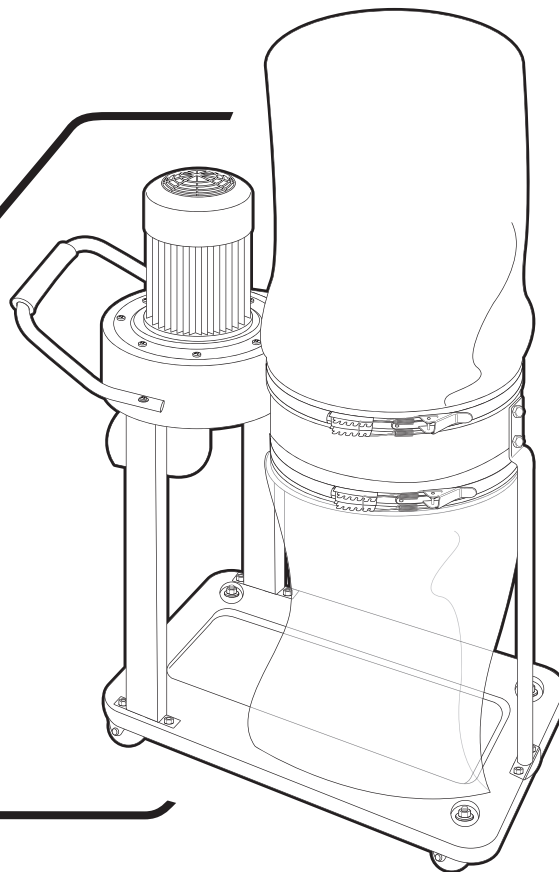


Owner's Manual

POWERTEC[®]








Dust Collector



Visit us on the web at www.southerntechllc.com

You will need this manual for safety instructions, operating procedures, and warranty. Put it and the original sales invoice in a safe, dry place for future reference.

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PRODUCT SPECIFICATIONS

Horsepower.....	1 HP
Voltage	120/240V
Hertz	60 Hz
Phase	1
Motor Speed	3450 RPM
Air Capacity.....	800 CFM
Max. Static Pressure.....	5.67"
Main Inlet Size.....	4"(101.6 mm)
Impeller Type	Radial Fin
Impeller Size	10" (254 mm)
Collection Bags	
Upper bag (filter)	2.5 micron
Lower bag(collection)	plastic
Bag Overall Dimensions	14-1/2" x 22"
Weight	55 lbs (25 kgs)

NOISE DATA

a weighted sound pressure level measuring (no load)	
Operators position	83dB
a weighted sound pressure level measuring (loaded)	
.....	85dB

WARNING

For your own safety, read and understand all warnings and operating instructions before using any tool or equipment.

WARNING

Some dust created by power sanding, sawing, grinding, drilling and other construction activities contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

Some examples of these chemicals are:

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

Your risk from these exposures vary, depending on how often you do this type of work. To reduce your exposure to these chemicals: work in a well ventilated area and work with approved safety equipment. Always wear OSHA/NIOSH approved, properly fitting face mask or respirator when using such tools.

WARNING

Always follow proper operating procedures as defined in this manual even if you are familiar with the use of this or similar tools. Remember that being careless for even a fraction of a second can result in severe personal injury.

WORK PREPARATION

- Wear proper apparel. Do not wear loose clothing, gloves, neckties, rings, bracelets or other jewelry which may get caught in moving parts of the tool.
- Wear protective hair covering to contain long hair.
- Wear safety shoes with non-slip soles.
- Wear safety glasses complying with United States ANSI Z87.1. Everyday glasses have only impact resistant lenses. They are NOT safety glasses.
- Wear face mask or dust mask if operation is dusty.
- Be alert and think clearly. Never operate power tools when tired, intoxicated or when taking medication that cause drowsiness.

WORK AREA PREPARATION

- Keep work area clean. Cluttered work areas invite accidents.
- Do not use power tools in dangerous environments. Do not use power tools in damp or wet locations. Do not expose power tools to rain.
- Work area should be properly lit.
- Ground all tools. Proper electrical receptacle should

be available for tool. Three-prong plug should be plugged directly into properly grounded, three-prong receptacle. If an adapter is used to accommodate a two-prong receptacle, the adapter lug MUST be to a known ground.

- Extension cords should have a grounding prong and the three wires of the extension cord should be of the correct gauge.
- Keep visitors at a safe distance from work area.
- Keep children out of the work area. Ensure your work shop is child-proof. Use padlocks, master switches or remove switch keys to prevent any unintentional use of power tools.

TOOL MAINTENANCE

- Always unplug tool prior to inspection.
- Consult manual for specific maintaining and adjusting procedures.
- Keep tool lubricated and clean for a safe operation.
- Remove adjusting tools. Form habit of checking to see adjusting tools or accessories are removed before switching tool on.
- Keep all parts in working order. Check to determine that guard or other parts will operate properly and perform their intended function.
- Check for damaged parts. Check for alignment of moving parts, binding, breakage, mounting and any other condition that may affect tool's operation.
- A guard or any other part that is damaged should be properly repaired or replaced. Do not perform makeshift repairs.

TOOL OPERATION

- Use the right tool for your job. Do not force your tool or attachment to do a job for which it was not designed.
- Avoid accidental start-up. Make sure that the tool is in the "OFF" position before plugging in.
- Never leave tool running unattended.
- Know your tool. Learn the tool's operation, application and specific limitations before using it.

CAUTION

Think safety! Safety is a combination of operator common sense and alertness at all times when tool is being used.

WARNING

Do not attempt to operate tool until it is completely assembled according to the instructions.

SAVE ALL WARNINGS AND INSTRUCTIONS FOR FUTURE REFERENCE



2

**SPECIFIC SAFETY INSTRUCTIONS****WARNING**

Read and understand the instruction manual before operating the dust collector. Basic precautions listed below should always be followed when using your dust collector to reduce the risk of injury, electrical shock or fire.

- This dust collector is designed to collect sawdust only.
- Never attempt to use this dust collector to collect water or any other liquids.
- Never try to use this dust collector to collect large wood pieces.
- Never attempt to use this dust collector to collect metal materials such as screws, nails or other metal parts.
- Never attempt to use this dust collector to collect flammable or combustible dust/gas. DO NOT use near any flammable or combustible liquids.
- Never attempt to use this dust collector to collect anything that is burning or smoking.
- DO NOT use outdoors or on wet surfaces.

- Turn machine off, disconnect power cord and ensure all moving parts have stopped completely before servicing or changing/emptying the bags.
- Always wear approved eye protection and respirator when emptying collection/filter bags.
- Ensure the machine is turned off before unplugging the dust collector.
- Unplug dust collector when not in use.
- Grasp the plug not the cord to unplug the dust collector.
- Never pull the dust collector by the power cord.
- ALWAYS ensure collection/filter bags are secured in place.
- Do not place your hand or tools near the open inlet while operating. Serious personal injury or damage to the machine can happen.
- Always connect dust collector to the matched power source.

IMPORTANT : Always consider safety first as it applies to your individual working conditions, the environment in every shop is different.

SAVE ALL WARNINGS AND INSTRUCTIONS FOR FUTURE REFERENCE

2

**ASSEMBLY****UNPACKING**

Refer to Figure 1.

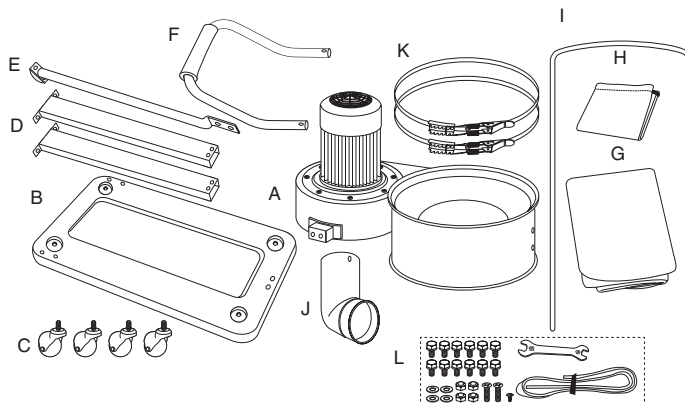
Check for shipping damage. Check immediately whether all parts and accessories are included. If anything is missing or broken, contact your retailer or call **847-780-6120**.

- Carefully remove all contents from shipping carton. The shipping carton contains:

ITEM	DESCRIPTION	QUANTITY
A	Collector Body/Motor	1
B	Base	1
C	Casters	4
D	Supports (rectangular)	2
E	Support (round)	1
F	Handle	1
G	Filter Bag	1
H	Collection Bag	1
I	Upper Bag Support	1
J	Elbow	1
K	Quick Release Bag Clamp	2

L	Hardware Bag Contains	
	5/16" nuts (caster)	4
	5/16-18" washer (caster)	4
	Hex head screws 5/16" x 1/2" (supports)	12
	Phillips head screws 5/16" x 1/2" (handle)	2
	Flange screw 10-24-3/8" (Elbow)	1
	12-10 mm Wrench	1
	Foam Strip	1
	Owner's Manual (not shown)	

Figure 1



2

INSTALLATION

Refer to Figures 2 - 14

CAUTION

Do not attempt assembly if parts are missing.
Call the Customer service line to obtain replacement parts.

WARNING

Do not operate dust collector until completely assembled.
Do not operate this tool until you have completely read and understood this manual.

NOTE: After unit is assembled dispose of all packaging material in an environmentally safe way.

Tools required for assembly:

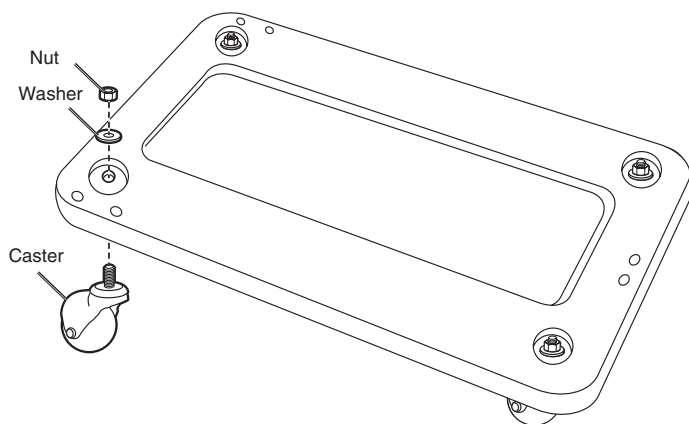
- 10-12 mm Wrench
- Phillips Screwdriver

WARNING

Ensure the dust collector is unplugged before assembling.

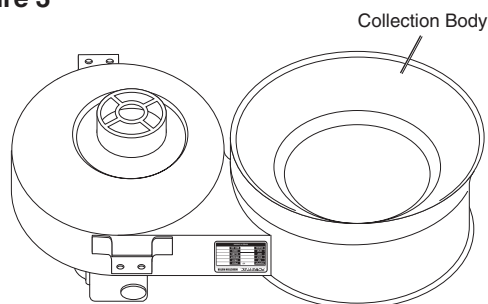
1. Place the four casters through the bottom of the base plate. Secure with the 5/16-18 washers and 5/16" nuts, use the 12 mm wrench to tighten hardware.

Figure 2



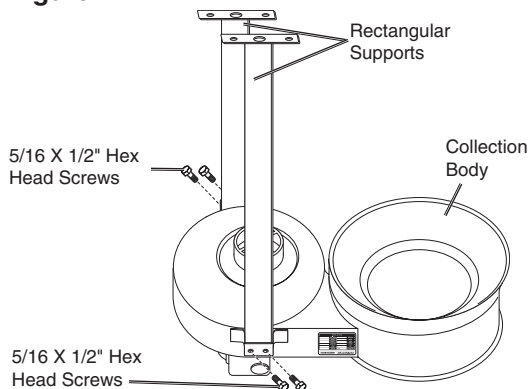
2. Lay the collection body upside down on a protective surface as shown.

Figure 3



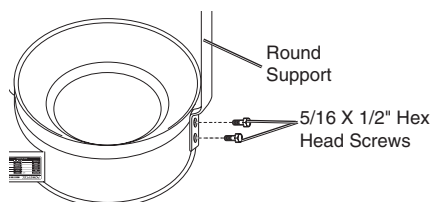
3. Attach the two rectangular supports to the collection body using the 5/16 x 1/2" hex head screws, use the 12 mm wrench to tighten hardware.

Figure 4



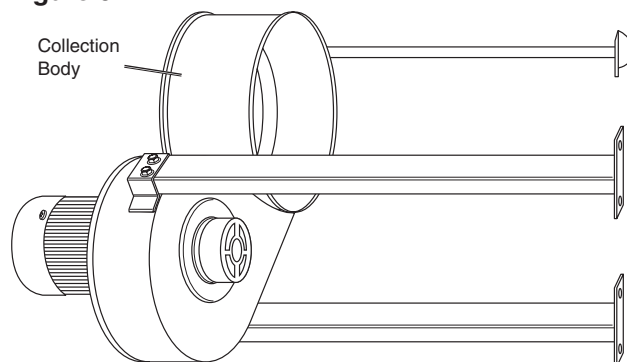
4. Attach the round support to collection body with the 5/16 x 1/2" hex head screws, use the 12 mm wrench to tighten hardware.

Figure 5



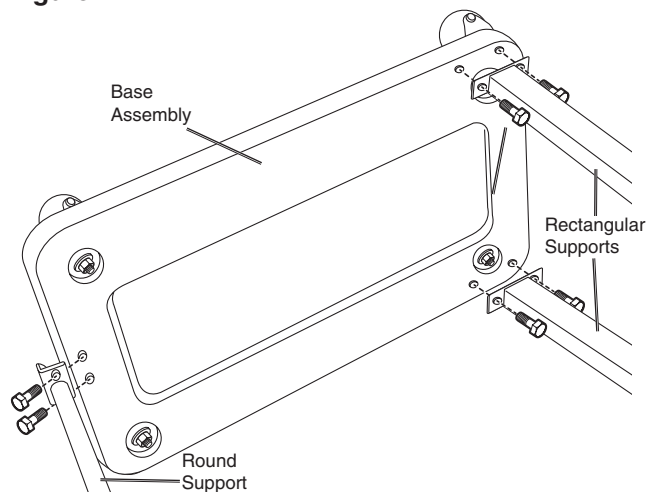
5. Lay the collection body assembly on its side.

Figure 6

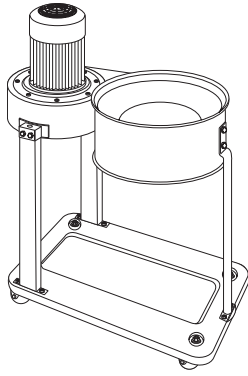


6. Use 5/16 x 1/2" hex head screws to attach the collection body assembly to the base assembly as shown. Use the 12 mm wrench to tighten hardware.

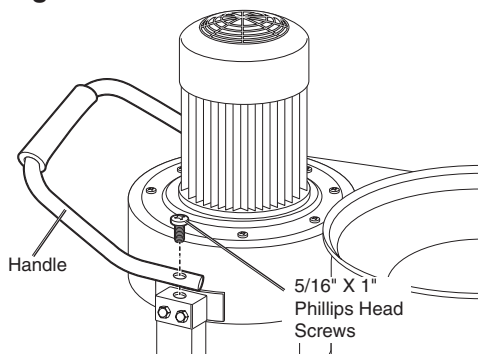
Figure 7



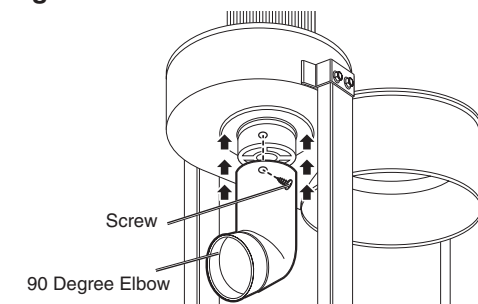
7. Carefully set the assembly up onto the casters.
Figure 8



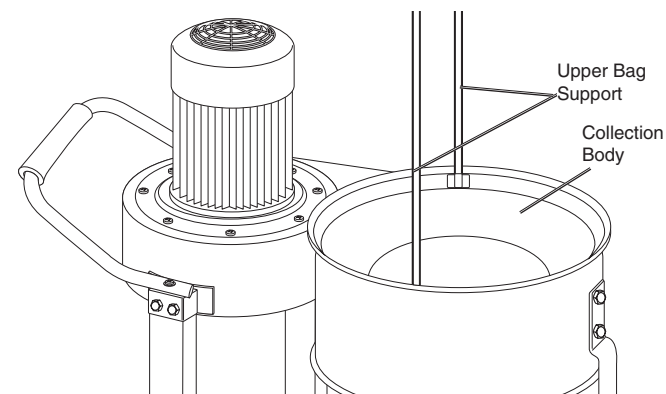
8. Assemble the handle to the collection body with two 5/16" x 1" Phillips head screws, use Phillips screwdriver to tighten.
Figure 9



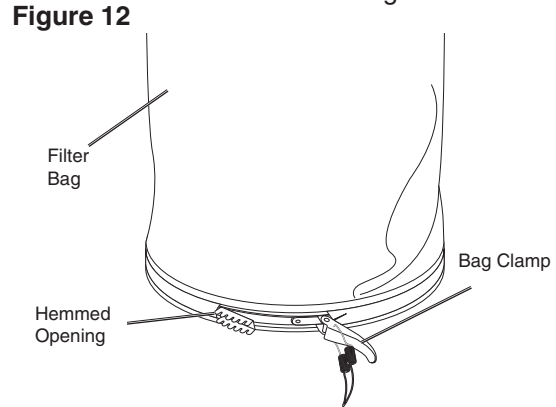
9. Assemble the 90 degree elbow as shown, use Phillips screwdriver to tighten.
Figure 10



10. Push the upper bag support into the holes of the collection body as shown.
Figure 11

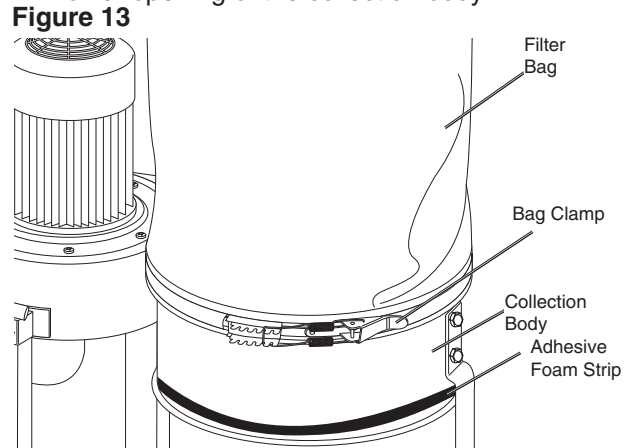


11. Thread the bag clamp through the hemmed opening in the bottom of the filter bag.
Figure 12

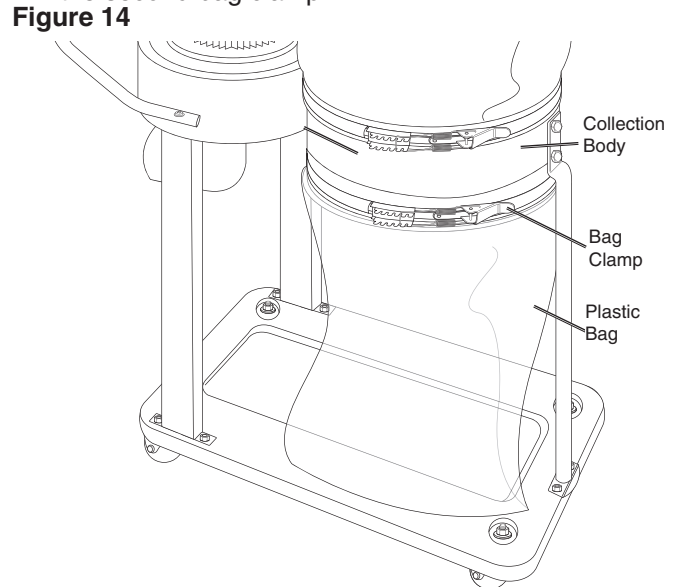


12. Place the filter bag over the upper bag support on to the collection body and fasten the bag clamp.

13. Place the adhesive foam strip (supplied) around the lower opening of the collection body.
Figure 13



14. Place the clear plastic collection bag over the lower opening of the collection body, secure in place with the second bag clamp.
Figure 14



TEST

⚠ WARNING

Before starting the dust collector, make sure you have read and understood the manual and you are familiar with the functions and safety features on the machine. Failure to do so may cause serious personal injury.

Run a test to ensure the dust collector operates properly and the safety key works properly.

1. Ensure all tools used for assembly are removed from the work area.
2. Plug the power cord into the correct receptacle. (Refer to **Power Source** paragraph in this section of the manual.)
3. Turn the dust collector ON. (Refer to **On/Off Switch** paragraph in **Operation** section of the manual.)
4. If unusual noise or excessive vibration is noticed, shut off the machine immediately and disconnect the cord from the power source. Check all the assembled parts once again and investigate to find the problem.
5. If the dust collector operates correctly, turn the machine OFF and remove the safety key on the switch. Once the safety key is removed, turn the switch ON. The machine should not run with the safety key removed.

If everything operates correctly the dust collector is ready for use.

POWER SOURCE

⚠ WARNING

Do not connect dust collector to the power source until all assembly steps have been completed.

The motor is designed for operation on the voltage and frequency specified. Normal loads will be handled safely on voltages not more than 10% above or below specified voltage. Running the unit on voltages which are not within the range may cause overheating and motor burn-out. Heavy loads require that the voltage at motor terminals be no less than the voltage specified on nameplate.

- Power supply to the motor is controlled by a single pole locking rocker switch. Remove the key to prevent unauthorized use.
- The motor is prewired to operate on a 120V power supply circuit. The motor can be converted to operate on a 240V power supply. See **To Convert to 240V Power Supply** for instructions.

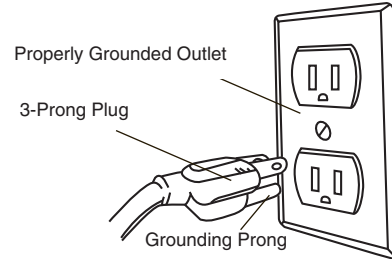
GROUNDING INSTRUCTIONS

⚠ WARNING

Improper connection of equipment grounding conductor can result in the risk of electrical shock. Equipment should be grounded while in use to protect operator from electrical shock.

- Check with a qualified electrician if you do not understand grounding instructions or if you are in doubt as to whether the tool is properly grounded.
- This tool is equipped with an approved cord rated at 120V and a 3-prong grounding type plug (see Figure 15) for your protection against shock hazards.
- Grounding plug should be plugged directly into a properly installed and grounded 3-prong grounding type receptacle, as shown (see Figure 15).

Figure 15



- Do not remove or alter grounding prong in any manner. In the event of a malfunction or breakdown, grounding provides a path of least resistance for electrical shock.

⚠ WARNING

Do not allow fingers to touch the terminals of plug when installing or removing from outlet.

- Plug must be plugged into matching outlet that is properly installed and grounded in accordance with all local codes and ordinances. Do not modify plug provided. If it will not fit in outlet, have proper outlet installed by a qualified electrician.
- Inspect tool cords periodically, and if damaged, have repaired by an authorized service facility.
- Green (or green and yellow) conductor in cord is the grounding wire. If repair or replacement of the electric cord or plug is necessary, do not connect the green (or green and yellow) wire to a live terminal.

EXTENSION CORDS

- The use of an extension cord is not recommended. The use of any extension cord will cause some drop in voltage and loss of power.
- Wires of the extension cord must be of sufficient size to carry the current and maintain adequate voltage.
- Use the table to determine the minimum wire size (A.W.G.) extension cord.
- Use only 3-wire extension cords having 3-prong grounding type plugs and 3-pole receptacles which accept the tool plug.
- If the extension cord is worn, cut or damaged in any way, replace it immediately.
- Extension Cord Length

Wire Size A.W.G.

Up to 50 ft 14 gauge

NOTE: Using extension cords over 50 ft. long is not recommended.

MOTOR

The dust collector is assembled with motor and wiring installed. The electrical wiring schematic is shown in Figure 16.

The permanently split capacitor motor has the following specifications:

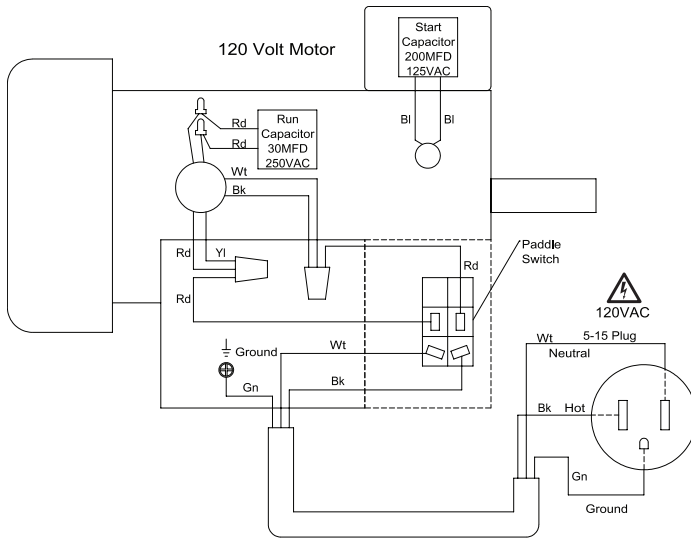
Horsepower (Peak HP)	1
Voltage	120/240
Amp.	10/5
Hertz	60
Phase	Single
RPM	3450

ELECTRICAL CONNECTIONS

⚠ WARNING

All electrical connections must be performed by a qualified electrician. Make sure tool is off and disconnected from power source while motor is mounted, connected, reconnected or anytime wiring is inspected. Motor and wires are installed as shown in wiring schematic (See Figure 16). Motor is assembled with approved, 3-conductor cord to be used at 120 volts.

Figure 16



The power lines are inserted directly into the switch. The green ground line must remain securely fastened to the frame to properly protect against electrical shock. The power supply to the motor is controlled by a single pole locking rocker switch.

- Remove the key to prevent unauthorized use.

TO CONVERT TO 240V POWER SUPPLY

To convert the dust collector to 240V the switch box must be rewired and a new plug attached. A qualified electrician **MUST** inspect the switch box and new plug before the dust collector is connected to the power source.

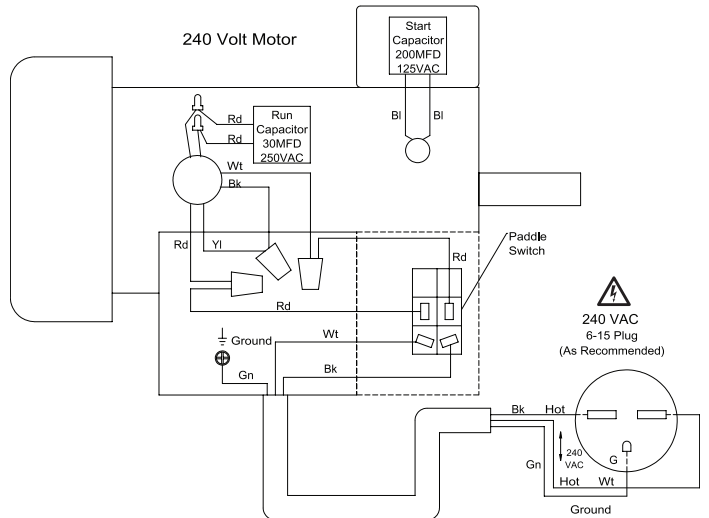
The 240V power supply circuit must have a verified ground and meet these requirements:

Circuit Type	220V/240V, 60 Hz, Single Phase
Circuit Size	15 Amps
Plug Receptacle	NEMA 6-15

TO CONVERT

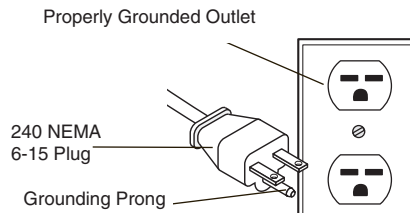
1. Make sure the tool is unplugged.
2. Open the switch box cover.
3. Follow the 240V wiring diagram on the inside of the switch box cover. **NOTE:** The 240V wiring diagram is also in Figure 17. Call the customer service line at **847-780-6120** for assistance if needed.

Figure 17



4. After rewiring make sure all wire nuts are tight and use electrical tape to secure them in place.
5. Replace the plug on the existing power cord with a NEMA 6-15 plug. The plug must be plugged into matching outlet that is properly installed and grounded in accordance with all local codes and ordinances.
6. Have the wiring inspected by a qualified electrician.
7. Replace the switch box cover.

Figure 18



BASIC OPERATIONS

ON/OFF Switch

The keyed switch is intended to prevent unauthorized use of the dust collector.

1. To turn the dust collector ON insert the yellow key into the key slot in the center of the switch.
2. Push the key firmly into the slot, then push switch to the ON position to start the dust collector.
3. To turn the dust collector OFF push the switch to the down position.
4. Remove the yellow switch key, when the dust collector has come to a complete stop, by gently pulling it outward.

WARNING

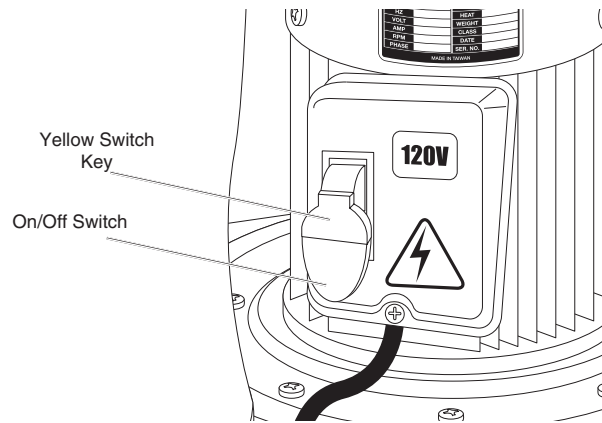
Remove the switch key whenever the dust collector is not in use.

Place it in a safe place and out of reach of children.

WARNING

ALWAYS lock the switch OFF when the dust collector is not in use. Remove the key and keep it in a safe place. In the event of power failure, blown fuse, or tripped circuit breaker, turn the switch OFF and remove the key, preventing accidental startup when power comes on.

Figure 19



Operation

NOTE: This dust collector is designed to collect dust from one machine at a time. It is not designed to be connected to a shop dust collection system.

1. Position the dust collector close to the the tool being used.
2. Connect one end of a dust collector hose to the dust collector inlet and one end to the machine outlet. Secure both ends with hose clamps (not included).
3. Turn the dust collector ON. (Refer to **On/Off Switch** paragraph in this section of the manual.)



GENERAL MAINTENANCE

WARNING

Make sure the machine is turned off and the cord is disconnected from the power source before servicing and removing/replacing any components on the machine.

- Check the dust collector daily for loose mounting bolts, screws, damaged wires, worn switch, full collection bag and any other unsafe condition.

CLEANING

WARNING

ALWAYS wear a respirator and safety goggles when emptying the collector bags.

Check and empty the collection bag on your dust collector regularly. The machine operates at a much higher level of efficiency when the collection bag is empty.

LUBRICATION

The sealed bearings in the motor have been permanently lubricated at the factory. They require no further lubrication.

MACHINE STORAGE

- When the dust collector is not in use, disconnect the cord from the power source and store the machine in a dry place.
- Do not expose the machine to rain.
- Ensure the cord is kept away from potential damage sources such as; sharp objects, chemicals, heat sources and water.

TOOL REPAIRS

- If power cord is worn, cut, or damaged in any way, have it replaced immediately.
- Replace worn abrasives when needed.
- Replace any damaged or missing parts. Use parts list to order parts. Any attempt to repair motor may create a hazard unless repair is done by a qualified service technician. Call the customer service line at **847-780-6120** for assistance.



TROUBLESHOOTING

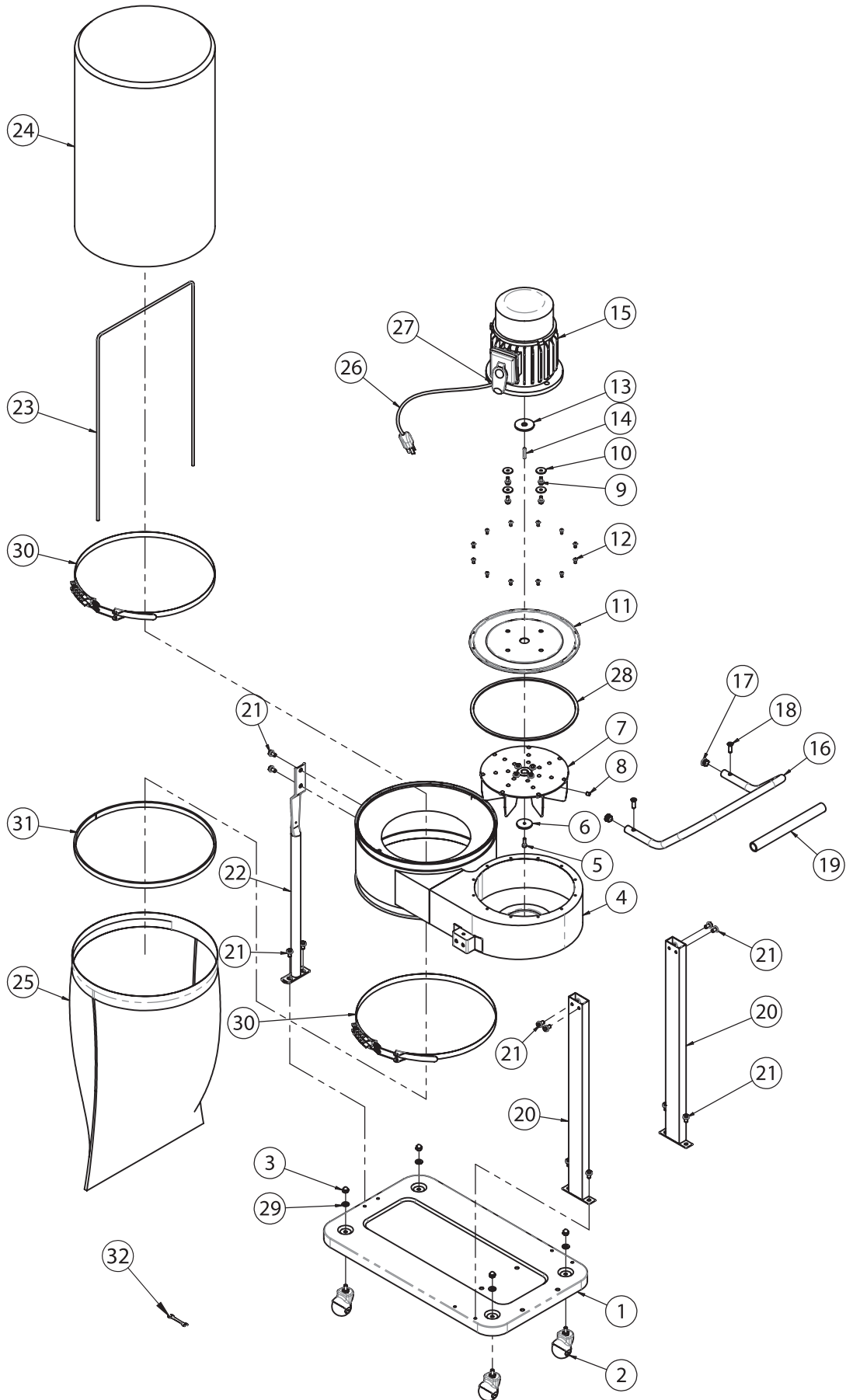
SYMPTOM	POSSIBLE CAUSE(S)	CORRECTIVE ACTION
Motor will not start	<ol style="list-style-type: none"> 1. Low voltage 2. Open circuit in motor or loose connections 3. Defective switch 4. Defective capacitor 5. Switch key is removed 	<ol style="list-style-type: none"> 1. Check power line for proper voltage 2. Inspect all lead connections on motor for loose or open connection 3. Replace switch 4. Replace capacitor 5. Insert switch key
Motor will not start; fuses blown or circuit breakers are tripped	<ol style="list-style-type: none"> 1. Short circuit in line cord or plug 2. Short circuit in motor or loose connections 3. Incorrect fuses or circuit breakers in power line 	<ol style="list-style-type: none"> 1. Inspect line cord or plug for damaged insulation and shorted wires 2. Inspect all lead connections on motor for loose or shorted terminals or worn insulation on wires 3. Install correct fuses or circuit breakers
Unit has vibration or noisy operation	<ol style="list-style-type: none"> 1. Motor or components are loose 2. Motor mount is loose/broken 3. Motor fan is rubbing cover 4. Motor bearings faulty 5. Dust collector is not on a flat surface 	<ol style="list-style-type: none"> 1. Inspect/replace any stripped or damaged bolts/nuts and re-tighten. 2. Tighten/replace 3. Replace fan cover; replace loose/damaged fan 4. Call the customer service line at 847-780-6120 for assistance 5. Place the dust collector on a flat surface.
Loud, repetitious noise or excessive vibration coming from dust collector	<ol style="list-style-type: none"> 1. Dust collection bag is full 2. Dust collector hose restricted 3. The lumber is wet and dust is not flowing through the hose smoothly 4. There is a leak in the hose 	<ol style="list-style-type: none"> 1. Empty collection bag. 2. Remove hose from dust collector inlet and unblock the restriction in the hose. A plumbing snake may be necessary. 3. Process lumber with less than 20% moisture content. 4. Inspect and replace hose.
Sawdust blown into the air from the dust collector	Hose clamps or dust collection bag is not properly clamped and secured.	Check hose and dust collection bag, ensure hose and bag clamps are tight and completely over the hose and bag.



DUST COLLECTOR PARTS ILLUSTRATION



10



DUST COLLECTOR PARTS LIST



Key. No.	Part. No.	Description	Specification	Q'ty
1	DC1080001	Base		1
2	DC1080002	Caster		4
3	DC1080003	Nut	5/16"	4
4	DC1080004	Collector Body		1
5	DC1080005	Hex.Screw	M6x20	1
6	DC1080006	Impeller Washer		1
7	DC1080007	Impeller		1
8	DC1080008	Hex. Head Screw	5/16"X5/16"	1
9	DC1080009	Flanger screw	1/4" x 1/2"	4
10	DC1080010	washer	1/4"x25	4
11	DC1080011	Inlet cover		1
12	DC1080012	Round head cross screw	M5x10mm	12
13	DC1080013	Motor Packing		1
14	DC1080014	Key	6x6x25	1
15	DC1080015	Motor		1
16	DC1080016	handle		1
17	DC1080017	handle cap	5/8"	2
18	DC1080018	Philip Head Screw	5/16"x1"	2
19	DC1080019	Form Grip		1
20	DC1080020	Supporting Leg		2
21	DC1080021	Hex.Head Screw	5/16"x1/2"	12
22	DC1080022	Supporter		1
23	DC1080023	Hanger		1
24	DC1080024	Upper Filter Bag		1
25	DC1080025	Bottom Collecting Bag		1
26	DC1080026	Power Cord		1
27	DC1080027	Switch		1
28	DC1080028	Foam		1
29	DC1080029	Washer	5/16"	4
30	DC1080030	Bag Clamp		2
31	DC1080031	Foam		1
32	DC1080032	Open End Wrench	10-12 mm	1



Thank you for investing in a **POWERTEC** power tool. This product has been designed and manufactured to meet high quality standards and is guaranteed for domestic use against defects in workmanship or material for a period of 12 months from the date of purchase. This guarantee does not affect your statutory rights.

SOUTHERN TECHNOLOGIES LLC. BENCH TOP AND STATIONARY POWER TOOL LIMITED 1 YEAR WARRANTY AND 30-DAY SATISFACTION GUARANTEE POLICY

POWERTEC products are designed and manufactured by **Southern Technologies LLC**. All warranty communications should be directed to **Southern Technologies LLC** by calling 847-780-6120 (toll free), 9 AM to 5 PM, Monday through Friday, US Central Time.

30- DAY SATISFACTION GUARANTEE POLICY

During the first 30 days after the date of purchase, if you are dissatisfied with the performance of this **POWERTEC** tool for any reason, you may return the tool to the retailer from which it was purchased for a full refund or exchange. You must present proof of purchase and return all original equipment packaged with the original product. The replacement tool will be covered by the limited warranty for the balance of the one year warranty period.

LIMITED ONE YEAR WARRANTY

This warranty covers all defects in workmanship or materials in this **POWERTEC** tool for a one year period from the date of purchase. This warranty is specific to this tool. **Southern Technologies, LLC** reserves the right to repair or replace the defective tool, at its discretion.

HOW TO OBTAIN SERVICE

To obtain service for this **POWERTEC** tool you must return it, freight prepaid, to **POWERTEC**. You may call (toll free) 847-780-6120 for more information. When requesting warranty service, you must present the proof of purchase documentation, which includes a date of purchase. **POWERTEC** will either repair or replace any defective part, at our option at no charge to you. The repaired or replacement unit will be covered by the same limited warranty for the balance of one year warranty period.

WHAT IS NOT COVERED

This warranty applies to the original purchaser at retailer and may not be transferred.

This warranty does not cover consumable items such as saw blades, knives, belts, discs, cooling blocks and sleeves. This warranty does not cover required service and part replacement resulting from normal wear and tear, including accessory wear.

This warranty does not cover any malfunction, failure or defect resulting from:

- 1) misuse, abuse, neglect and mishandling not in accordance with the owner's manual.
- 2) damage due to accidents, natural disasters, power outage, or power overload.
- 3) commercial or rental use.
- 4) alteration, modification or repair performed by persons not recommended by **POWERTEC**.

DISCLAIMER

To the extent permitted by applicable law, all implied warranties, including warranties of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE, are disclaimed. Any implied warranties, that cannot be disclaimed under state law are limited to one year from the date of purchase. **Southern Technologies LLC** is not responsible for direct, indirect, incidental or consequential damages. Some states do not allow limitations on how long an implied warranty lasts and/or do not allow the exclusion or limitation of incidental or consequential damages, so the above limitations may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state. **Southern Technologies LLC**, makes no warranties, representations, or promises as to the quality or performance of its power tools other than those specifically stated in this warranty.

POWERTEC

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