



# OWNER'S MANUAL

## DC-650TS Dust Collector



**JET EQUIPMENT & TOOLS, INC.**  
A WMH Company  
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**M-708630 08/01**

This manual has been prepared for the owner and operators of the JET DC-650TS. Its purpose, aside from machine operation, is to promote safety through the use of accepted correct operating and maintenance procedures. Completely read the safety and maintenance instructions before operating or servicing the machine. To obtain maximum life and efficiency from your Dust Collector, and to aid in using the machine safely, read this manual thoroughly and follow instructions carefully.

### **Warranty & Service**

The JET Group warrants every product it sells. If one of our tools needs service or repair, one of our Authorized Repair Stations located throughout the United States can give you quick service.

In most cases, any one of these JET Group Repair Stations can authorize warranty repair, assist you in obtaining parts, or perform routine maintenance and major repair on your JET, Performax or Powermatic tools.

For the name of an Authorized Repair Station in your area, please call 1-800-274-6848.

### **More Information**

Remember, the JET Group is consistently adding new products to the line. For complete, up-to-date product information, check with your local JET Group distributor.

### **JET Group Warranty**

The JET Group (including Performax and Powermatic brands) makes every effort to assure that its products meet high quality and durability standards and warrants to the original retail consumer/purchaser of our products that each product be free from defects in materials and workmanship as follow: 1 YEAR LIMITED WARRANTY ON ALL PRODUCTS UNLESS SPECIFIED OTHERWISE. This Warranty does not apply to defects due directly or indirectly to misuse, abuse, negligence or accidents, normal wear-and-tear, repair or alterations outside our facilities, or to a lack of maintenance.

THE JET GROUP LIMITS ALL IMPLIED WARRANTIES TO THE PERIOD SPECIFIED ABOVE, FROM THE DATE THE PRODUCT WAS PURCHASED AT RETAIL. EXCEPT AS STATED HEREIN, ANY IMPLIED WARRANTIES OR MERCHANTABILITY AND FITNESS ARE EXCLUDED. SOME STATES DO NOT ALLOW LIMITATIONS ON HOW LONG THE IMPLIED WARRANTY LASTS, SO THE ABOVE LIMITATION MAY NOT APPLY TO YOU. THE JET GROUP SHALL IN NO EVENT BE LIABLE FOR DEATH, INJURIES TO PERSONS OR PROPERTY, OR FOR INCIDENTAL, CONTINGENT, SPECIAL, OR CONSEQUENTIAL DAMAGES ARISING FROM THE USE OF OUR PRODUCTS. SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU.

To take advantage of this warranty, the product or part must be returned for examination, postage prepaid, to an Authorized Repair Station designated by our office. Proof of purchase date and an explanation of the complaint must accompany the merchandise. If our inspection discloses a defect, we will either repair or replace the product, or refund the purchase price if we cannot readily and quickly provide a repair or replacement, if you are willing to accept a refund. We will return repaired product or replacement at JET'S expense, but if it is determined there is no defect, or that the defect resulted from causes not within the scope of JET'S warranty, then the user must bear the cost of storing and returning the product. This warranty gives you specific legal rights; you may also have other rights which vary from state to state.

The JET Group sells through distributors only. Members of the JET Group reserve the right to effect at any time, without prior notice, those alterations to parts, fittings, and accessory equipment which they may deem necessary for any reason whatsoever.

## **WARNING**

1. **Read and understand the entire contents of this manual before attempting assembly or operation. Do not use this machine until proper training and knowledge has been obtained.**
2. Do not leave Dust Collector when plugged in. Unplug from outlet when not in use and before servicing.
3. Do not use outdoors or on wet surfaces.
4. Do not allow to be used as a toy. Close attention is necessary when used near children.
5. Use only as described in this manual. Use only manufacturer's recommended attachments.
6. Do not use with damaged cord or plug. If Dust Collector is not working as it should, has been dropped, damaged, left outdoor, or dropped in water, return it to a service center.
7. Do not pull or carry by cord, use cord as a handle, close a door on cord, or pull cord around sharp edges or corners. Do not run Dust Collector over cord. Keep cord away from heated surfaces.
8. Do not unplug by pulling on cord. To unplug, grasp the plug, not the cord.
9. Do not handle plug or Dust Collector with wet hands.
10. Do not put any objects into the openings. Do not use with any opening blocked; keep free of dust, lint, hair, and anything that may reduce air flow.
11. Keep hair, loose clothing, fingers, and all parts of body away from opening and moving parts.
12. Do not pick up anything that is burning or smoking, such as cigarettes, matches, or hot ashes.
13. Do not use without dust bag and/or filters in place.
14. Turn off all controls before unplugging.
15. Use extra care when cleaning on stairs.
16. Do not use to pick up flammable or combustible liquids such as gasoline or use in areas where they may be present.
17. Do not operate without hose connected to the hose inlet. Hazardous moving parts inside. Unplug before removing hose inlet or impeller guard.
18. Some dust created by power sanding, sawing, grinding, drilling and other construction activities contains chemicals known to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are:
  - Lead from lead based paint
  - Crystalline silica from bricks and cement and other masonry products, and
  - Arsenic and chromium from chemically-treated lumber.
19. Your risk from those exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals: work in a well ventilated area, and work with approved safety equipment, such as those dust masks that are specifically designed to filter out microscopic particles
20. Do not operate tool while under the influence of drugs, alcohol or any medication.
21. Make sure the 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 undersize cord will cause a drop in the line voltage resulting in loss of power and overheating. The table below shows the correct size to use depending on cord length and nameplate ampere rating. If in doubt, use the next heavier gauge. The smaller gauge number, the heavier the cord.
22. Static electricity will build up in the filter during operation. The filter ground must be attached to the machine ground, and to the filter.

### **Cord Length**

25'  
50'  
100'  
150'

### **Cord Gauge**

16 AWG  
16 AWG  
14 AWG  
12 AWG

**SAVE THESE INSTRUCTIONS**

## Grounding Instructions

**Caution: This tool must be grounded while in use to protect the operator from electric shock.**

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.

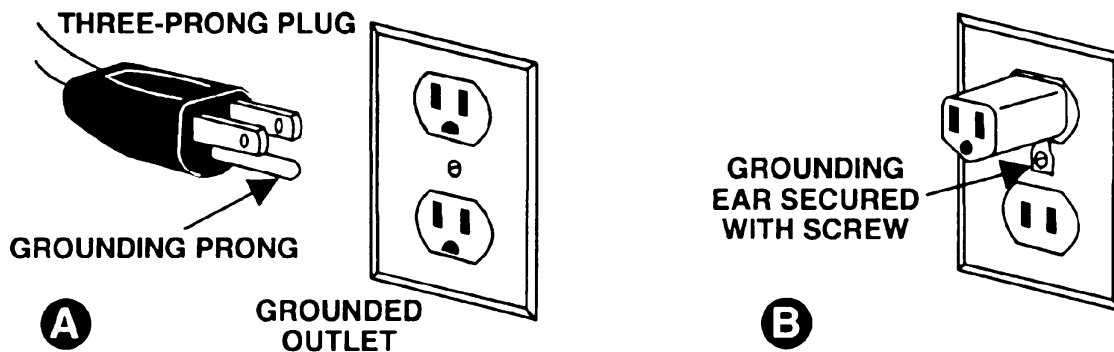
Improper connection of the equipment-grounding conductor can result in a risk of electric shock. The conductor, with insulation having an outer surface that is green with or without yellow stripes, is the equipment-grounding conductor. If repair or replacement of the electric cord or plug is necessary, 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 three wire extension cords that have three-prong grounding plugs and three-pole receptacles that accept the tool's plug.

Repair or replace a damaged or worn cord immediately.

### 115 Volt Operation

As received from the factory, your dust collector is ready to run at 115 volt operation. This dust collector, when wired for 115 volt, is intended for use on a circuit that has an outlet and a plug that looks like the one illustrated in (A). A temporary adapter, which looks like the adapter as illustrated in (B), may be used to connect this plug to a two-pole receptacle, as shown in (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 adapter 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 (B).



## 230 Volt Operation

If 230V, 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 115V operation, as shown in Figure A. Reconnect these four motor leads for 230V operation, as shown in Figure B.
3. The 115V attachment plug (A), supplied with the dust collector, must be replaced with a UL/CSA listed plug suitable for 230V operation (D). Contact your local Authorized JET Service Center or qualified electrician for proper procedures to install the plug. The dust collector must comply with all local and national codes after the 230 volt plug is installed.
4. The dust collector with a 230 volt plug should only be connected to an outlet having the same configuration (D). No adapter is available or should be used with the 230 volt plug.

**Important:** In all cases (115 or 230 volts), make certain the receptacle in question is properly grounded. If you are not sure, have a registered electrician check the receptacle.

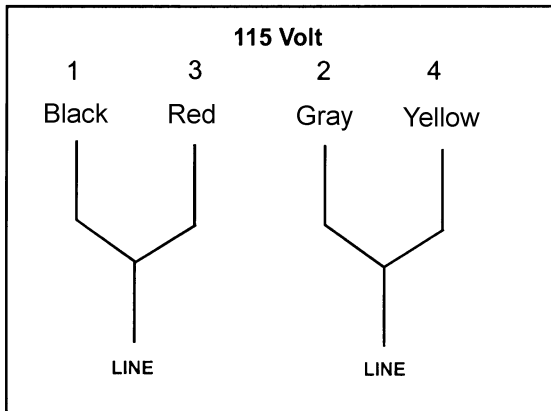


FIGURE A

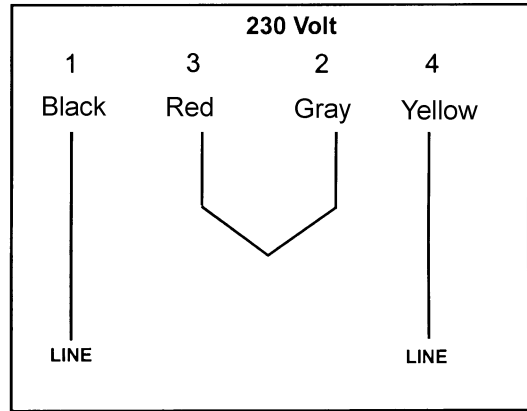
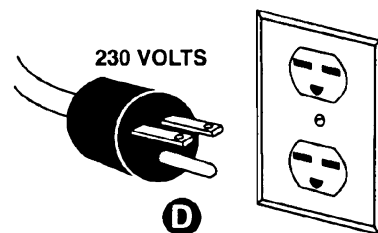
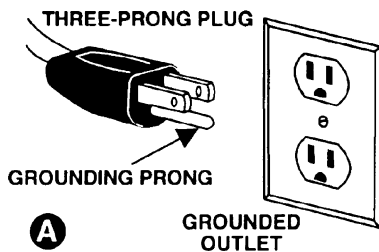


FIGURE B



**Specifications:**

**DC-650TS**

Stock Number.....	708630
Blower Wheel Diameter.....	11"
Sound Rating at 3 feet.....	60-70 db
Hose Diameter.....	4"
Air Flow (CFM).....	650
Velocity at 4" (FPM).....	7,445
Static Pressure (inch of water).....	7.80
Overall Dimensions.....	26-3/16" dia. x 28" H
Motor (TEFC).....	1 HP, 1Ph 115V/230V
Net Weight (approx.).....	53 lbs.

**Table of Contents**

**Page**

Warranty.....	2
Warnings.....	3
Grounding Instructions.....	4
115 Volt Operation.....	4
230 Volt Operation.....	5
Specifications.....	6
Table of Contents.....	6
Unpacking DC-650TS.....	7
Contents of Shipping Carton.....	7
Tools Required for Assembly.....	7
Assembly.....	8
Electrical Connections.....	9
Turning the Machine On & Off.....	9
Maintenance.....	9-10
Parts Breakdown and Parts List.....	11-12
Wiring Diagram.....	13

The specifications in this manual are given as general information and are not binding. JET Equipment & Tools reserves the right to effect, at any time and without prior notice, changes or alterations to parts, fittings, and accessory equipment deemed necessary for any reason whatsoever.

**⚠ 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!**

material, fittings, construction and grounding.  
Stock # JW1050V

### Unpacking

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

### Contents of the Shipping Carton

1. Plastic Cover/Motor/Fan Assembly
1. Hose
1. Owner's Manual
1. Warranty Card
1. Filter
1. Hose Clamp
1. Plastic impeller guard
1. Metal Deflector
1. Elbow
1. Hardware Package



### Tools Required for Assembly

2. 10mm Wrenches or sockets
1. #2 Cross Point Screw Driver

The JET DC-650TS does not come with a collector can. You can use the JET two stage dust collector on a variety of round, metal and plastic collector cans. The outer diameter of the trash can should be approximately 20-1/4" – 24-1/4" to fit properly.

Use the proper type hose (C, Fig. 5) to connect the dust collector to the machine being operated. Dryer vent hose is not acceptable for this purpose. Contact your nearest JET distributor for the full line of JET Dust Collector Hoses and Accessories. Customize your installation and obtain maximum performance with JET's dust hoods, hoses, clamps, fittings, and blast gates.

Order the Dust Collection Basics Video which covers topics such as system design, duct

## Assembly

### **WARNING**

The dust collector must be disconnected from the power source during assembly. Failure to comply may result in serious injury!

The JET DC-650TS does not come with a collector can. You can use the JET two stage dust collector on a variety of round, metal and plastic collector cans. The outer diameter of the trash can should be approximately 20-1/4" – 24-1/4" to fit properly.

1. Attach the deflector (A, Fig. 1) to the plastic cover using two hex cap screws, four flat washers and two hex nuts (B, Fig. 1). Tighten the hardware.
2. Attach the impeller guard (C, Fig. 1) to the plastic cover with three flat washers and three hex nuts (D, Fig. 1). Tighten the hardware

### **WARNING**

To reduce the risk of injury from moving parts, always keep impeller guard in place. Failure to comply may result in serious injury!

3. Slide the elbow (A, Fig. 2) over the impeller housing exhaust, and tighten in place with one hex cap screw, one flat washer and one hex nut (B, Fig. 2).
4. Connect the filter (A, Fig. 3) to the elbow and turn counter-clockwise so that it locks in place.

### **WARNING**

Static electricity will build up in the filter during operation. The filter ground must be attached to the machine ground, and to the filter. Failure to comply may result in fire/loss of property, or personal injury!

5. Attach the grounding clip (A, Fig. 6) to the metal part of the filter. This will prevent static electricity from building up in the filter.

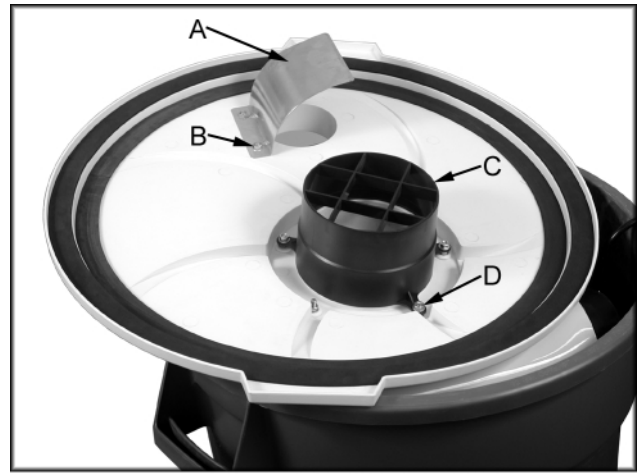


Fig. 1

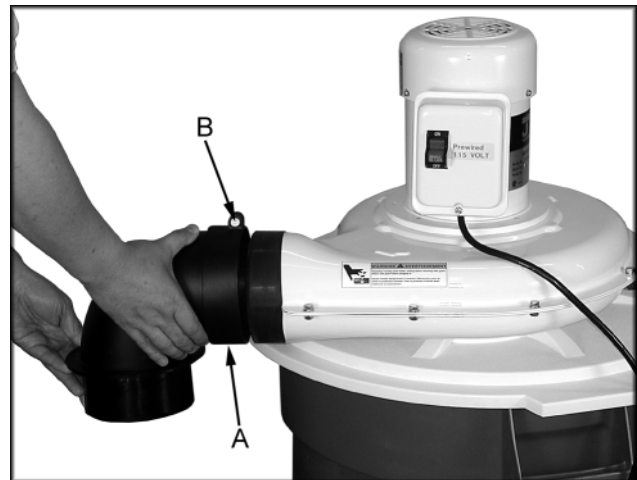


Fig. 2



Fig. 3



## Electrical Connections

### **WARNING**

All electrical connections must be done by a qualified electrician. All adjustments or repairs must be done with the dust collector disconnected from the power source, unplugged. Failure to comply may result in serious injury!

The DC-650TS dust collector is rated 115V/230V, **Prewired 115V**.

If you want to run the DC-650TS on 230V refer to the wiring diagram found on the inside of the switch box cover (A, Fig. 4).

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

## Turning the Machine On & Off

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

1. The dust collector can be turned on by flipping the switch (B, Fig. 4) into the on position.
2. There is a removable key in the tip of the switch that can be removed in the off position. When the key has been removed the dust collector cannot be used.

## Maintenance

### **WARNING**

Never perform maintenance on this machine before turning switch off and removing plug from power source, unplug. Failure to comply may cause serious injury!

## Motor

Make frequent inspections of the motor cover (C, Fig. 4) and blow out (with low pressure air hose) or vacuum any accumulation of foreign material in order to maintain normal motor ventilation.

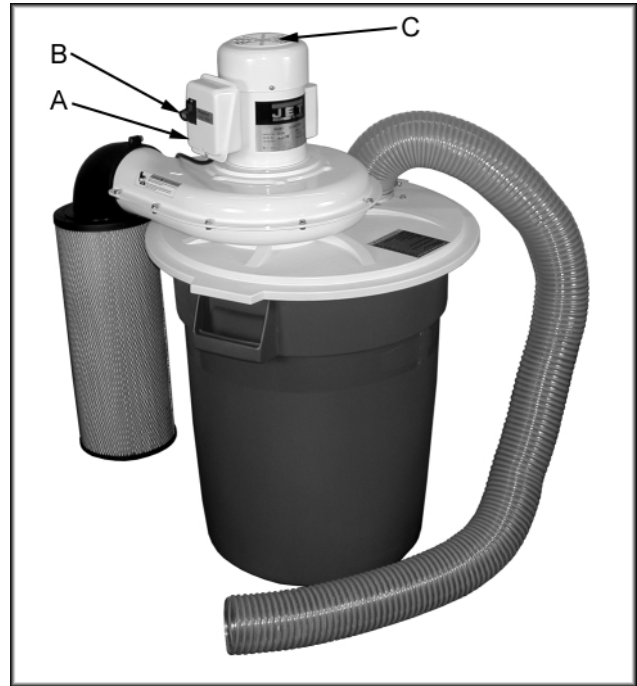


Fig. 4

## Cleaning the Filter

### CAUTION

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

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

1. **Disconnect the machine from the power source.**
2. Take off the grounding clip and remove the filter (A, Fig. 5) by turning clockwise.
3. Empty the contents into an appropriate container.
4. The filter can be cleaned with a low pressure air hose. Blow from the outside of the filter to clean the dust particles. For best results check and empty the filter frequently. Some applications will fill up the filter quicker than others.

### WARNING

**Static electricity will build up in the filter during operation. The filter ground must be attached to the machine ground, and to the filter. Failure to comply may result in fire/loss of property, or personal injury!**

5. Install the filter and reattach the grounding clip.

## Emptying the Collector Can

1. **Disconnect the machine from the power source, unplug.**
2. Lift the dust collector off the collector can (B, Fig. 5).
3. Dispose of the contents in the collector can.

Use the proper type hose (C, Fig. 5) to connect the dust collector to the machine being operated. Dryer vent hose is not acceptable for this purpose. Contact your nearest JET distributor for the full line of JET Dust Collector Hoses and Accessories. Customize your installation and obtain maximum performance with JET's dust hoods, hoses, clamps, fittings, and blast gates.

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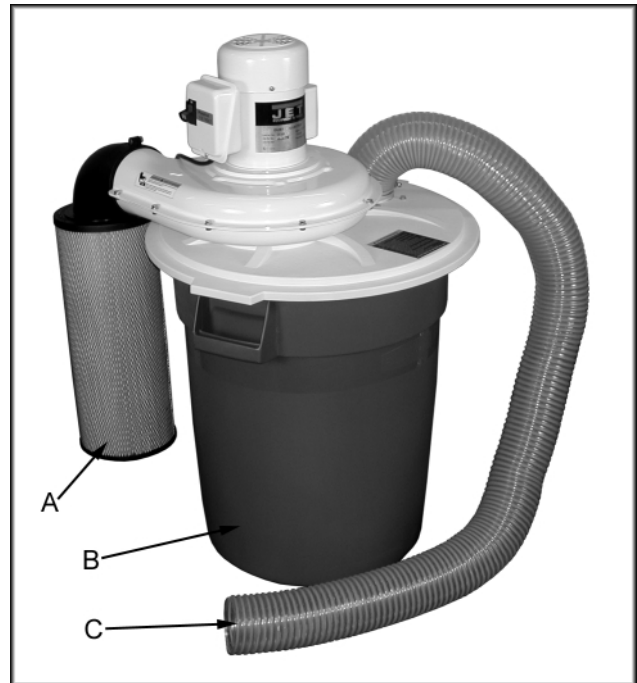
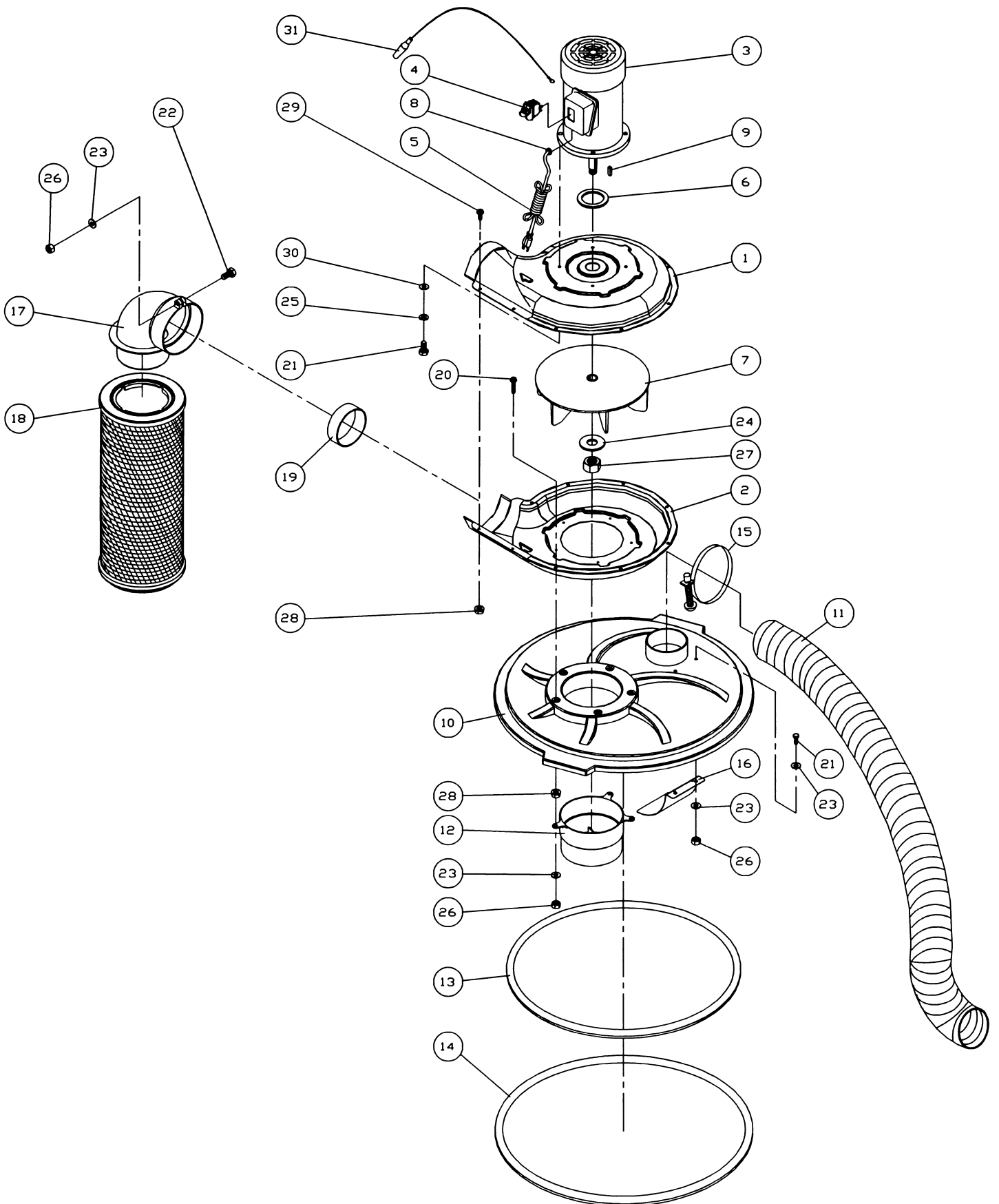


Fig. 5



Fig. 6

# Parts Breakdown



## Parts List for the DC-650TS

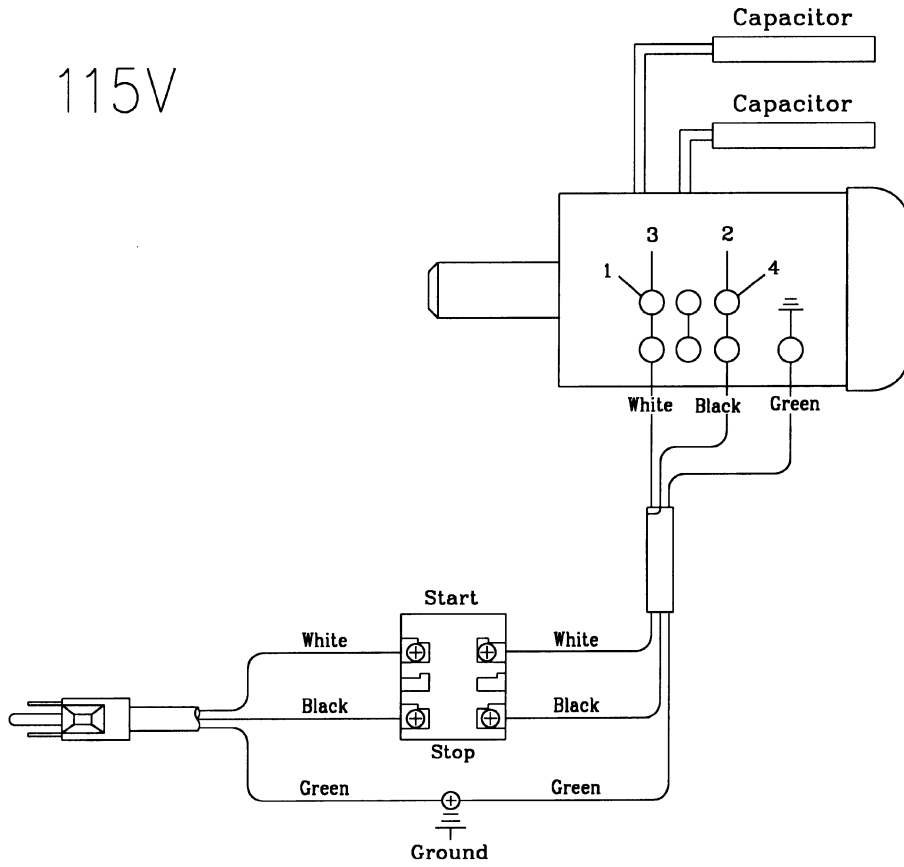
Index No.	Part No.	Description	Size	Qty.
1	331019AW	Impeller Housing (upper)		1
2	331019BW	Impeller Housing (lower)		1
3	MH331001	Motor	115V/230V, 1HP, 1Ph	1
	DC1100-50W	Motor Fan Cover (not shown)		1
	MF411012	Motor Fan (not shown)		1
	CA003030	Running Capacitor (not shown)	30MFD, 300V	1
	CA020010	Starting Capacitor (not shown)	200MFD, 125V	1
	DC650TS-CS	Centrifugal Switch (not shown)		1
4	994532	Switch		1
5	999910	Power Cord		1
6	423023	Motor Packing		1
7	331020	Impeller	11"	1
8	998621	Strain Relief		1
9	KS050525	Key	5x5x25	1
10	331001	Cover		1
11	HS430018	Hose	4"x6'	1
12	331004	6" Plastic Impeller Guard		1
13	331016	Gasket		1
14	331023	Gasket		1
15	423968	Ring Clamp	4"	1
16	331021	Deflector		1
17	331018	Elbow		1
18	331022	Filter		1
19	331027	Gasket		1
20	SG060500	Hex Head Bolt W/Flange	M6x25	5
21	TS-1482021	Hex Head Bolt *	M6x12	(2) 6
22	TS-1482041	Hex Head Bolt *	M6x20	(1) 1
23	WF061310	Flat Washer *	M6x13	(8) 8
24	WF164030	Flat Washer	M16x40	1
25	TS-1551041	Spring Washer	M6	4
26	TS-1540041	Nut *	M6	(6) 6
27	TS-0561072	Nut	5/8"-18UNF	1
28	TS-1540041	Nut	M6	14
29	SG069300	Hex Head Bolt W/Flange	M6x12	9
30	WF061620	Flat Washer	M6x16	4
31	331033	Grounding Clip		1
	DC650TS-NP	Name Plate (not shown)		1
	DC650TS-WL	Warning Label (not shown)		1
	DC650TS-HP	Hardware Package (not shown)		1

\* indicates included in Hardware Package

(#) indicates quantity included in Hardware Package

# Wiring Diagram

115V



230V

