

J E T®

Operating Instructions and Parts Manual Model DC-500 Dust Collector



DC-500 Dust Collector

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Part No. M-708660
Revision A1 12/09
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Warranty and Service

Walter Meier (Manufacturing) Inc., warrants every product it sells. If one of our tools needs service or repair, one of our Authorized Service Centers located throughout the United States can give you quick service. In most cases, any of these Walter Meier Authorized Service Centers can authorize warranty repair, assist you in obtaining parts, or perform routine maintenance and major repair on your JET® tools. For the name of an Authorized Service Center in your area call 1-800-274-6848.

MORE INFORMATION

Walter Meier is consistently adding new products to the line. For complete, up-to-date product information, check with your local Walter Meier distributor, or visit waltermeier.com.

WARRANTY

JET products carry a limited warranty which varies in duration based upon the product. (MW = Metalworking, WW = Woodworking)

90 DAY WARRANTY	1 YEAR WARRANTY	2 YEAR WARRANTY	5 YEAR WARRANTY	Warranty reverts to 1 Year Warranty if woodworking (WW) products listed below are used for commercial, industrial or educational purposes	LIFETIME WARRANTY	
Lathe Accessories Machine Accessories Mobile Bases Safety Equipment Specialty Items Vise Accessories	Air Tools- Contractor Air Tools-Industrial Air Tools-Light Industrial Lubrication	Body Repair Kits Bottle Jacks Cable Pullers Cold Saws Hoists-Air Hoists-Electric Metalforming Mill/Drills Milling Machines	MW Bandsaws MW Drill Presses MW Finishing Equipment MW Lathes MW Precision Vises Pallet Trucks	Rigging Equip. Service Jacks Stackers Surface Grinders Tapping Trolleys-Air Trolleys-Electric Web Slings Winches-Electric	Trolleys-Geared Trolleys-Plain Winches-Manual WW Air Filtration WW Bandsaws WW Buffers WW Drill Presses WW Dust Collectors WW Dust Filters WW Dust Fittings WW Jointers WW Lathes WW Planers WW Sanders WW Shapers WW Tablesaws	Fastening Tools Mechanics Hand Tools Striking Tools Vises (non-precision) Clamps

WHAT IS COVERED?

This warranty covers any defects in workmanship or materials subject to the exceptions stated below. Cutting tools, abrasives and other consumables are excluded from warranty coverage.

WHO IS COVERED?

This warranty covers only the initial purchaser of the product.

WHAT IS THE PERIOD OF COVERAGE?

The general JET warranty lasts for the time period specified in the product literature of each product.

WHAT IS NOT COVERED?

Five Year Warranties do not cover woodworking (WW) products used for commercial, industrial or educational purposes. Woodworking products with Five Year Warranties that are used for commercial, industrial or education purposes revert to a One Year Warranty. This warranty does not cover defects due directly or indirectly to misuse, abuse, negligence or accidents, normal wear-and-tear, improper repair or alterations, or lack of maintenance.

HOW TO GET SERVICE

The product or part must be returned for examination, postage prepaid, to a location designated by us. For the name of the location nearest you, please call 1-800-274-6848.

You must provide proof of initial purchase date and an explanation of the complaint must accompany the merchandise. If our inspection discloses a defect, we will repair or replace the product, or refund the purchase price, at our option.

We will return the repaired product or replacement at our expense unless it is determined by us that there is no defect, or that the defect resulted from causes not within the scope of our warranty in which case we will, at your direction, dispose of or return the product. In the event you choose to have the product returned, you will be responsible for the shipping and handling costs of the return.

HOW STATE LAW APPLIES

This warranty gives you specific legal rights; you may also have other rights which vary from state to state.

LIMITATIONS ON THIS WARRANTY

WALTER MEIER (MANUFACTURING) INC., LIMITS ALL IMPLIED WARRANTIES TO THE PERIOD OF THE LIMITED WARRANTY FOR EACH PRODUCT. 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.

WALTER MEIER 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.

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Warnings

1. Read and understand the entire owner's manual before attempting assembly or operation.
2. Read and understand the warnings posted on the machine and in this manual. Failure to comply with all of these warnings may cause serious injury.
3. Replace the warning labels if they become obscured or removed.
4. This dust collector is designed and intended for use by properly trained and experienced personnel only. If you are not familiar with the proper and safe operation of a dust collector, do not use until proper training and knowledge have been obtained.
5. Do not use this dust collector for other than its intended use. If used for other purposes, Walter Meier (Manufacturing) Inc., disclaims any real or implied warranty and holds itself harmless from any injury that may result from that use.
6. Always wear approved safety glasses/face shields while using this dust collector. Everyday eyeglasses only have impact resistant lenses; they are not safety glasses.
7. Before operating this dust collector, remove tie, rings, watches and other jewelry, and roll sleeves up past the elbows. Remove all loose clothing and confine long hair. Non-slip footwear or anti-skid floor strips are recommended. Do **not** wear gloves.
8. Wear ear protectors (plugs or muffs) during extended periods of operation.
9. Some dust created by power sanding, sawing, grinding, drilling and other construction activities contain 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, cement and other masonry products.
 - Arsenic and chromium from chemically treated lumber.Your risk of exposure 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 face or dust masks that are specifically designed to filter out microscopic particles.
10. Do not operate this machine while tired or under the influence of drugs, alcohol or any medication.
11. Make certain the switch is in the **OFF** position before connecting the machine to the power supply.
12. Make certain the machine is properly grounded.
13. Make all machine adjustments or maintenance with the machine unplugged from the power source.
14. Remove adjusting keys and wrenches. Form a habit of checking to see that keys and adjusting wrenches are removed from the machine before turning it on.
15. Keep safety guards in place at all times when the machine is in use. If removed for maintenance purposes, use extreme caution and replace the guards immediately.
16. Check damaged parts. Before further use of the machine, a guard or other part that is damaged should be carefully checked to determine that it will operate properly and perform its intended function. Check for alignment of moving parts, binding of moving parts, breakage of parts, mounting and any other conditions that may affect its operation. A guard or other part that is damaged should be properly repaired or replaced.
17. Provide for adequate space surrounding work area and non-glare, overhead lighting.
18. Keep the floor around the machine clean and free of scrap material, oil and grease.
19. Keep visitors a safe distance from the work area. **Keep children away.**



Warnings

20. Make your workshop child proof with padlocks, master switches or by removing starter keys.
21. Give your work undivided attention. Looking around, carrying on a conversation and “horse-play” are careless acts that can result in serious injury.
22. Do not use the dust collector for anything except wood dust. Materials such as liquids, metal shavings, metal dust, screws, glass, plastic or rock can cause sparks and/or damage when coming into contact with any part of the dust collector.
23. Use recommended accessories; improper accessories may be hazardous.
24. Maintain tools with care. Follow instructions for lubricating and changing accessories.
25. Turn off the machine before cleaning. Use a brush or compressed air to remove chips or debris — do not use your hands.
26. Do not stand on the machine. Serious injury could occur if the machine tips over.
27. Never leave the machine running unattended. Turn the power off and do not leave the machine until it comes to a complete stop.
28. Remove loose items and unnecessary work pieces from the area before starting the machine.

Familiarize yourself with the following safety notices used in this manual:

CAUTION

This means that if precautions are not heeded, it may result in minor injury and/or possible machine damage.

WARNING

This means that if precautions are not heeded, it may result in serious injury or possibly even death.

Table of Contents

Warranty and Service.....	2
Warnings.....	3
Table of Contents	5
Introduction	5
Specifications	5
Shipping Contents	5
Hardware and Assembly	6
Assembly	7
Electrical Connections.....	7
Operating Controls.....	8
Maintenance	9
Parts.....	10
Wiring Diagram.....	12

Introduction

This manual is provided by JET covering the safe operation and maintenance procedures for the DC-500 Dust Collector. This manual contains instructions on installation, safety precautions, general operating procedures, maintenance instructions and parts breakdown. This machine has been designed and constructed to provide years of trouble free operation if used in accordance to instructions set forth in this manual. If there are any questions or comments, please contact either your local supplier or Walter Meier (Manufacturing) Inc.

Specifications

Model.....	DC-500
Stock Number	708660
Blower Wheel Diameter (in.).....	9-1/2
Hose Diameter (in.).....	4
Collector Bag Capacity (cu. ft.)	1.9
Air Flow (CFM)	500
Filter Efficiency	30 Microns
Overall Dimensions.....	58-3/4" (H) x 17-1/4" (W) x 28-1/2" (D)
Motor (TEFC)	1/2HP, 1Ph, 115V only
Net Weight (approx.).....	65lbs.

The specifications in this manual are given as general information and are not binding. Walter Meier 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.

Shipping Contents

Compare the contents of your container with the parts listings and illustrations on the following page to make sure all parts are intact. Missing parts, if any, should be reported to your distributor. Read the instruction manual thoroughly for assembly, maintenance and safety instructions.

Hardware and Assembly

Main Shaper Container Contents

Refer to also to Figure 2.

- 1 Support Rod (K)
- 1 Filter Bag (L)
- 1 Support Bar (M)
- 1 Motor and Housing (N)
- 1 Collection Bag (O)
- 1 Base (Q)
- 1 Frame (R)

Hardware (shown in Figure 1)

- 2 Roller Sleeve (A)
- 2 M8 Wing Nut (B)
- 2 M8 Flat Washer (C)
- 2 M8 Lock Washer (D)
- 1 M5 Wing Nut (E)
- 1 M5 Flat Washer (F)
- 1 M5 Lock Washer (G)
- 3 Lock Knob (H)
- 2 Wheel (J)



Figure 1 – Hardware

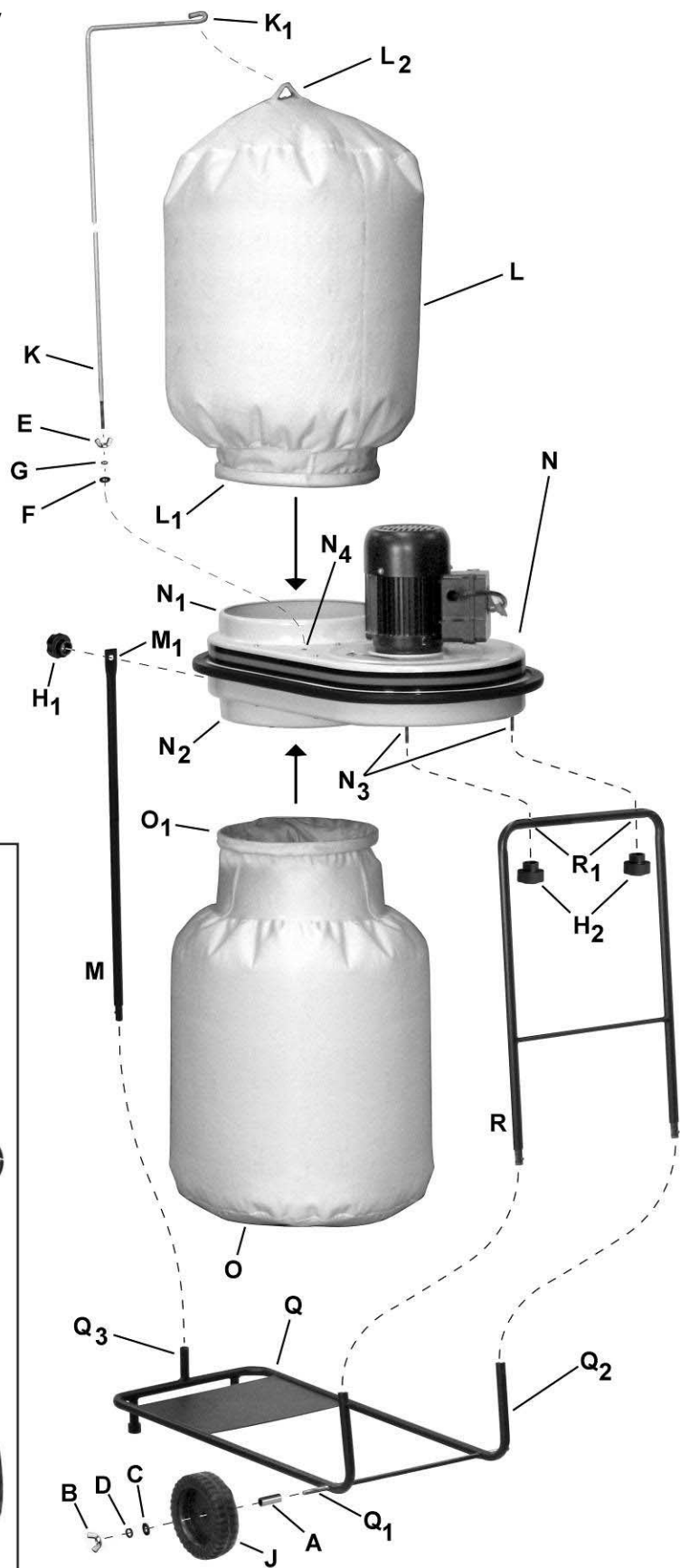


Figure 2

Assembly

For all assembly, refer to Figures 1 and 2.

Base and Wheels

1. Slide a *sleeve* (A) onto the *threaded stud* (Q₁) located on the base, followed by the *wheel* (J), M8 *flat washer* (C) and M8 *lock washer* (D).
2. Secure wheel with an M8 *wing nut* (B).
3. Assemble the remaining wheel in the same manner.

Support Bar

4. Insert the *support bar* (M) into the *support bar mount* (Q₃).

Align the spring-loaded *detent* on the *support bar* (M) with the hole on the *mount* (Q₃).
5. Depress the *detent*, then slide the *support bar* into the *mount* until the *detent* snaps into place, securing the bar to the base.

Frame

6. Insert the ends of the *frame* (R) into the *frame mount* (Q₂).

The *frame* (R) must be oriented such that the spring-loaded detents are on the same side as the holes on the mount (Q₂).
7. Depress both detents, then slide the frame into the mounts until the detents snap into place, securing the frame to the base.

Motor and Housing

The *motor housing* (N) has two threaded *mounting studs* (N₃) protruding down at one end of the housing and one stud protruding *out* on the opposite end (not visible in Figure 2).

8. Place the *motor and housing assembly* (N) onto the stand assembly, inserting the *mounting studs* (N₃) through the *mounting holes* of the frame (R₁) and support bar (M₁).
9. Secure the motor and housing assembly with three *lock knobs* (H₁, H₂).

Filter Bag Support Rod

10. Thread an M5 *wing nut* (E) onto the *filter bag support rod* (K), followed by an M5 *lock washer* (G) and M5 *flat washer* (F).
11. Thread the *support rod* (K) into the *mounting hole* (N₄) on top of the motor and housing assembly.

12. Secure the *support rod* (K) by tightening the *wing nut* (E) down against the *lock washer* (G), *flat washer* (F) and housing body.

Filter Bag Installation

13. Hang the *filter bag* (L) by placing the *loop* (L₂) over the support rod *hook* (K₁).
14. Insert the *snap ring* (L₁) of the filter bag into the top of the *housing* (N₁) at an angle.
15. Pull up on the ring and bag until it seats into the housing.

Collection Bag Installation

16. Insert the *snap ring* (O₁) of the *collection bag* (O) into the bottom of the *housing* (N₂) at an angle.
17. Pull down on the ring and bag until it seats into the housing.

Electrical Connections

⚠WARNING Electrical connections must be made by a qualified electrician in compliance with all relevant codes. This machine must be properly grounded to help prevent electrical shock and possible fatal injury.

General Information

The DC-500 dust collector is rated at 115V. Use a plug and outlet rated at least 20 amps. The circuit for the machine should also be protected by at least a 20 amp circuit breaker or fuse. Keep in mind that a circuit being used by other machines, tools, lights, heaters, etc. at the same time will add to the electrical load. A dedicated circuit to the dust collector will give you the best results since dust collectors are generally used at the same time other tools are running.

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

Extension Cords

If an extension cord is necessary, make sure the cord rating is suitable for the amperage listed on the machine's motor plate. An undersize cord will cause a drop in line voltage resulting in loss of power and overheating.

The chart in *Table 1* shows the correct size cord to use based on cord length and motor plate amp rating. If in doubt, use the next heavier gauge. The smaller the gauge number, the heavier the cord.

Amps	Extension Cord Length *					
	25 feet	50 feet	75 feet	100 feet	150 feet	200 feet
< 5	16	16	16	14	12	12
5 to 8	16	16	14	12	10	NR
8 to 12	14	14	12	10	NR	NR
12 to 15	12	12	10	10	NR	NR
15 to 20	10	10	10	NR	NR	NR
21 to 30	10	NR	NR	NR	NR	NR

*based on limiting the line voltage drop to 5V at 150% of the rated amperes.

NR: Not Recommended.

Table 1

Operating Controls

Start/Stop

The Start/Stop *switchbox* (A) is located on the side of the motor.

Start – Pull red switch *out* (C) to start.

Stop – Press the red switch *in* (D) to stop.

Switch Safety Lock

The *start/stop switch* (E) on the DC-500 Dust Collector comes equipped with a *safety lock* (B). When the safety lock is removed from the switch the machine cannot be started.

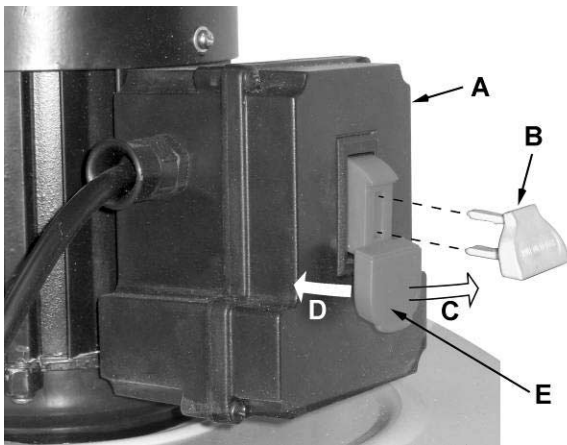


Figure 3

Maintenance

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

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

Cleaning the Filter Bag

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.

Clean both the 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. Unhook the filter bag from the hanger and shake the bag so that the majority of the dust falls into the collector bag.
3. Remove the filter bag by pushing the ring of the collector bag downwards and pulling the bag out at an angle.
4. Turn the bag inside out and clean.
5. Turn the bag outside in and re-install to the housing.

Removing the Collector Bag

1. Disconnect the machine from the power source.
2. Remove the collector bag by pushing the ring of the collector bag upwards and pulling the bag out at an angle.
3. Empty the contents into an appropriate container.
4. Turn the bag inside out and clean.
5. Turn the bag outside in and insert into the housing.

⚠WARNING To reduce the risk of injury from moving parts, always keep the inlet connected to the flexible hose. Failure to comply may result in serious injury!

Motor

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

Connecting the Dust Collector to a Machine

Use the proper type hose 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.

Grounding the Dust Collection System

The dust collection system includes the dust collector and the hose, or ductwork you use to connect the tools. The dust collector is grounded through the ground wire in the cord. The hose or ductwork you use to connect the tool to the dust collector must also be grounded. To assist in grounding your system you can purchase the JET "Dust Collector Grounding Kit" stock # JW1053 through JET Distributors.

Parts

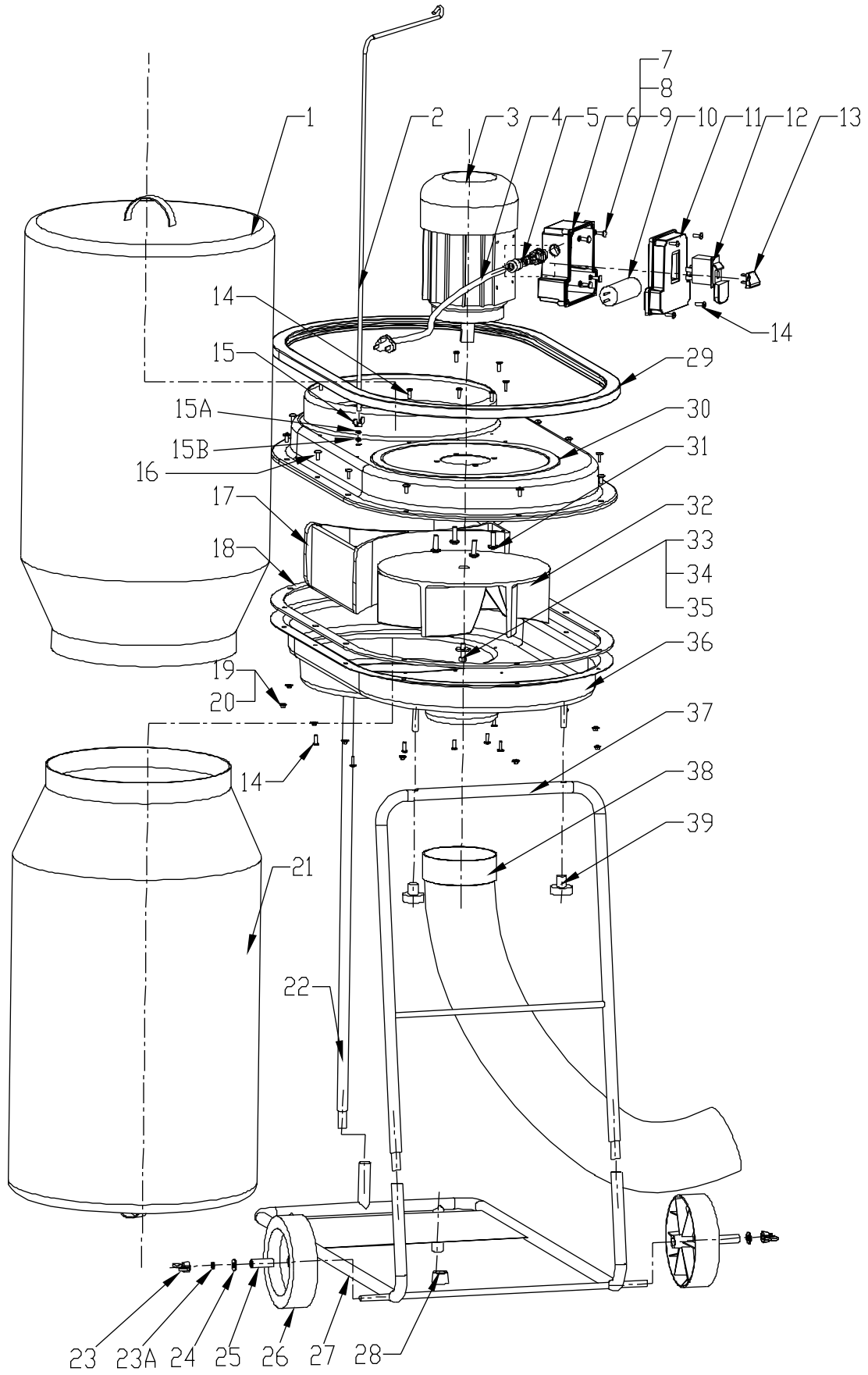
Ordering Replacement Parts

To order parts or reach our service department, call 1-800-274-6848 between 7:30am and 5:30pm (CST), Monday through Friday. Having the Model Number and Serial Number of your machine available when you call will allow us to serve you quickly and accurately.

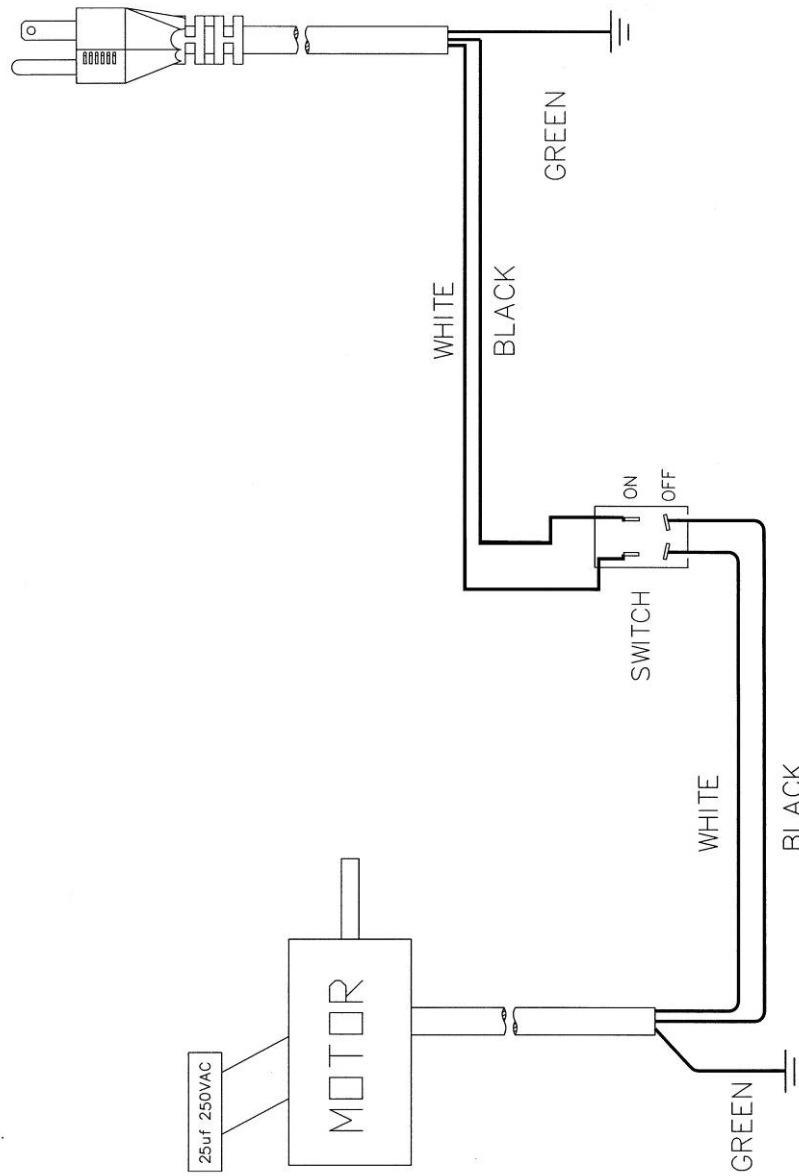
Parts List

Index No.	Part No.	Description	Size	Qty
1.....	708385.....	Filter Bag		1
2.....	DC500-2	Hook.....		1
3.....	DC500-3	Motor.....	1/2HP, 1Ph, 115V	1
4.....	DC500-4	Power Cord.....		1
5.....	DC500-5	Power Cord Holder		1
6.....	DC500-6	Switch Box		1
7.....	TS-1532032	Pan Head Machine Screw	M4x10.....	4
8.....	TS-2361041	Lock Washer	M4.....	4
9.....	TS-1550021	Flat Washer.....	M4.....	4
10.....	DC500-10.....	Capacitor	250V, 25µF	1
11.....	DC500-11.....	Switch Box Cover		1
12.....	DC500-12.....	Switch.....		1
13.....	DC500-13.....	Switch Safety Key.....		1
14.....	DC500-14.....	Pan Head Self Tapping Screw.....	ST4x12	16
15.....	TS-2321051	Wing Nut.....	M5.....	1
15A.....	TS-2361051	Lock Washer	M5.....	1
15B.....	TS-1550031	Flat Washer.....	M5.....	1
16.....	TS-1532042	Pan Head Machine Screw	M4x12.....	12
17.....	DC500-17.....	Inner Housing.....		1
18.....	DC500-18.....	Rubber Seal		2
19.....	TS-1540021	Hex Nut.....	M4.....	12
20.....	TS-1550021	Flat Washer.....	M4.....	12
21.....	708386.....	Collection Bag		1
22.....	DC500-22.....	Support Bar.....		1
23.....	TS-154306	Wing Nut.....	M8.....	2
23A.....	TS-2361081	Lock Washer	M8.....	2
24.....	TS-1550061	Flat Washer.....	M8.....	2
25.....	DC500-25.....	Sleeve		2
26.....	DC500-26.....	Wheel		2
27.....	DC500-27.....	Base		1
28.....	DC500-28.....	Rubber Foot.....		2
29.....	DC500-29.....	Housing PVC Ring.....		1
30.....	DC500-30.....	Top Housing.....		1
31.....	TS-1534042	Pan Head Machine Screw	M6x12.....	4
32.....	DC500-32.....	Impeller.....		1
33.....	DC500-33.....	Bolt (Left Hand Thread).....	M6x20 LH	1
34.....	TS-1550041	Flat Washer.....	M6.....	1
35.....	TS-2361061	Lock Washer	M6.....	1
36.....	DC500-36.....	Bottom Housing.....		1
37.....	DC500-37.....	Frame.....		1
38.....	DC500-38.....	Dust Hose		1
39.....	DC500-39.....	Knob.....		3

Assembly Drawing



Wiring Diagram



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