DC3-5XL
Owner's Manual

850CFM Dust Collection System

1-1/2HP PORTABLE DUST COLLECTION SYSTEM
- assembly
- operation
- repair parts

Penn State Industries

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Printed in Taiwan
Your DC3-5XL Dust Collector has been shipped to you in two (2) Cartons:

Carton #1- Dust Collector - 50 lbs.
Carton #2- Filter Bag and Manual (optional 8' Hose) - 6 lbs.

Note: Unpack the contents of both packages and check carefully to ensure that all items are included. Do not discard any packing material until the dust collector is fully assembled and operational.

Hints and Tips for Dust Collection Systems:

- Use hose clamps to attach flexible hose to all fittings.
- For maximum airflow, do not restrict openings; avoid too many bends and sharp turns.
- Use duct or hose with a smooth inside surface whenever possible.
- Avoid extreme rises and drops in your dust collection system.
- Avoid sharp 90-degree elbows and Tee connectors.
- If you must attach your hose to a machine with an opening smaller than 4", always restrict to the smaller opening with a reducing adapter at the machine (rather than at the dust collector) in order to insure maximum airflow.
- Systems using narrow tubing for ductwork will yield a large reduction in suction due to high static pressure losses. Ductwork with a diameter less than 3" is not recommended.
- If you are using blast gates, always close any gates not in use.
- Make sure bag band clamps are very tight to avoid the bag from blowing off and leaking.
- To eliminate static electricity buildup in long lengths of duct made up of PVC, wrap a bare grounding wire around the pipe. Use PSI #DWIRE or equivalent. Ground the wire to either end.
- The PSI flexible hose (#D50, #D08) is self-grounding. Strip wire at one end and secure to a suitable Ground.

WARRANTY:
This product is warranted against defects in material and workmanship for a period of two years on the motor, and two years overall from the date of purchase. This warranty applies to the original purchaser of the product and is limited to the repair or replacement of the product or its components at the discretion of Penn State Industries. Excluded are parts, which have been misused, abused, altered, or consumed by normal operation of the machine. Also excluded are direct or consequential damages to persons, properties, or materials. Your invoice serves as proof of purchase and must be referenced to authorize warranty repairs. Please call for proper authorization prior to return.

PRODUCT SUPPORT:
If you are having problems with this product – locate the key numbers of your problem parts in this Manual. Feel free to call our technicians during normal business hours (8:30 a.m. to 4:30 p.m. Monday through Friday) to discuss your situation relative to problem parts. If you write, please give us a phone number where you can be reached during the day. We will be glad to call you to talk about your problems. Have your invoice number and spare part number handy to expedite processing any warranty parts ordered.

Thank you for your business.

Please record your invoice number and date purchased: Invoice #_______ Date:________

For PENN STATE INDUSTRIES - Customer Service: call 215-676-7609, 1-800-377-7297
Technical Support: call 1-800-656-4767
IMPORTANT SAFETY INSTRUCTIONS

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

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

- Read and understand this owner's manual and all labels on the Dust Collection System before operating. Use only as described in this manual. To avoid personal injury or damage to Dust Collection System, use only recommended accessories.
- Sparks inside the electrical parts, can ignite flammable vapors or dust. To avoid fire or explosion:
  - Do not vacuum, or use this Dust Collection System near flammable or combustible liquids, gases, gasoline or other fuels, lighter fluid, cleaners, oil-based paints, natural gas, hydrogen, or explosive dusts like coal dust, magnesium dust, grain dust, or gun powder.
  - Do not vacuum anything that is burning or smoking, such as cigarettes, matches, or hot ashes.
  - To avoid health hazards from vapors or dusts, do not vacuum toxic materials.
  - Do not use or store near hazardous materials.
  - Do not use outdoors or on wet surfaces.
  - Put unit on a stable, level surface.
  - Route vacuum hose and electric cord out of traffic areas.
  - Do not allow to be used as a toy. Close attention is necessary when used by or near children.
  - Do not leave appliance plugged in. Unplug from outlet when not in use and before servicing.
  - To avoid injury from accidental starting, unplug power cord before changing or cleaning filter/dust bag or chip bag.
  - Do not use without filter/dust bag and/or chip bag in place.
  - Do not unplug by pulling on the cable. To unplug, grasp the plug, not the cable.
  - Turn off controls before unplugging.
  - 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.
  - 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.
  - Do not handle plug of the Dust Collection System with wet hands.
  - Do not put any object into ventilation openings. Do not vacuum with any ventilation openings blocked, keep free of dust, lint, hair or anything that may reduce air flow.
  - Keep hair, loose clothing, fingers, and all parts of body away from openings and moving parts.
  - Extension cable 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. See "Extension Cable" in the "Operation" section for proper wire sizes.
  - Connect to properly grounded outlet only (See "grounding instructions" on page 5.)

SAVE THESE INSTRUCTIONS FOR FUTURE REFERENCE
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 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:

WARNING: 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 the following labels which appear on the top and bottom of filtration housing and sides of motor.

WARNING

Metal shavings or dust can set sawdust on fire.
Collect wood materials only.
Do not collect metal shavings or dust.
See manual for details.
Risk of electrical shock
Use indoors in dry area.
Do not use outdoors or on wet surfaces.
Sparks can ignite vapors from flammable products.
Do not use around flammable products.

If connected to a circuit protected by fuses, use time delay fuses with this appliance.

WARNING

Hazardous moving parts inside.
Unplug before removing inlet guard.
Attach inlet guard before plugging in.

BEFORE EACH USE:

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

A. WEAR SAFETY GOGGLES, FORESIGHT IS BETTER THAN NO SIGHT. Wear safety goggles, not glasses, that comply with ANSI Z87.1 (shown on label). Operating any power tool can result in foreign objects being thrown into the eyes which can result in permanent eye damage. Safety goggles are available at stores. Use of glasses or goggles not in compliance with ANSI Z87.1 could result in severe injury from breakage of the eye protection.

B. When cleaning collection bags, wear a dust mask.
GENERAL SAFETY INSTRUCTIONS FOR POWER TOOLS

1. KNOW YOUR TOOL
   Read and understand owner's manual and labels affixed to the tool. Learn its application and limitations as well as its specific potential hazards peculiar to this tool.

2. GROUND THE TOOL
   This tool is equipped with a approved 3-conductor cord and a 3-prong grounding type plug to fit the proper grounding type receptacle. The green (Green/yellow) conductor in the cord is the grounding wire. Never connect the green (Green/yellow) 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
   Form habit of checking to see that keys and adjusting wrenches are removed from tool before turning it on.

5. KEEP WORK AREA CLEAN
   Cluttered areas and benches invite accidents. Floor must not be slippery due to wax or sawdust.

6. AVOID DANGEROUS ENVIRONMENT
   Don't use power tools in damp or wet locations or expose them to rain. Keep work area well lighted. Provide adequate surrounding work space.

7. KEEP CHILDREN AWAY
   All visitors should be kept a safe distance from work area.

8. MAKE WORKSHOP CHILD-PROOF
   - with padlocks, master switches, or by removing starter keys.

9. USE PROPER SPEED
   This tool will do the job better and safer when operated at the proper speed.

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

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

12. USE SAFETY GOGGLES (Head Protection)
    Wear safety goggles (must comply with ANSI Z87.1) at all times. Everyday eyeglasses only have impact resistant lenses, they are NOT safety glasses. Also, use face or dust mask if cutting operation is dusty, and use ear protectors (plugs or muffs) during extended periods of operation.

13. DON'T OVERREACH
    Keep proper footing and balance at all times.

14. MAINTAIN TOOLS WITH CARE
    Keep tools sharp and clean for best and safest performance. Follow instructions for lubricating and changing accessories.

15. DISCONNECT TOOLS
    Before servicing, when changing accessories or attachments.

16. AVOID ACCIDENTAL STARTING
    Make sure switch is in "OFF" position before plugged 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". Don't leave Dust Collection System until it comes to a complete stop.
# Introduction

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

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

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

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

**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.

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

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

⚠️ **CAUTION:** Means that if the safety information is not followed, someone may be injured.

## DC3-5XL Specifications:

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Air Flow (CFM)</td>
<td>850</td>
</tr>
<tr>
<td>Motor (HP)</td>
<td>1.5</td>
</tr>
<tr>
<td>Motor Voltage</td>
<td>110</td>
</tr>
<tr>
<td>Cycles</td>
<td>60</td>
</tr>
<tr>
<td>Impeller Diameter</td>
<td>9&quot; Steel</td>
</tr>
<tr>
<td>Motor max draw (AMPS)</td>
<td>18</td>
</tr>
<tr>
<td>Noise (dB)</td>
<td>62-82</td>
</tr>
<tr>
<td>Filter Bag Rating (microns)</td>
<td>5</td>
</tr>
<tr>
<td>Maximum Static Pressure</td>
<td>8.5&quot;</td>
</tr>
<tr>
<td>Inlet/Outlet</td>
<td>4&quot;</td>
</tr>
<tr>
<td>Collector Size (l-w-h)</td>
<td>18&quot;x15&quot;x17&quot;</td>
</tr>
<tr>
<td>Bag Size</td>
<td>20&quot; Dia. X30&quot;</td>
</tr>
<tr>
<td>Net Weight (lbs)</td>
<td>46</td>
</tr>
</tbody>
</table>
operation

POWER SUPPLY

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

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

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

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

GROUNDING INSTRUCTIONS (EARTHING)

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

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

EXTENSION CORDS

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

For circuits that are farther away from electrical circuit box, the wire size must be increased proportionately in order to deliver ample voltage to the motor.

<table>
<thead>
<tr>
<th>Length of Conductor</th>
<th>Wire Sizes Required (American Wire Gage)</th>
</tr>
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<tbody>
<tr>
<td>0 - 25 feet</td>
<td>120V Lines</td>
</tr>
<tr>
<td>26 - 50 feet</td>
<td>No 16</td>
</tr>
<tr>
<td>51 - 100 feet</td>
<td>No 14</td>
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<tr>
<td></td>
<td>No 12</td>
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</table>
ON / OFF SWITCH

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

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

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

NOTICE: The type of Switch on your dust collector might be different to the above ON/OFF switch for your country.
## DC3-5XL

### Parts List

<table>
<thead>
<tr>
<th>Code</th>
<th>Parts NO.</th>
<th>PSI #</th>
<th>Description</th>
<th>QTY</th>
<th>Code</th>
<th>Parts NO.</th>
<th>PSI #</th>
<th>Description</th>
<th>QTY</th>
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<tr>
<td>1</td>
<td>412042</td>
<td>ZDC3XL-01</td>
<td>Impeller Housing</td>
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<td>2</td>
<td>412902</td>
<td>ZDC3-02</td>
<td>U-Type Tubing Bracket</td>
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<td>5</td>
<td>SF069300</td>
<td>ZDC3XL-05</td>
<td>Washer Head Screw</td>
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<td>6</td>
<td>KS050525</td>
<td>ZDC3XL-06</td>
<td>Key</td>
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<td>7</td>
<td>N1081300</td>
<td>ZDC3XL-07</td>
<td>Nylon Nut</td>
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<td>8</td>
<td>NH581400</td>
<td>ZDC3XL-08</td>
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<td>NH602303</td>
<td>ZDC3XL-10</td>
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<td>4&quot; Hose Clamp</td>
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<td>BC3-5V</td>
<td>Dust Collection Bag</td>
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<td>13</td>
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<td>17</td>
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<td>ZDC3-MO</td>
<td>Motor</td>
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<td>18</td>
<td>994532</td>
<td>ZDC3-18</td>
<td>Switch</td>
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</table>

### Notes

- QTY: Quantity
- PSI #: Part number
- Description: Description of the part
- ZDC3XL-01: Impeller Housing
- ZDC3XL-02: U-Type Tubing Bracket
- ZDC3XL-03: Spacer
- ZDC3XL-04: Inlet
- ZDC3XL-05: Washer Head Screw
- ZDC3XL-06: Key
- ZDC3XL-07: Nylon Nut
- ZDC3XL-08: Nut
- ZDC3XL-09: Acorn Nut
- ZDC3XL-10: Nut
- DBC4-1: 4" Hose Clamp
- BC3-5V: Dust Collection Bag
- ZDC3-13: Handle
- ZDC3-14: Handle Grip
- ZDC3-15: Power Cord
- ZDC3-16: Strain Relief
- ZDC3-MO: Motor
- ZDC3-18: Switch

- Motor Flange Packing
- Motor Support Flange
- Impeller
- Caster roller
- Hex Head Bolt
- Hex Head Bolt
- Hex Head Bolt
- Hex Head Bolt
- Pan Head Flange Bolt
- Pan Head Flange Bolt
- Hex Socket Cap Bolt
- Flat Washer
- Flat Washer
- Flat Washer
- Flat Washer
- Spring Washer
- Spring Washer
- Spring Washer
CONVERTING YOUR DC3-5XL DUST COLLECTOR TO 220 VOLTS

Instructions

Note 1: The bottom two wires are the AC input to the motor system and remain in the same place. Do not modify.

Note 2: The green ground wire inside the wiring box remains where it is.

Note 3: The sub-straight is a feed through sub-straight where the three terminals on the top are connected to the three on the bottom.

Note 4: The middle section of the sub-straight is not used for normal 110 volt operation.

To convert 110V to 220V operation:

1) Disconnect power plug from the wall outlet.

2) Remove the screw and cover from the wiring box.

3) Remove the translucent cover from the wire sub-straight.

4) The system is shipped from Penn State Industries in the 110 volt configuration, as shown in figure #2.

5) On the upper left terminal you will find lines #1 and #3 on the upper right you will find lines #2 and #4. Disconnect line #3 from the upper left terminal, leaving line #1 where it is.

6) Disconnect line #2 from the upper right is terminal, leaving line #4 where it is.

7) The middle section of this sub-straight is normally not used on this system, so you can take advantage of it being there. Take lines #2 and #3 and tie them together using the normally un-used upper middle terminal as in figure #3. Your system is now converted to 220 volts.

8) Install the appropriate 220 volt plug to the cord. You are now ready to run at 220.
**maintenance**

**MOTOR**

Excessive dust in motor could cause excessive heat in motor. Every effort should be made to prevent foreign material from entering the motor. When operated under conditions likely to permit accumulations of dust, dirt, or waste within the motor, a visual inspection should be made at frequent intervals. Accumulations of dry dust can usually be blown out successfully. **NOTE:** Motors used on wood-working tools are particularly susceptible to the accumulation of sawdust and wood chips and should be blown out or "vacuumed" frequently to prevent interference with normal motor ventilation.

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

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

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

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

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

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

---

**troubleshooting**

**MOTOR**

<table>
<thead>
<tr>
<th>PROBLEM</th>
<th>PROBABLE CAUSE</th>
<th>REMEDY SUGGESTED</th>
</tr>
</thead>
<tbody>
<tr>
<td>Motor will not run.</td>
<td>1. Defective cord, plug, switch and/or motor.</td>
<td>1. Consult Service. Any attempt to repair this motor</td>
</tr>
<tr>
<td></td>
<td>2. Blown fuse.</td>
<td>may create a hazard unless repair is done by a qualified</td>
</tr>
<tr>
<td></td>
<td></td>
<td>service technician. Repair service is available at your</td>
</tr>
<tr>
<td></td>
<td></td>
<td>nearest store</td>
</tr>
<tr>
<td></td>
<td>2. Check for blown fuses and replace with fuse of proper</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>capacity.</td>
</tr>
<tr>
<td>Excessive sawdust in air</td>
<td>1. Loose connectors</td>
<td>1. Tighten connections.</td>
</tr>
<tr>
<td></td>
<td>2. Filter/dust bag and/or chip collection bag</td>
<td></td>
</tr>
<tr>
<td></td>
<td>releasing sawdust.</td>
<td>2. Sawdust trapped between clamp bag and housing.</td>
</tr>
<tr>
<td>Excessive impeller</td>
<td>1. Picked up large wood chips or debris.</td>
<td>1. Do not pick up metal or ferrous materials. Stop the</td>
</tr>
<tr>
<td></td>
<td>2. Loose impeller.</td>
<td>machine and the material will fall to the bottom of inlet tube.</td>
</tr>
<tr>
<td></td>
<td>3. Rubbing impeller.</td>
<td>2. Unplug unit prior to disassembly. Hazardous moving</td>
</tr>
<tr>
<td></td>
<td></td>
<td>parts inside. Use a piece of wood to free impeller.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3. Consult Service to repair loose or rubbing impeller</td>
</tr>
<tr>
<td></td>
<td></td>
<td>A repair to the housing may create a hazard unless it is</td>
</tr>
<tr>
<td></td>
<td></td>
<td>done by a qualified service technician.</td>
</tr>
<tr>
<td>PROBLEM</td>
<td>PROBABLE CAUSE</td>
<td>REMEDY SUGGESTED</td>
</tr>
<tr>
<td>------------------------------------</td>
<td>----------------------------------------------------</td>
<td>----------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Excessive noise.</td>
<td>1. Motor</td>
<td>1. Have motor checked by qualified service technician.</td>
</tr>
<tr>
<td>Motor fails to develop full power</td>
<td>1. Circuit overloads with lights, appliances and</td>
<td>1. Do not use other appliances or motors on same circuit when using the Dust</td>
</tr>
<tr>
<td>NOTE: LOW VOLTAGE: (Power output</td>
<td>other motors.</td>
<td>Collection System.</td>
</tr>
<tr>
<td>of motor decreases rapidly with</td>
<td>2. Undersize extension cord or extension cord too</td>
<td>2. Increase the wire sizes on extension cords, or reduce length of extension</td>
</tr>
<tr>
<td>decrease in voltage at motor</td>
<td>long.</td>
<td>cords. See &quot;Motor Specifications and Electrical Requirements&quot; section.</td>
</tr>
<tr>
<td>terminals.)</td>
<td>3. General overloading of power company facilities.</td>
<td>3. Request a power check from the power company</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Motor starts slowly or fails to</td>
<td>1. Low voltage.</td>
<td>1. Request voltage check from the power company</td>
</tr>
<tr>
<td>come up to full speed</td>
<td>2. Windings burned out or open.</td>
<td>2. Have motor repaired or replaced by a qualified service technician.</td>
</tr>
<tr>
<td></td>
<td>3. Starting switch will not operate. (Switch</td>
<td>3. Have capacitor replaced by a qualified service technician.</td>
</tr>
<tr>
<td></td>
<td>contacts working properly.)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Capacitor is bad.</td>
<td></td>
</tr>
<tr>
<td>Motor overheats</td>
<td>1. Motor overloaded.</td>
<td>1. Clean out sawdust to provide normal air circulation through motor. See &quot;Maintenance&quot; section.</td>
</tr>
<tr>
<td></td>
<td>2. Improper cooling. (Air circulation restricted</td>
<td></td>
</tr>
<tr>
<td></td>
<td>through motor due to sawdust, accumulating inside</td>
<td></td>
</tr>
<tr>
<td></td>
<td>of motor.)</td>
<td></td>
</tr>
<tr>
<td>Motor stalls (resulting in blown</td>
<td>1. Voltage too low to permit motor to reach</td>
<td>1. Request voltage check from the power company</td>
</tr>
<tr>
<td>fuses or tripped circuit breakers)</td>
<td>operating speed.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2. Fuses or circuit breakers do not have sufficient</td>
<td>2. Install proper size fuses or circuit breakers.</td>
</tr>
<tr>
<td></td>
<td>capacity.</td>
<td></td>
</tr>
<tr>
<td>Frequent opening of fuses or</td>
<td>1. Motor overloaded.</td>
<td>1. Install proper size fuses or circuit breakers.</td>
</tr>
<tr>
<td>circuit breakers</td>
<td>2. Fuses or circuit breakers do not have sufficient</td>
<td></td>
</tr>
<tr>
<td></td>
<td>capacity.</td>
<td></td>
</tr>
</tbody>
</table>

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.
New SAFETY RULES for Stationary Power Tools

follow them for best results and full benefit from shop machines

Every good craftsman respects the tools with which he works. He knows they represent years of constantly improved design. He also knows that they are dangerous if mishandled.

This is the theme of a new safe use program developed by the Power Tool institute, Inc., for stationary power tools. The institute has put together a list of safety rules, based on approved practices in industrial and home shops, to accompany a set of new standards for stationary power tools that members of the institute manufacture.

1 Know your power tool. Read the owner's manual carefully. Learn its applications and limitations, as well as the specific potential hazards peculiar to this tool.

2 Keep guards in place and in working order.

3 Ground all tools. If tool is equipped with three-prong plug, it should be plugged into a three-hole electrical receptacle. If an adapter is used to accommodate a two-prong receptacle, the adapter wire must be attached to a known ground. Never remove the third prong.

4 Remove adjusting keys and wrenches. Form habit of checking to see that keys and adjusting wrenches are removed from tool before turning it on.

5 Keep work area clean. Cluttered areas and benches invite accidents.

6 Avoid dangerous environment. Don't use power tools in damp or wet locations or expose them to rain. Keep your work area well lighted.

7 Keep children away. All visitors should be kept a safe distance from work area.
8. Make workshop kidsproof — with padlocks, master switches, or by removing starter keys.

9. Don't force tool. It will do the job better and be safer at the rate for which it was designed.

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

11. Wear proper apparel. Wear no loose clothing, gloves, neckties, rings, bracelets, or other jewelry which may get caught in moving parts. Non-slip footwear is recommended. Wear protective hair covering to contain long hair.

12. Always use safety glasses. Also use face or dust mask if cutting operation is dusty. Everyday eyeglasses only have impact resistant lenses. They are NOT safety glasses.

13. Secure work. Use clamps or use to hold work, when practical. It's safer than using your hands and it frees both hands to operate tool.

14. Don't overreach. Keep proper footing and balance at all times.


16. Disconnect tools before servicing and when changing accessories such as blades, bits, cutters and the like.

17. Use recommended accessories. Consult owner's manual for recommended accessories. Use of improper accessories may cause risk of injury to persons.

18. Reduce the risk of unintentional starting. Make sure switch is in OFF position before plugging in.
MULTI-FUNCTION:
This unit can be also used as a vacuum to dispeel polluted air from your work area.
1. You must remove the cloth bag from the dust collector.
2. Connect one hose to the inlet.
3. Connect the other hose to the outlet.
4. You will now be able to remove polluted air from confined areas. An example of types of air that should be removed is welding fumes.

IMPORTANT:
Read the SAFETY INSTRUCTIONS in page one in this manual.

WARNING:
Sparks inside the electrical part, can ignite flammable vapors or dust. To avoid fire or explosion:
• Do not vacuum, or use this Dust Collection System near flammable or combustible liquids, gases, gasoline or other fuels, lighter fluid, cleaners, oil-based paints, natural gas, hydrogen, or explosive dusts like coaldust, magnesium dust, grain dust, or gun powder.
• Do not vacuum anything that is burning or smoking, such as cigarettes, matches, or not ashes.
• To avoid health hazards from vapors or dusts, do not vacuum toxic materials.
# Dust Collection System

**Owners Manual**

**Service**

Dust Collection System

**How to Order Repair Parts**

When ordering repair parts, always give the following information:

<table>
<thead>
<tr>
<th>PART NUMBER</th>
<th>PART DESCRIPTION</th>
</tr>
</thead>
</table>

**Model Number**

DC3-5XL

**Name of Item**

Dust Collection System

All parts listed may be ordered from any Service Center and most stores. If the parts you need are not stocked locally, your order will be electronically transmitted to the original maker for handling.

Printed in Taiwan