collection System with wet hands.
18. 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.
19. Keep hair, loose clothing, fingers, and all parts of body away from openings and moving parts.
20. Extension cables in poor condition or that are too small can pose fire and shock hazards. When using an extension cable, be sure it is in good condition.
21. Connect to properly earthed outlet only. (See "Grounding Instructions" section)

## CALCULATION OF PRESSURE LOSS

$$h = \lambda \cdot L/D \cdot V^2/2g \cdot r(\text{mmAg})$$

$$\lambda = 0.02$$

L= Hose length (m)

D= Hose diameter (m)

V= Average speed (m/s)

g= Gravity acceleration (9.8m/s<sup>2</sup>)

$$r = 1.2\text{kg/m}^3$$

### PRESSURE UNIT CONVERSION

1Psi= About 703 mmAg

1kg/cm<sup>2</sup>= About 10,000 mmAg

1Mbar= About 10 mmAg

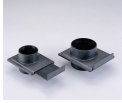
1bar= About 1,000 Mbar

1M<sup>3</sup>= About 1,000L

1mmHg= About 13.6 mmAg

# OPTIONAL ACCESSORIES

## ● PLASTIC BLAST GATE



## ● FLOOR SWEEP



## ● REDUCER



## ● TABLE SAW DUST HOODS



# LOOSE PARTS

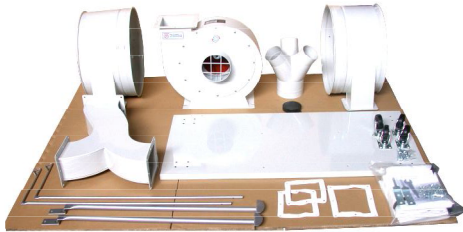


Fig.1



Fig.2



Fig.3

# OPERATION

## POWER SUPPLY

Your Dust Collection System is prewired at the factory. The Voltage and Ampere are indicated on the label affixed on the switch or motor cover. Please read all the labels carefully before connect your Dust Collection System to the power source. Please use a Time Delay Fuse or Circuit Breaker of the RIGHT Voltage and Ampere. FAILURE TO DO SO CAN RESULT IN INJURY FROM SHOCK OR FIRE.



### WARNING:

IF NOT PROPERLY GROUNDED, THIS DUST COLLECTON 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 BY QUALIFIED ELECTRICIAN IMMEDIATELY.

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

# GROUNDING INSTRUCTION (EARTHING)

This appliance must be grounded. IN case of malfunction or breakdown, grounding provides a path of least resistance for electric current in order to reduce the risk of electric shock. This appliance is equipped with a cord with 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.

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 and it must be held in place by a metal screw.



## **WARNING:**

TO MAINTAIN PROPER DUST COLLECTION SYSTEM GROUNDING, WHENEVER THE OUTLET. YOU ARE PLANNING TO USE FOR THIS POWER TOOL MUST BE PROPERLY GROUNDED, DO NOT REMOVE OR ALTER THE GROUNDING LINE IN ANY MANNER.



## **WARNING:**

IMPROPER CONNECTION OF THE EQUIPMENT GROUNDING CONDUCTOR CAN RESULT IN A RISK OF ELECTRIC SHOCK. CHECK WITH A QUALIFIED ELECTRICIAN IF YOU ARE IN DOUBT AS TO WHETHER THE OUTLET IS PROPERLY GROUNDED. DO NOT MODIFY THE ANY ELECTRICAL COMPONENTS PROVIDED WITH THE APPLIANCE.

## ***ON/OFF (I/O) SWITCH***

On the rear of the MOTOR Housing above the Handle is the Switch Box. The ON/OFF (I/O) Switch has the ability to be turned "ON". Switch to the "ON" position by pushing the "I". Turn the switch "OFF" by pushing the "O". Keep the dust collection system out of the reach of children at all times.



## **WARNING:**

THE DUST COLLECTION SYSTEM CAN BE ACCIDENTALLY STARTED OR USED BY CHILDREN OR OTHERS. ALWAYS KEEP THE DUST COLLECTION SYSTEM OUT OF THE REACH OF CHILDREN.



## **WARNING:**

THE DUST COLLECTION SYSTEM WILL START IMMEDIATELY WHEN THE POWER COMES BACK ON AFTER BLACKOUT IF THE SWITCH IS LEFT "ON" AFTER BLACKOUT IF THE SWITCH IS LEFT "ON". ALWAYS TURN THE SWITCH "OFF" WHEN BLACKOUTS OCCURE.

## WIRE CONNECTION

For wire connection refer to the schedules of electrical equipment, circuit diagrams and interconnection diagrams.



### WARNING:

ALL ELECTRICAL WORK OR WIRE CONNECTION WORK SHOULD BE DONE BY A QUALIFIED ELECTRICIAN.

## MAINTENANCE

1. Build up of saw dusts in motor may cause damage on the motor. It is important to clean off saw dust in motor to ensure the service life of the motor and the normal performance of the dust collector.
2. Remove and empty the lower bag of the dust collector periodically.
3. Clean the upper bag at a proper time



### WARNING

Be sure to disconnect the dust collector from power source before performing maintenance.

## MOTOR

1. Excessive dust in motor could cause excessive heat in motor.
2. 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:** Motor used on woodworking 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. To remove dust, blow off motor with a low pressure air house.



### 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 until the 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 or a qualified electrician.

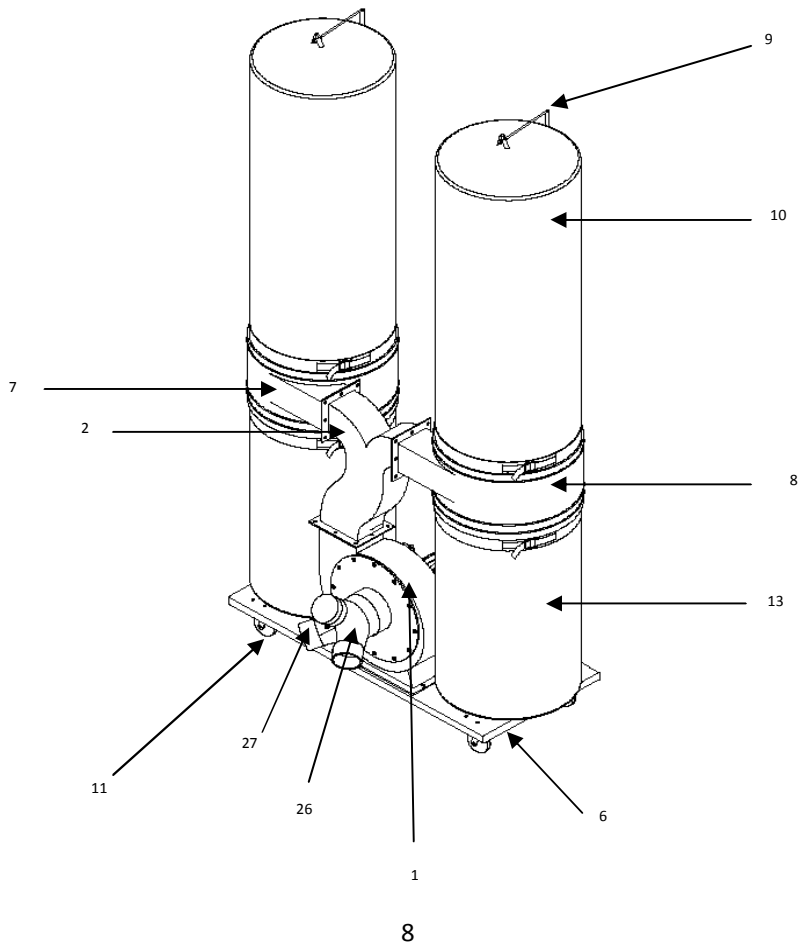
**NOTE:** The speed of this motor cannot be regulated or changed. No adjustment needed.



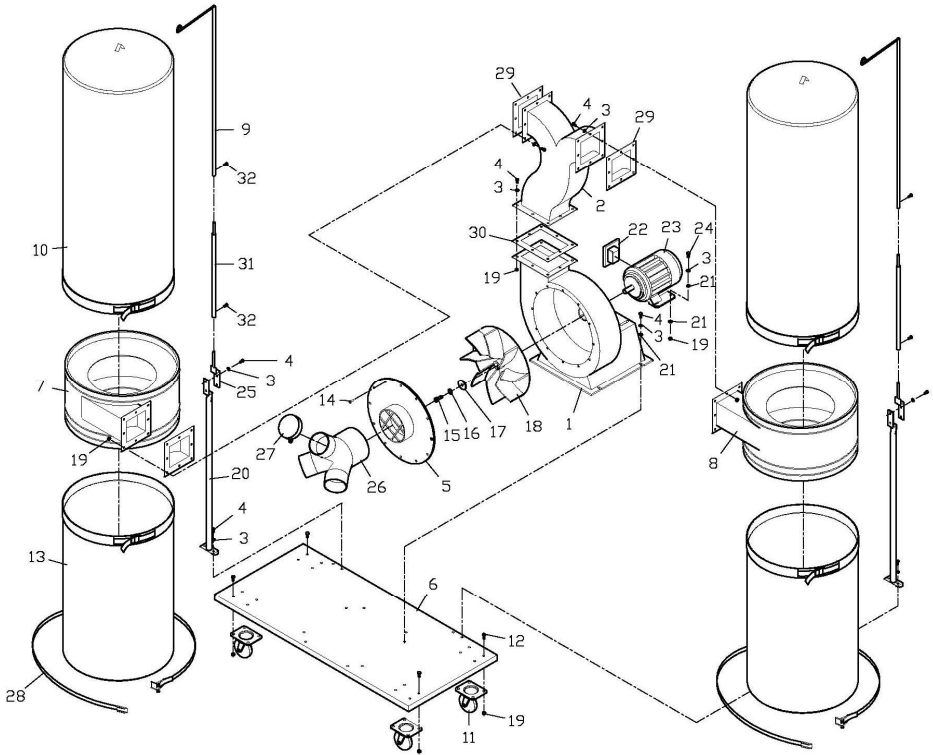
# LEGEND OF DUST COLLECTOR MODEL DM-525B

- |                       |                    |
|-----------------------|--------------------|
| 1. Fan/motor assembly | 10. Filter bag     |
| 2. Connector          | 11. Caster         |
| 6. Base plate         | 13. Collection bag |
| 7. Collector          | 26. Shutter        |
| 8. Collector          | 27. Cap            |
| 9. Bag Support rod    |                    |

# LEGEND OF DUST COLLECTOR MODEL DM-525B



# PARTS DIAGRAM



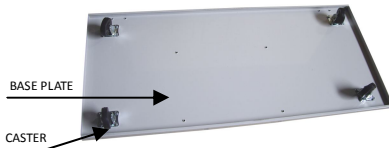
## SPECIFICATIONS OF DUST COLLECTOR MODEL DM-525B DM-525BS DM-535B DM-575B

	DM-525B	DM-525BS	DM-535B	DM-575B
MOTOR	3HP	5HP	5HP	7 1/2HP
Impeller diameter	13-1/2"	14"	14"	17"
Air flow	1862 CFM	2390CFM	2550CFM	4134CFM
Drum diameter	500mm	500mm	600mm	660mm
Inlet diameter	6"x 1&4"x 3	8"x 1&4"x 4	8"x 1&4"x 4	9"x 1&4"x 5

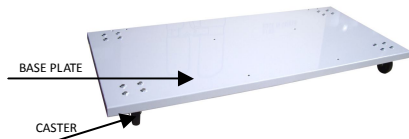
# PARTS LIST

DUST COLLECTOR			
Part No.	Description	Size	Quantity
1	Collector body		1
2	Connector		1
3	Spring Washer	5/16"	40
4	Screw	5/16"×3/4"L	36
5	Inlet cover		1
6	Base plate		1
7	Collector (right)		1
8	Collector (left)		1
9	Bag support		2
10	Filter bag		2
11	Caster		4
12	Screw	5/16×3/8"L	16
13	Collection bag		2
14	Screw ⊕	1/4"×3/8"L	12
15	Screw 6mm left hand	6mm left ×27mmL	1
16	Spring washer		1
17	Washer		1
18	Fan with plate		1
19	Nut	5/16"	44
20	Support		2
21	Washer	5/16"	12
22	Switch		1
23	Motor		1
24	Screw	5/16"×1-1/4"L	4
25	Support insert		2
26	Shutter	∅4"×3 or ∅4"×4	1
27	Cap		1
28	Metal bag clamp (Optional)		4
29	Rubber gasket		2
30	Rubber gasket		1
31	Extension Pipe (Optional)		2
32	Screw ⊕	3/16"×3/8"L	2

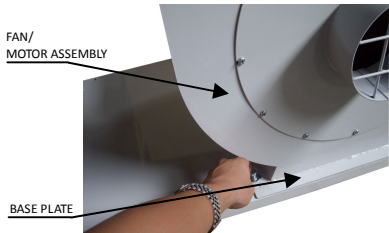
# ASSEMBLY



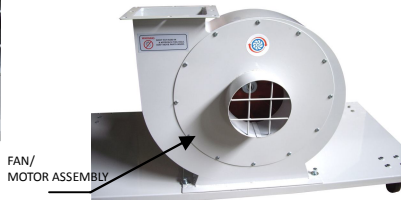
1. To assemble, first place the base plate upside down and attach the four casters to the holes provided and tighten with the wrench.



2. After 4 casters have been installed, return the base plate to the upright position.



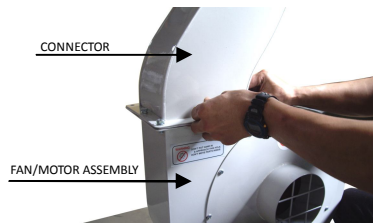
3. Install the fan/motor assembly to the base plate.



4. The fan/motor assembly is well installed to the base plate.



5. Place rubber gasket on the fan/motor assembly before installing the connector.



6. Install the connector to the fan/motor assembly by using 8 nuts, screws and spring washers provided.



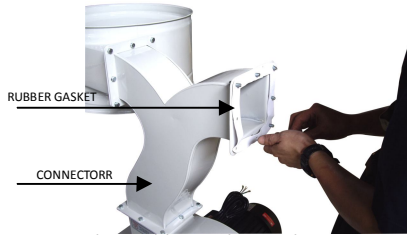
7. The picture shows the connector is well installed on the fan/motor assembly.



8. Place rubber gasket on the connector before installing the right connector.



9. Install the right connector to the connector.



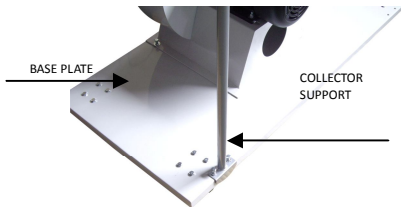
10. Place rubber gasket on the connector before installing the left connector.



11. Install the left connector to the connector.



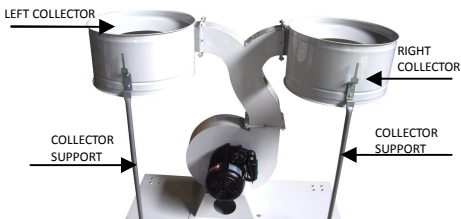
12. The picture shows the two collectors are well installed on the connector.



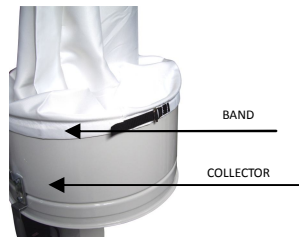
13. Install the two collector supports on the base plate for the two collectors.



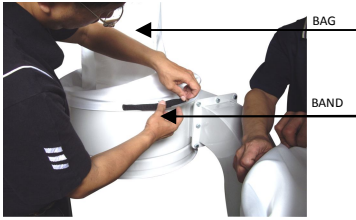
14. Install the support insert on the collector.



15. The picture shows the collectors and collector supports are well installed.



16. Attach the two filter bags to the two collectors.



17. Use the band sewn in the base of the bag to tighten it.



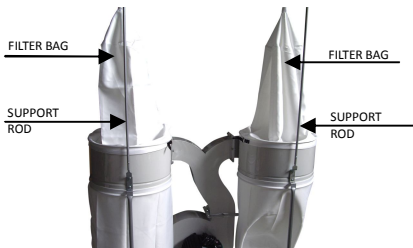
18. Attach the two collection bags to the two collectors.



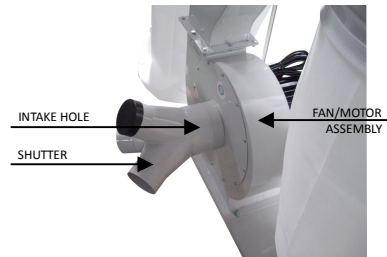
19. Use the band sewn in the top of the collection bag to tighten it.



20. Install the bag support rod onto the support insert.



21. Hang the two filter bags from the support rods.



22. Place the shutter on the intake hole of the fan/motor assembly.

23. The dust collector is now ready to be placed into service.



## CAUTION

Before connecting to a power source, be sure the power source is properly grounded and is of proper voltage and amperage.

# TROUBLE SHOOTING

## MOTOR

PROBLEM	PROBLEBLE CAUSE	REMEDY SUGGESTED
Motor will not run.	<ol style="list-style-type: none"> <li>1. Defective cord, plug, switch and/or motor.</li> <li>2. Blown fuse.</li> </ol>	<ol style="list-style-type: none"> <li>1. Consult service. Any attempt to repair this motor may create a hazard unless repair is done by a qualified service technician. Repair service is available at your supplier.</li> <li>2. Check for blown fuses and replace with fuse of proper capacity.</li> </ol>
Excessive saw dust in air.	<ol style="list-style-type: none"> <li>1. Loose connectors</li> <li>2. Filler/dust bag and/or chip collection bag releasing sawdust.</li> </ol>	<ol style="list-style-type: none"> <li>1. Tighten connections.</li> <li>2. (a.) Sawdust trapped between clamp bag and housing (b.) Lower bag is hung up on sawdust shoot extension. Reposition chip bag properly.</li> </ol>
Excessive impeller noise	<ol style="list-style-type: none"> <li>1. Picked up large wood chips or debris.</li> <li>2. Loose impeller.</li> <li>3. Rubbing impeller.</li> </ol>	<ol style="list-style-type: none"> <li>1. Do not pick up metal or ferrous materials. Stop the machine and the material will fall to the bottom of inlet tube.</li> <li>2. Unplug unit prior to disassembly. Hazardous moving parts inside. Attach inlet guard before plugging in. Use a piece of wood to free impeller.</li> <li>3. Consult Service to repair loose or rubbing impeller. A repair to the housing may create a hazard unless it is done by a qualified service technician. Repair service is available at you nearest store.</li> </ol>
Excessive noise	<ol style="list-style-type: none"> <li>1. Motor</li> </ol>	<ol style="list-style-type: none"> <li>1. Have motor checked by qualified service technician. Repair service is available at your nearest store.</li> </ol>
Motor fails to develop full power. NOTE: LOW VOLTAGE: (Power output of motor decreases rapidly with decrease in voltage at motor terminals.)	<ol style="list-style-type: none"> <li>1. Circuit overloaded with lights, appliances and other motors.</li> <li>2. Undersize extension cord or extension cord too long.</li> <li>3. General overloading of power company facilities.</li> </ol>	<ol style="list-style-type: none"> <li>1. Do not use other appliances or motors on same circuit when using the Dust Collection System.</li> <li>2. Increase the wire sizes on extension cords, or reduce length of extension cords.</li> <li>3. Request a power check from the power company.</li> </ol>

Motor starts slowly or fails to come up to full speed.	<ol style="list-style-type: none"> <li>1. Low voltage.</li> <li>2. Windings burned out or open.</li> <li>3. Starting switch will not operate. (Switch contacts working properly. )Capacit or is bad condition.</li> </ol>	<ol style="list-style-type: none"> <li>1. Request voltage check from the power company.</li> <li>2. Have motor repaired or replaced by a qualified service technician.</li> <li>3. Have capacitor replaced by a qualified service technician.</li> </ol>
Motor overheats.	<ol style="list-style-type: none"> <li>1. Motor overloaded</li> <li>2. Improper cooling. (Air circulation restricted through motor due to sawdust, accumulating inside of motor.)</li> </ol>	<ol style="list-style-type: none"> <li>1. Clean out sawdust to provide normal air circulation through motor. See "Maintenance" section.</li> </ol>
Motor stalls (resulting in blown fuses or tripped circuit breakers)	<ol style="list-style-type: none"> <li>1. Voltage too low to permit motor to reach operating speed.</li> <li>2. Fuses or circuit breakers do not have sufficient capacity.</li> </ol>	<ol style="list-style-type: none"> <li>1. Request voltage check from the power company.</li> <li>2. Install proper size fuses or circuit breakers.</li> </ol>
Frequent opening of fuse or circuit breakers.	<ol style="list-style-type: none"> <li>1. Motor overloaded.</li> <li>2. Fuses of circuit breakers do not have sufficient capacity.</li> </ol>	<ol style="list-style-type: none"> <li>1. Install proper size fuses or circuit breakers.</li> </ol>

**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 and proper operation of the centrifugally-operated starting switch.

## HOW TO ORDER REPLACEMENT PARTS

Replacement parts can be ordered from your local distributor or directly from the manufacturer. When ordering replacement parts, remember to provide the following information:

1. The model number and serial number of the dust collector.
2. The parts number.
3. The parts name.
4. The desired quantity of the part.