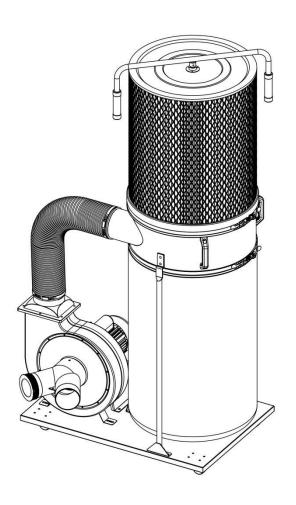


# Operator's Manual Dust Collector BBDC2





**CAUTION**: Read and follow all Safety Rules and Operating Instructions before First Use of this Product.

Save this manual for future reference.

#### Introduction

We take great pride in introducing the Model BBDC2 2HP duct collector with a canister filter, a distinguished addition to the expanding Busy Bee Tools family of exceptional woodworking machinery.

When adhering to the comprehensive guidelines outlined in this manual, you can anticipate years of reliable and enjoyable performance, serving as a testament to Busy Bee Tools' unwavering commitment to customer satisfaction.

We are delighted to provide you with this manual for the Model BBDC2 dust collector. It has been meticulously crafted to assist you with the assembly process, ensure safety compliance, and cover essential operational procedures.

Our goal is to deliver the most comprehensive documentation possible to facilitate your experience.

The specifications, drawings, and photographs featured in this manual accurately depict the Model BBDC2 dust collector as it was configured when this manual was produced. Nevertheless, in line with Busy Bee Tools' continuous improvement policy, adjustments and enhancements may be implemented at any time, with no obligation on Busy Bee Tools' part.

To enhance your convenience, we maintain an up-to-date repository of Busy Bee Tools manuals on our website at www.busybeetools.com. Any updates or modifications to your machine will be promptly reflected in these manuals.

We encourage you to visit our website regularly to access the latest revisions to this manual, and to stay informed about the optimal operation of your equipment. Your satisfaction and safety are our top priorities, and we are committed to ensuring that your experience with the BBDC2 dust collector is exceptional.

In case you require additional assistance or have any further questions, please do not hesitate to reach out and contact our dedicated Customer Service and Technical Support Department at:

**Busy Bee Tools Head Office** 

130 Great Gulf Drive

Concord ON, L4K 5W1

Or at any of our branches across Canada.

Visit our website for the latest deals and for more information at www.busybeetools.com

Call us Toll Free: 1-800-461-2879. Email us at: cs@busybeetools.com

Our team of experts is here to provide you with the guidance and support you need to ensure the safe and efficient operation of your machine. Your satisfaction and safety are our top priorities, and we are committed to assisting you in any way we can.

#### TECHNICAL SPECIFICATIONS

Attention: Please choose the proper power source, voltage and frequency shown in the label for your product.

| Dust Collector                          | BBDC2                  |
|-----------------------------------------|------------------------|
| Motor Power                             | 120V, 60Hz, 2HP, 12.8A |
| Max. Air Suction Capacity               | 1471.44 CFM            |
| Max. Static Pressure                    | 10.45"                 |
| Inlet port Diameter                     | 5"                     |
| Inlet adapter diameter                  | 4" X2                  |
| Dust bag Capacity (Clear plastic)       | 54.2 Gal/ 205 L        |
| Canister filter size(Diameter x Length) | 510 X 610mm (20" X24") |
| Noise Level                             | 75dB                   |

#### **SAFETY**

WARNING: Read carefully these Operating Instructions. Familiarize with the controls and proper use of the machine. Keep the Operating Instructions for future reference. The warning labels with instructions attached to the machine provide important information on safe operation.

- READ and become familiar with the entire Operator's Manual. LEARN the machine's application, limitations and possible hazards.
- 2. KEEP GUARD IN PLACE and in working order.
- 3. **REMOVE ADJUSTINGTOOLS.** Form a habit of checking to see that all keys, adjusting wrenches or any other tools are removed from the machine before turning ON.
- 4. **KEEP WORK AREA CLEAN.** Cluttered areas and benches invite accidents.
- 5. **DON'T USE IN DANGEROUS ENVIRONMENT**. Don't use machinery in damp or wet locations or expose them to rain. Keep the work area well lighted.
- 6. KEEP CHILDREN AWAY. All visitors should be kept at a safe distance from work area.
- 7. MAKE WORKSHOP CHILDPROOF with padlocks.
- 8. DON'T FORCE THE MACHINE. It will do the job better and safer at the rate for which it was designed.
- 9. **USE THE RIGHT TOOL.** Do not force tool or attachment to do a job for which it was not designed.
- 10. **USE PROPER EXTENSION CORD.** Make sure your 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 undersized cord will result in a drop in line voltage and in loss of power that will cause the tool to overheat.
- 11. **WEAR PROPER APPAREL.** Do not wear loose clothing, gloves, neckties, rings, bracelets, or other jewelry that may get caught in moving parts. Non-slip footwear is recommended. Wear protective hair covering to contain long hair.
- 12. ALWAYS WEAR EYE PROTECTION. Wear goggles for protection against projected chips.
- 13. DON'T OVERREACH. Keep proper footing and balance at all times.
- 14. MAINTAIN WITH CARE. Follow all maintenance instructions and lubrication schedules to keep machine in good working condition. An improperly maintained machine could malfunction, leading to serious personal injury or death.
- 15. DISCONNECT POWER FIRST before servicing, when changing belt and other part.
- 16. USE RECOMMENDED ACCESSORIES. The use of improper accessories may cause serious injury.

- Consult the Operator's Manual about recommended accessories.
- 17. **NEVER STAND ON MANCHINE.** Serious injury could occur if the machine is tipped or if the cutting tool is unintentionally contacted.
- 18. **CHECK FOR DAMAGED PARTS.** Before further use of the tool, 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 the operation of the machine. A guard or other part that is damaged should be properly repaired or replaced.
- 19. **NEVER LEAVE THE MACHINE RUNNING UNATTENDED. TURN THE POWER "OFF".** Don't leave the machine unattended until it comes to a complete stop.
- 20. **BE CAREFUL**. Pay attention to what you are doing. Work reasonably. Do not use the machine when you are tired.
- 21. **HAVE YOUR MACHINE REPAIRED BY AN EXPERT ONLY!** This machine meets the applicable safety provisions. Any repairs may only be executed by an expert, using original spare parts; otherwise, the user could face a risk of injury.
- 22. **STABLE MACHINE.** Unexpected movement during operation greatly increases risk of injury or loss of control. Before starting. Please verify the machine is stable and the mobile base (if used) is locked.
- 23. **HAZARDOUS DUST.** Dust created by machinery operations may cause cancer, birth defects, or long-term respiratory damage. Be aware of dust hazards associated with the material of each workpiece. Always wear a proper respirator to reduce your risk.
- 24. **HEARING PROTECTION.** Always wear hearing protection when operating or observing loud machinery. Extended exposure to this noise without hearing protection can cause permanent hearing loss.

#### SPECIFIC SAFETY INSTRUCTIONS FOR DUST COLLECTORS

- 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 it until proper training and knowledge have been obtained.
- 2. Do not use the dust collector for anything except wood dust. Materials such as liquids, metal shavings, metal dust, screws, glass, plastic or rocks can cause sparks and/or damage when coming into contact with any part of the dust collector.
- 3. To reduce the risk of entanglement or contact with impeller, DO NOT place hands, hair, clothing, or tools in or near open dust collection inlet during operation, and keep small animals and children away. The powerful suction could easily pull them into impeller.
- 4. When emptying bag or drum, wear respirator and safety glasses. Empty dust away from ignition sources and into approved container.
- 5. Only operate dust collector in locations that contain fire suppression system or have fire extinguisher nearby.
- 6. To reduce risk of fire or explosions caused by sparks from static electricity, ground all ducting using grounding wire.
- 7. Never allow the machine to suction flammable or explosive solvents, or liquids such as petrol, oil, alcohol, thinners, or small particles (such as metal filings or ash) that may be hotter than 60°C otherwise there is danger of explosion or fire.
- 8. This machine cannot be used in the vicinity of gases or other flammable substances.

#### **ELECTRICAL REQUIREMENTS**

#### POWER SUPPLY AND MOTOR SPECIFICATIONS

**WARNING:** To avoid electrical hazards, fire hazards, or damage to the tool, use proper circuit protection. Use a separate electrical circuit for your tools. To avoid shock or fire, if power cord is worn or cut, or damaged in any way, have it replaced immediately.

#### **GROUNDING INSTRUCTIONS**

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

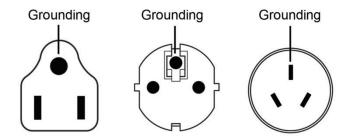
**IN THE EVENT OF A MALFUNCTION OR BREAKDOWN,** grounding provides a path of least resistance for electric current and reduces the risk of electric shock. This tool is equipped with an electric cord that has an equipment-grounding conductor and a grounding plug. The plug MUST be plugged into a matching receptacle 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 receptacle, have the proper receptacle installed by a qualified electrician.

**IMPROPER CONNECTION** of the equipment-grounding conductor can result in risk of electric shock. The conductor with green insulation (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 person if you do not completely understand the grounding instructions, or if you are not sure the tool is properly grounded.

Refer to nether picture:



**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.

**WARNING:** This machine is for indoor use only. Do not expose to rain or use in damp locations.

WARNING: The dust collection system includes the dust collector and the hose, or ductwork used to connect tools/machines. The dust collector is grounded through the ground wire in the cord. The hose or ductwork used to connect the tools/machines to the dust collector must also be grounded.

## GUIDELINES FOR EXTENSION CORDS USE PROPER EXTENSION CORD.

Ensure your extension cord is in good condition. When using an extension cord:

- Be sure the extension cord is heavy enough to carry the current your product will draw. An undersized cord will cause a drop in line voltage, resulting in loss of power and cause overheating.
- Be sure your extension cord is properly wired and in good condition. Always replace a damaged
  extension cord or have it repaired by a qualified person before using it. Protect your extension cords
  from sharp objects, excessive heat and damp or wet areas.

#### **ACCESSORIES AND ATTACHMENTS**

#### RECOMMENDED ACCESSORIES

**WARNING:** To avoid injury:

- Use only accessories recommended for the machine.
- Follow the instructions that accompany accessories. Using improper accessories may cause hazards.
- Use only accessories designed for this machine to avoid injury from thrown broken parts or workpieces.
- Do not use any accessory unless you have completely read the instruction or operator's manual for that accessory.

#### **PACKING BOX CONTENTS**

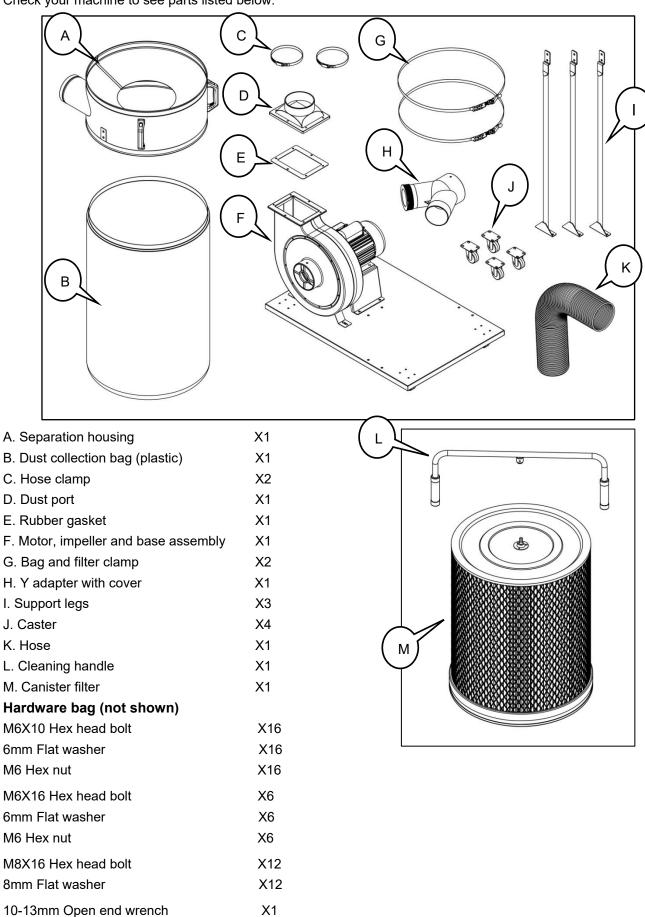
#### **UNPACKING AND CHECKING CONTENTS**

Carefully unpack the machine and all its parts and compare them against the illustration following. **WARNING:** 

- To avoid injury from unexpected start, do not plug the power cord into a power source receptacle during unpacking and assembly. This cord must remain unplugged whenever you are assembling or adjusting the machine
- If any part is missing or damaged, do not plug the machine in until the missing or damaged part is replaced, and assembly is complete.

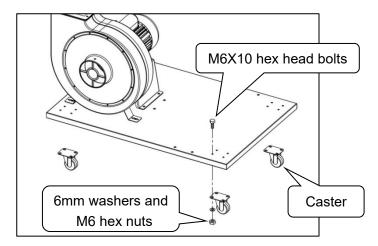
#### **DIAGRAM OF LOOSE PARTS**

Check your machine to see parts listed below:

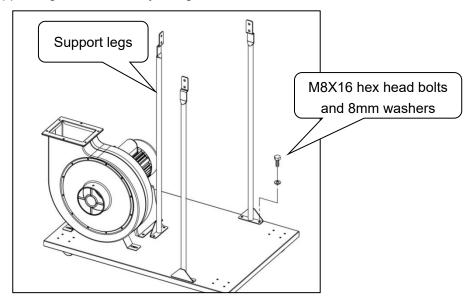


#### **ASSEMBLY**

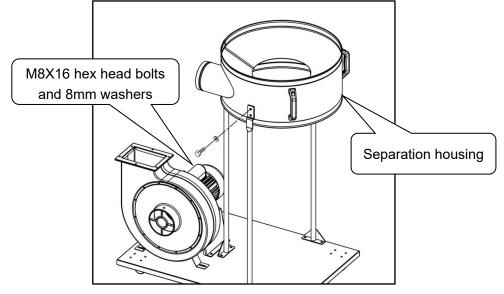
1. Assemble four casters to the base using M6x10 hex head bolts, 6mm flat washers and M6 hex nuts.



2. Attach three support legs to the base by using M8X16 hex head bolts and 8mm flat washers

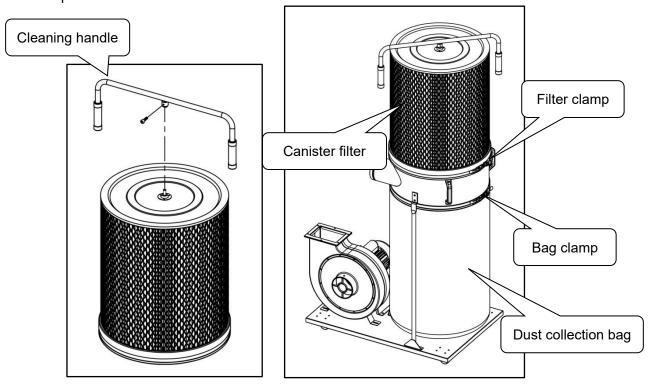


3. Install the separation housing to the three support legs with M8X16 hex head bolts and 8mm flat washers.

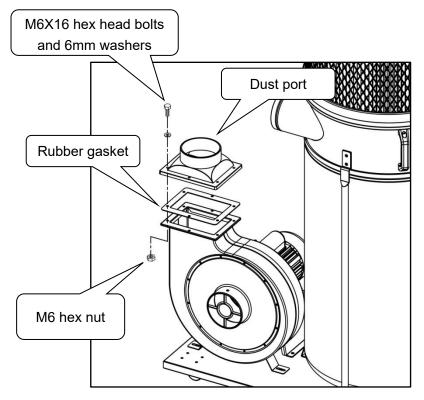


4. Attach the cleaning handle onto the shaft of canister filter and tighten hex head bolt.

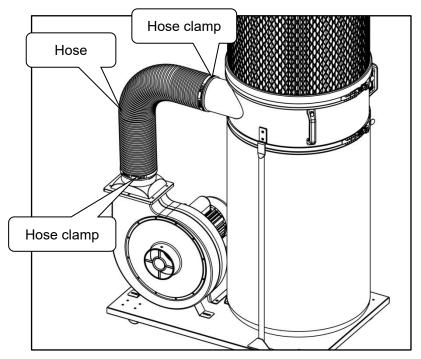
Install the canister filter assembly and dust bag to the upper and lower port of separation housing with the clamp.



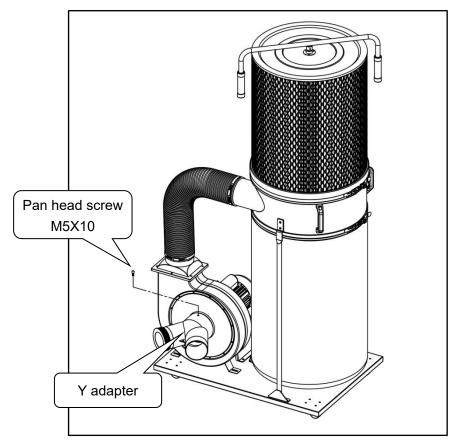
5. Place a rubber gasket around the impeller outlet rim, Secure the dust port to the impeller outlet with M6X16 hex head bolts, 6mm Flat washers and M6 hex nuts.



6. Attach the hose between the separation housing and the impeller housing with two clamps. Tighten the clamps to secure the hose.



7. Install the Y adapter over the impeller intake hole, then secure it in place with the M5X10 pan head screw



#### **OPERATION**

Once the assembly is complete, test run your dust collector to make sure it runs properly and is ready for regular operation.

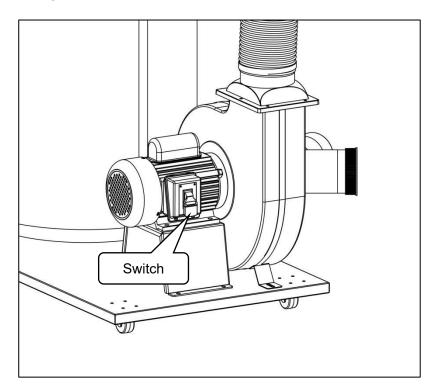
Connect the machine to power.

Verify that the machine is operating correctly by turning the switch ON.

When running normally, the machine runs smoothly without abnormal vibration or impact noise.

Use the proper type of hose and adapter to connect the dust collector to the machine that will be operated.

Operating a dust collector is simple and straight-forward. Turn the dust collector ON, then turn the dust producing machine ON. When you are finished with the machine operation, turn the machine OFF, then turn the dust collector OFF.



#### **MAINTENANCE**

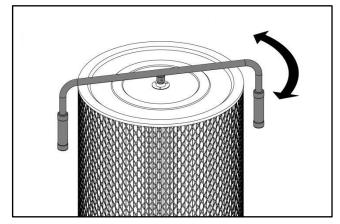
**Warning:** Turn the machine off and disconnect it from the power supply before conducting maintenance work or settings.

#### **Cleaning the Canister Filter**

Clean the canister filter and dust collection bag frequently to maintain the dust collector performing at its optimum.

To clean the canister filter:

- Disconnect the dust collector from the power source.
- Rotate the cleaning handle clockwise and counterclockwise several times to free the trapped dust particles from the filter pleats. The particles will fall into the collection bag.



The use of compressed air or liquids to clean the canister filter will damage the filtration pleats of the filter. Use ONLY the cleaning handle or, if necessary, use a soft brush to clean the inside of the canister filter.

#### Replacing the Dust collection bag

Always empty or replace the dust collection bag on a regular basis. Emptying the collection bags allows the machine to operate at a much higher level of efficiency.

- 1. Disconnect the machine from the power source outlet.
- 2. Remove the collector bag by loosening the bag clamp.
- 3. Empty the contents into an appropriate container.
- 4. Replace the dust collection bag.

**Warning:** Always wear the appropriate respirator or dust mask and safety glasses when cleaning or emptying the bags. Small dust particles can escape the bags during emptying, causing them to become airborne and easily inhaled. This microscopic air-borne dust is extremely unhealthy to breathe and can cause serious health problems.

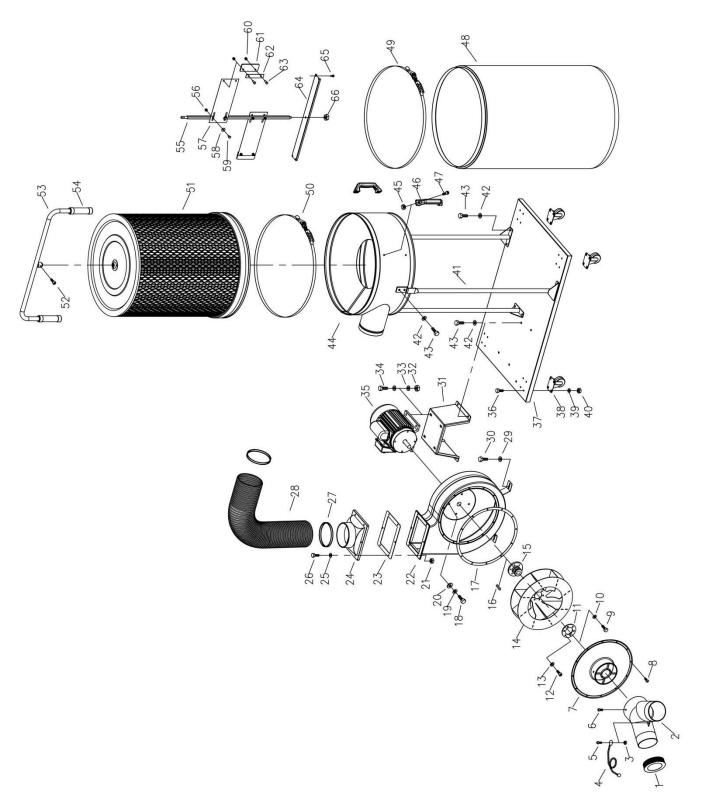
#### Machine care

- Check the condition of the power supply cords frequently and replace them if they are broken, or if the internal wires are exposed.
- If you do not intend to use the machine for a long time, clean it and place it in a dry place.
- Before each use, inspect the general condition of the dust collector. Check for loose screws, misalignment or binding of moving parts, cracked or broken parts, damaged electrical wiring, and any other condition that may affect its safe operation. If abnormal noise or vibration occurs, have

## **TROUBLESHOOTHING**

| PROBLEM                                                                              | CAUSE                                                                                                                                                                                                                                                             | SOLUTION                                                                                                                                                                                                                                                                                                                                                                                                                              |
|--------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| The machine does not work                                                            | <ul> <li>Defective motor, power cable or plug,</li> <li>Overload protector is tripped,</li> <li>Start capacitor is at fault.</li> <li>Wall fuse/circuit breaker is blown / tripped.</li> <li>Power switch is at fault.</li> <li>The motor is at fault.</li> </ul> | <ul> <li>Specialized personnel should check the machine,</li> <li>Reset the overload protector,</li> <li>Test/replace.</li> <li>Ensure the correct size for machine load; replace weak breaker.</li> <li>Replace faulty power switch.</li> <li>Test / repair / replace.</li> </ul>                                                                                                                                                    |
| Machine has vibration or noisy operation                                             | <ul> <li>Motor, motor mount, or other mounting component is loose or broken.</li> <li>Motor fan is rubbing on fan cover.</li> <li>Impeller is loose or damaged and unbalanced.</li> <li>Bearings are at fault.</li> </ul>                                         | <ul> <li>Retighten. Use thread locking fluid if necessary. Replace stripped fasteners or damaged components if necessary.</li> <li>Replace the dented fan cover; replace loose/damaged fan.</li> <li>Disconnect the dust collector from power and inspect the impeller for dents and bends. Replace the motor and impeller as a set if the motor shaft and the impeller hub are damaged.</li> <li>Test and replace bearing</li> </ul> |
| Sawdust being blown into the air from the dust collector.                            | Bag clamps are not properly clamped and secured.                                                                                                                                                                                                                  | Re-secure bag clamps are tight and completely over the bags.                                                                                                                                                                                                                                                                                                                                                                          |
| Dust collector does<br>not adequately collect<br>dust or chips; poor<br>performance. | <ul> <li>The dust collection bag is full.</li> <li>The canister filter is clogged.</li> <li>The Dust collector is too far away.</li> <li>Unused inlet port is not covered</li> </ul>                                                                              | <ul> <li>Empty the dust collection bag.</li> <li>Clean the canister filter.</li> <li>Relocate the dust collector closer.</li> <li>Cover the unused inlet port.</li> </ul>                                                                                                                                                                                                                                                             |

## **ASSEMBLY DIAGRAM**



### **PART LIST**

| No. | Part Number | Description                     | QTY. |
|-----|-------------|---------------------------------|------|
| 1   | PBBDC201    | Inlet cover                     | 1    |
| 2   | PBBDC202    | Y adapter                       | 1    |
| 3   | ZHXNM5080   | Hex nut M5                      | 2    |
| 4   | PBBDC204    | Connection chain                | 1    |
| 5   | ZPHSM508010 | Pan head screw M5X10            | 2    |
| 6   | ZPHSM508010 | Pan head screw M5X10            | 1    |
| 7   | PBBDC207    | Impeller cover                  | 1    |
| 8   | ZPHSM508010 | Pan head screw M5X10            | 12   |
| 9   | ZHXBM610025 | Left thread hex head bolt M6X25 | 1    |
| 10  | ZWFM600000  | Washer                          | 1    |
| 11  | PBBDC211    | Clamping plate                  | 1    |
| 12  | ZHXBM610016 | Socket head screw M6X16         | 6    |
| 13  | ZWLM6000000 | Lock washer 6mm                 | 6    |
| 14  | PBBDC214    | Impeller                        | 1    |
| 15  | PBBDC215    | Flange                          | 1    |
| 16  | ZKEY0606040 | Key 6x6x40mm                    | 1    |
| 17  | PBBDC217    | Rubber gasket ring              | 1    |
| 18  | ZHXBM812516 | Hex head bolt M8X16             | 4    |
| 19  | ZWLM800000  | Lock washer 8mm                 | 4    |
| 20  | ZWFM800000  | Flat washer 8mm                 | 4    |
| 21  | ZHXNM610000 | Hex nut M6                      | 6    |
| 22  | PBBDC222    | Impeller house                  | 1    |
| 23  | PBBDC223    | Rubber gasket plate             | 1    |
| 24  | PBBDC224    | Dust port                       | 1    |
| 25  | ZWFM600000  | Flat washer 6mm                 | 6    |
| 26  | ZHXBM610016 | Hex head bolt M6X16             | 6    |
| 27  | PBBDC227    | Hose clamp                      | 2    |
| 28  | PBBDC228    | Hose                            | 1    |
| 29  | ZWFM800000  | Flat washer                     | 2    |
| 30  | ZHXBM812516 | Hex head bolt M8X16             | 2    |
| 31  | PBBDC231    | Motor support plate             | 1    |
| 32  | ZHXNM812500 | Hex nut M8                      | 4    |

| No. | Part Number  | Description                     | Qty. |
|-----|--------------|---------------------------------|------|
| 33  | ZWFM800000   | Flat Washer M8                  | 8    |
| 34  | ZHXBM812425  | Hex head bolt M8X25             | 4    |
| 35  | BBDC2MOT     | Motor                           | 1    |
| 36  | ZHXBM610010  | Hex head bolt M6X10             | 16   |
| 37  | PBBDC237     | Base                            | 1    |
| 38  | PBBDC238     | Caster                          | 4    |
| 39  | ZWFM600000   | Flat washer 6mm                 | 16   |
| 40  | ZHXNM610000  | Hex nut M6                      | 16   |
| 41  | PBDC241      | Support leg                     | 3    |
| 42  | ZWFM800000   | Flat washer 8mm                 | 16   |
| 43  | ZHXBM812616  | Hex head bolt M8X16             | 16   |
| 44  | PBBDC244     | Separation housing              | 1    |
| 45  | ZHXNM610000  | Hex nut M6                      | 4    |
| 46  | PBBDC246     | Handle                          | 2    |
| 47  | ZCHSM610016  | Socket head screw M6X16         | 4    |
| 48  | PBBDC248     | Dust collection bag             | 1    |
| 49  | PBBDC249     | Filter clamp                    | 1    |
| 50  | PBBDC250     | Bag clamp                       | 1    |
| 51  | PBBDC251     | Canister filter                 | 1    |
| 52  | ZHXBM610010  | Hex head bolt M6X10             | 1    |
| 53  | PBBDC253     | Cleaning handle                 | 1    |
| 54  | PBBDC254     | EVA form handle grip            | 2    |
| 55  | PBBDC255     | Central axis                    | 1    |
| 56  | ZLKNM610000  | Lock nut M6                     | 4    |
| 57  | PBBDC257     | Spring plate                    | 2    |
| 58  | ZWFM600000   | Flat washer 6mm                 | 4    |
| 59  | ZHXBM610020  | Hex head bolt M6X20             | 4    |
| 60  | ZLKNM610000  | Lock nut M6                     | 4    |
| 61  | PBDC261      | Rubber block                    | 2    |
| 62  | PBBDC262     | Fixing plate                    | 2    |
| 63  | ZHXBM610014  | Hex head bolt M6X14             | 4    |
| 64  | PBBDC264     | Central axis support plate      | 1    |
| 65  | ZTPS42014013 | Self-tapping screw 4.2-1.4X13mm | 4    |
| 66  | ZLKNM812500  | Lock nut M8                     | 1    |

# Warranty

#### **BUSY BEE TOOLS 2 YEARS LIMITED WARRANTY**

Busy Bee Tools warrants every product to be free from defects in materials and agrees to correct such defects where applicable. This warranty covers <u>two years</u> for parts and 90 days for labor (unless specified otherwise), to the original purchaser from the date of purchase but does not apply to malfunctions arising directly or indirectly from misuse, abuse, improper installation or assembly, negligence, accidents, repairs or alterations or lack of maintenance.

#### Proof of purchase is necessary.

All warranty claims are subject to inspection of such products or part thereof and Busy Bee Tools reserves the right to inspect any returned item before a refund or replacement may be issued.

This warranty shall not apply to consumable products such as blades, bits, belts, cutters, chisels, punches etc.

Busy Bee Tools shall in no event be liable for injuries, accidental or otherwise, death to persons or damage to property or for incidental contingent, special or consequential damages arising from the use of our products.

#### IF THE MACHINE IS ALTERED IN ANY WAY, THE WARRANTY SHALL BE NULL AND VOID.

#### RETURNS, REPAIRS AND REPLACEMENTS

To return, repair, or replace a Busy Bee Tools product, you must visit the appropriate Busy Bee Tools showroom or call 1-800-461-BUSY.

For replacement parts directly from Busy Bee Tools, for this machine, please call 1-800-461-BUSY (2879), and have your model number and part number & payment option ready.

- All returned merchandise will be subject to a minimum charge of 15% for re-stocking and handling with the following qualifications.
- Returns must be pre-authorized by us in writing.
- We do not accept collect shipments.
- Items returned for warranty purposes must be insured and shipped pre-paid to the nearest warehouse
- Returns must be accompanied with a copy of your original invoice as proof of purchase. Returns must be in an un-used condition and shipped in their original packaging a letter explaining your reason for the return. Incurred shipping and handling charges are not refundable.
- Busy Bee will repair or replace the item at our discretion and subject to our inspection.
- Repaired or replaced items will be returned to you pre-paid by our choice of carriers.
- Busy Bee reserves the right to refuse reimbursement or repairs or replacement if a third party without our prior authorization has carried out repairs to the item.
- Repairs made by Busy Bee Tools are warranted for 30 days on parts and labor.
- Any unforeseen repair charges will be reported to you for acceptance prior to making the repairs.
- The Busy Bee Parts & Service Departments are fully equipped to do repairs on all products purchased from us with the exception of some products that require the return to their authorized repair depots. A Busy Bee representative will provide you with the necessary information to have this done.
- For faster service it is advisable to contact the nearest Busy Bee location for parts availability prior to bringing your product in for repairs.