



CDC-650P CARBATEC CYCLONE DUST COLLECTOR

INSTRUCTIONS MANUAL

carbatec.com.au

V2

2 YEAR
WARRANTY

THANK YOU FOR CHOOSING carbatec®

Carbatec has been a trusted brand for woodworking enthusiasts and professionals across Australia and New Zealand, since 1987.

Our quality woodworking products are designed and built to offer value and performance, making the latest features and technological advancements more accessible to Aussie woodworkers.

Backed by our no-fuss after-sales care and warranty support, you can trust Carbatec to keep you woodworking, as promised.

We look forward to sharing in your woodworking journey!

If you have any questions about our products or service, please call us on **1800 658 111** or email us at info@carbatec.com.au

Find us on social media



facebook.com/Carbatec



instagram.com/Carbatec



youtube.com/CarbaTecTheHomeOfWoodworking

WHAT'S IN THE BOX

The following items are provided in 3 packages (1 plywood case and 2 cartons).



- | | | | |
|----------------------------|--|-------------------------------------|-----------------------------------|
| A. Base | I. Dust collection drum and lid | N. Collection bag for filter | U. End caps |
| B. Support brackets | J. Vacuum hose | O. Casters for drum | V. Drum lid lifting clamps |
| C. Connecting Rod | K. Hose clamps | P. Drum handle | W. Canister filter |
| D. Impeller housing | L. Perforated drum ring | Q. Cap for Y adapter | X. Bag clamp |
| E. Elbow | M. Collection bag for drum | R. Bag clamp | Y. Flexible hose |
| F. Rubber gasket | | S. Y. adapter | Z. Hose clamps |
| G. Rubber gasket | | T. Casters for base | |
| H. Cyclone funnel | | | |

1. Remove parts from all of the cartons and lay them on a clean work surface.
2. Remove any protective materials and coatings from all of the parts of the cyclone dust extractor. The protective coatings can be removed by spraying WD-40 on them and wiping it off with a soft cloth. This may need to be redone several times before all of the protective coatings are removed completely.
3. Compare the items above to verify that all items are accounted for before discarding the shipping box.

CAUTION

DO NOT use acetone, gasoline or lacquer thinner to remove any protective coatings.

NOTICE

If you cannot find an item on this list, carefully check around and inside the machine and packaging materials. Often, these items get lost in packaging materials while unpacking or they are pre-installed at the factory.

IMPORTANT

Key information can be found on the inspection panel, found on the rear of the machine.

4

carbatec

QUALITY INSPECTED

Model:
Voltage
Freq:
Phase:
Amp:
kW:
Speed:
Lot No.:
Serial No.:
Date:

Made in for:

CARBATEC PTY LTD

Brisbane - Australia



Record the serial number and date of purchase in your manual for future reference.

SERIAL NUMBER:

.....

DATE OF PURCHASE:

.....

CONTENTS

Introduction	2
What's in the box	3
Key information	4
Safety instructions - General	6-9
Safety instructions - Dust Collector	9-10
Safety instructions - Electrical	11
Overview	12
Specifications	13
Assembly	14-20
Operation	21-22
Maintenance	23-25
Parts diagrams/Parts list	26-27
Troubleshooting	28-29
Wiring diagram	30
Warranty	31

NOTE: The specifications, photographs, drawings and information in this manual represent the current machine model when the manual was prepared. Changes and improvements may be made at any time, with no obligation on the part of Carbatec to modify previously delivered units. Reasonable care has been taken to ensure that the information in this manual is correct, to provide you with the guidelines for the proper safety, assembly and operation of this machine.

SAFETY INSTRUCTIONS

IMPORTANT! Safety is the single most important consideration in the operation of this equipment. The following instructions must be followed at all times. Failure to follow all instructions listed below may result in electric shock, fire, and/or serious personal injury. There are certain applications for which this tool was designed. We strongly recommend that this tool not be modified and/or used for any other application other than that for which it was designed. If you have any questions about its application, do not use the tool until you have contacted us and we have advised you.

The purpose of safety symbols is to attract your attention to possible dangers. The safety symbols and the explanations with them deserve your careful attention and understanding. The symbol warnings do not, by themselves, eliminate any danger. The instructions and warnings they give are no substitutes for proper accident prevention measures.

WARNING

Be sure to read and understand all safety instructions in this manual, including all safety alert symbols such as "DANGER," "WARNING," and "CAUTION" before using this tool. Failure to following all instructions listed below may result in electric shock, fire, and/or serious personal injury.

SYMBOL MEANING



A safety alert symbol Indicates **DANGER, WARNING, or CAUTION.** May be used in conjunction with other symbols or pictographs.



DANGER

Indicates an imminently hazardous situation, which, if not avoided, will result in death or serious injury.



WARNING

Indicates a potentially hazardous situation, which, if not avoided, could result in death or serious injury.



CAUTION

Indicates a potentially hazardous situation, which, if not avoided, could result in minor or moderate injury.

NOTICE

(Without Safety Alert Symbol) Indicates a situation that may result in property damage.



Carbatec products bearing the Regulatory Compliance Mark (RCM) have been tested in accordance with applicable Australian/New Zealand Standards to ensure their compliance with all mandatory standards and regulations (applicable at time of original sale). Carbatec Pty Ltd are registered as a responsible supplier with relevant Australian government departments and our products are registered on the EESS & ACMA database.

GENERAL SAFETY

Operating a power tool can be dangerous if safety and common sense are ignored. The operator must be familiar with the operation of this machine. Read this manual to understand this machine. **DO NOT OPERATE** this machine **IF YOU DO NOT FULLY UNDERSTAND** the limitations of this tool. **DO NOT MODIFY** this machine in any way.

BEFORE USING THIS MACHINE



WARNING

To avoid serious injury and damage to the tool, read and follow all of the Safety and Operating Instructions before operating the machine.



WARNING

1. **SOME DUST CREATED BY USING POWER TOOLS CONTAINS CHEMICALS** known to cause cancer, birth defects, or other reproductive harm. Some examples of these chemicals are:
 - Lead from lead-based paints.
 - Crystalline silica from bricks, cement, and other masonry products.
 - Arsenic and chromium from chemically treated lumber

Your risk from these 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 specially designed to filter out microscopic particles.

2. **READ** this entire manual. **LEARN** how to use the tool for its intended applications.

3. **GROUND ALL TOOLS.** If the tool is supplied with a 3-prong plug, it must be plugged into a 3-contact electrical receptacle. The third prong is used to ground the tool and provide protection against accidental electric shock.
4. **AVOID A DANGEROUS WORKING ENVIRONMENT.** Do not use electrical tools in a damp environment or expose them to rain.
5. **DO NOT USE** electrical tools in the presence of **FLAMMABLE** liquids or gases.
6. **ALWAYS KEEP THE AREA CLEAN,** well lit, and organized. Do not work in an environment with floor surfaces that are slippery from debris, grease, and wax.
7. **KEEP VISITORS AND CHILDREN AWAY.** Do not permit people to be in the immediate work area, especially when the electrical tool is operating.
8. **DO NOT FORCE THE TOOL** to perform an operation for which it was not designed. It will do a safer and higher quality job by only performing operations for which the tool was intended.
9. **WEAR PROPER CLOTHING.** Do not wear loose clothing, gloves, neckties, or jewellery. These items can get caught in the machine during operations and pull the operator into the moving parts. The user must wear a protective cover on their hair, if hair is long, to prevent it from contacting any moving parts.
10. **CHILDPROOF THE WORKSHOP AREA** by removing switch keys, unplugging tools from the electrical receptacles, and using padlocks.

GENERAL SAFETY

- 11. ALWAYS UNPLUG THE TOOL FROM THE ELECTRICAL RECEPTACLE**
when making adjustments, changing parts or performing any maintenance.
- 12. KEEP PROTECTIVE GUARDS IN PLACE AND IN WORKING ORDER.**
- 13. AVOID ACCIDENTAL STARTING.** Make sure that the power switch is in the "OFF" position before plugging in the power cord to the electrical receptacle.
- 14. REMOVE ALL MAINTENANCE TOOLS** from the immediate area prior to turning "ON" the machine.
- 15. USE ONLY RECOMMENDED ACCESSORIES.**
Use of incorrect or improper accessories could cause serious injury to the operator and cause damage to the tool. If in doubt, check the instruction manual that comes with that particular accessory.
- 16. NEVER LEAVE A RUNNING TOOL UNATTENDED.** Turn the power switch to the "OFF" position. Do not leave the tool until it has come to a complete stop.
- 17. DO NOT STAND ON A TOOL.** Serious injury could result if the tool tips over, or you accidentally contact the tool.
- 18. DO NOT STORE ANYTHING ABOVE OR NEAR** the tool where anyone might try to stand on the tool to reach it.
- 19. MAINTAIN YOUR BALANCE.** Do not extend yourself over the tool. Wear oil resistant rubber soled shoes. Keep floor clear of debris, grease, and wax.
- 20. MAINTAIN TOOLS WITH CARE.** Always keep tools clean and in good working order. Keep all blades and tool bits sharp, dress grinding wheels and change other abrasive accessories when worn.
- 21. EACH AND EVERY TIME, CHECK FOR DAMAGED PARTS PRIOR TO USING THE TOOL.** Carefully check all guards to see that they operate properly, are not damaged, and perform their intended functions. Check for alignment, binding or breaking of moving parts. A guard or other part that is damaged should be immediately repaired or replaced.
- 22. DO NOT OPERATE TOOL WHILE TIRED, OR UNDER THE INFLUENCE OF DRUGS, MEDICATION OR ALCOHOL.**
- 23. SECURE ALL WORK.** Use clamps or jigs to secure the work piece. This is safer than attempting to hold the work piece with your hands.
- 24. STAY ALERT, WATCH WHAT YOU ARE DOING, AND USE COMMON SENSE WHEN OPERATING A POWER TOOL.** A moment of inattention while operating power tools may result in serious personal injury.

25. ALWAYS WEAR A DUST MASK TO PREVENT INHALING DANGEROUS DUST OR AIRBORNE PARTICLES, including wood dust, crystalline silica dust and asbestos dust. Direct particles away from face and body. Always operate tool in well ventilated area and provide for proper dust removal. Use dust extraction system wherever possible. Exposure to dust may cause serious and permanent respiratory or other injury, including silicosis (a serious lung disease), cancer, and death. Avoid breathing dust, and avoid prolonged contact with dust. Allowing dust to get into your mouth or eyes, or lay on your skin may promote absorption of harmful material. Always use properly fitting AS/NZS approved respiratory protection appropriate for the dust exposure, and wash exposed areas with soap and water.

26. USE A PROPER EXTENSION CORD IN GOOD CONDITION. Use of extension cords should be avoided where possible. When using an extension cord, be sure to have a cord heavy enough to carry the current your product will draw, and with compatible pin configuration and connections. NEVER use an extension cord rated at less than your machine. Longer run extensions will need heavier duty extension cords. Only connect your extension cord or machine to a receptacle that accepts your plug and never modify your plug to suit a receptacle.

DUST COLLECTOR SAFETY

INTENDED USE

This dust collector is only intended for collecting wood dust and chips from woodworking machines. Do not use this dust collector to collect metal, dirt, pebbles, drywall, asbestos, lead paint, silica, liquids, aerosols, or any flammable, combustible, or hazardous materials.

HAZARDOUS DUST

Dust created while using machinery may cause cancer, birth defects, or long-term respiratory damage. Be aware of dust hazards associated with each work piece material, and always wear a AS/NZS-approved respirator to reduce your risk.

DUST ALLERGIES

Dust from certain woods may cause an allergic reaction in people and animals. Make sure you know what type of wood dust you will be exposed to in case there is a possibility of an allergic reaction.

WEAR A RESPIRATOR

Fine dust that is too small to be caught in the filter will be blown into the ambient air during operation. Always wear a AS/NZS-approved respirator during operation and for a short time after to reduce your risk of permanent respiratory damage.

DUST COLLECTOR SAFETY

EMPTYING DUST

When emptying dust from the collection container, wear a respirator and safety glasses. Empty dust away from ignition sources and into an approved container.

DISCONNECT POWER SUPPLY

Turn the switch off, disconnect the dust collector from the power supply, and allow the impeller to come to a complete stop before leaving the machine unattended or doing any service, cleaning, maintenance, or adjustments.

SUSPENDED DUST PARTICLES AND IGNITION SOURCES

Do not operate the dust collector in areas where explosion risks are high. Areas of high risk include, but are not limited to, areas near pilot lights, open flames, or other ignition sources.

FIRE SUPPRESSION

Only operate the dust collector in locations that contain a fire suppression system or have a fire extinguisher nearby.

IMPELLER HAZARDS

Do not place your hands or tools near the open inlet during operation for any reason. The powerful suction could easily cause accidental contact with the impeller, which will cause serious personal injury or damage to the machine. Always keep small animals and children away from open dust collection inlets.

AVOIDING SPARKS

Do not allow steel or rocks to strike the impeller—this may produce sparks. Sparks can smolder in wood dust for a long time before a fire is detected. If you accidentally cut into wood containing tramp metal (nails, staples, spikes, etc.), immediately turn off the dust collector, disconnect it from power, and wait for the impeller to stop—then empty the

collection container into an approved airtight metal container.

OPERATING LOCATION

To reduce respiratory exposure to fine dust, locate permanently installed dust collectors away from the working area, or in another room that is equipped with a smoke detector. Do not operate the dust collector in rainy or wet locations. Exposure to water may create a shock hazard or decrease the life of the machine.

STATIC ELECTRICITY

Plastic dust lines generate high amounts of static electricity as dust chips pass through them. Although rare, sparks caused by static electricity can cause explosions or fire. To reduce this risk, make sure all dust lines are thoroughly grounded by using a grounding wire.

REGULAR CLEANING

Regularly check/empty the collection bags or drum to avoid the buildup of fine dust that can increase the risk of fire. Make sure to regularly clean the surrounding area where the machine is operated—excessive dust buildup on overhead lights, heaters, electrical panels, or other heat sources will increase the risk of fire.



No list of safety guidelines can be complete. Every shop environment is different. Accidents are frequently caused by lack of familiarity or failure to pay attention. Use this machine with respect and caution to lessen the possibility of operator injury. If normal safety precautions are overlooked or ignored, serious personal injury may occur.

ELECTRICAL SAFETY

WARNING

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 the path of least resistance for electric current and reduces the risk of electric shock. This tool may be equipped with an electric cord that has an equipment grounding conductor and a grounding plug. **The plug MUST Be plugged** into a matching electrical 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 electrical receptacle, have the proper electrical receptacle installed by a qualified electrician.

IMPROPER ELECTRICAL CONNECTION of the equipment grounding conductor can result in risk of electric shock. The conductor with the green insulation (with or without yellow stripes) is the equipment grounding conductor. **DO NOT** connect the equipment grounding conductor to a live terminal if repair or replacement of the electric cord or plug is necessary.

CHECK WITH A QUALIFIED ELECTRICIAN

or service personnel if you do not completely understand the grounding instructions, or if you are not sure the tool is properly grounded.

Use only a 3-wire extension cord that has a 3-prong grounding plug and a 3-pole receptacle that accepts the tool's plug. Replace a damaged or worn cord immediately.

Power tools and machinery are intended for use on a circuit that has an electrical receptacle as shown in **FIGURE A** that shows a 10 Amp 3-wire electrical plug and corresponding electrical receptacle that has a grounding conductor.

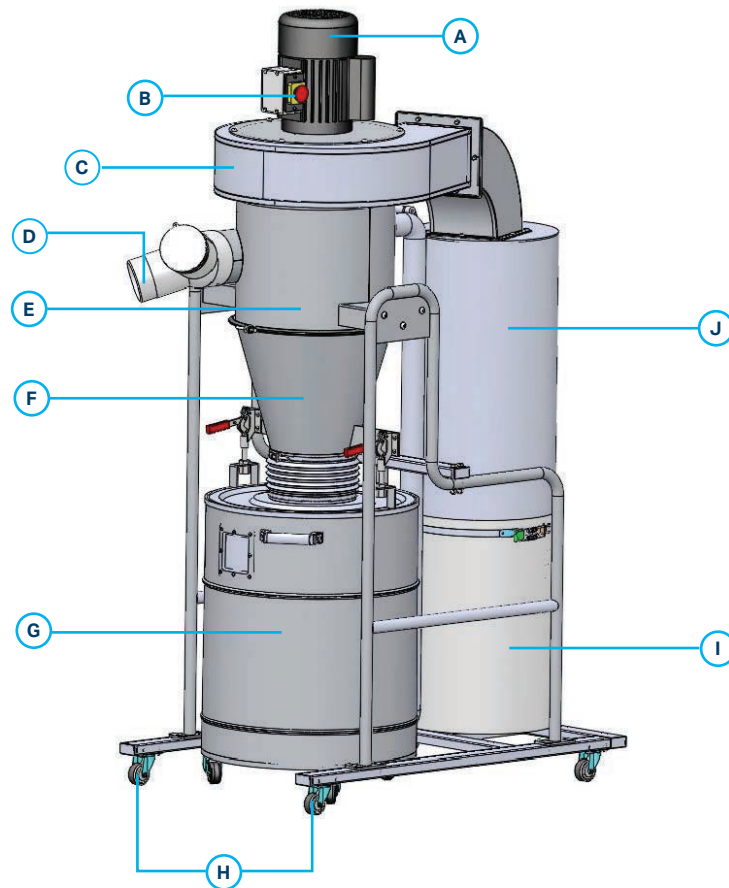
If this particular tool has been designed and fitted with a two prong electrical plug, ensure it displays the 'Double Insulated' logo shown in **FIGURE B**, before connecting to a 3-wire receptacle.

WARNING

Never modify the standard fitted electrical plugs to fit your receptacle.



OVERVIEW

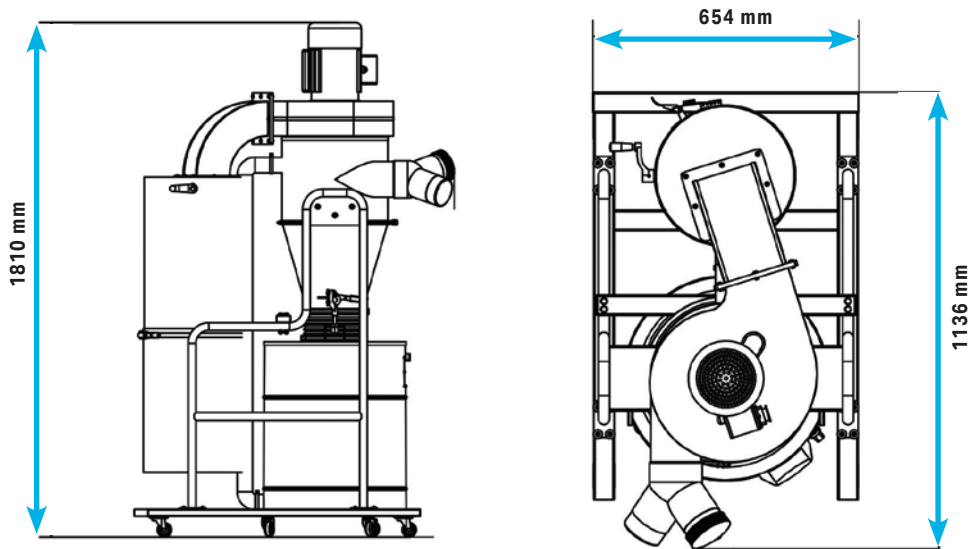


CDC-650P CYCLONE DUST COLLECTOR OVERVIEW

- | | |
|-------------------------|-------------------------|
| A. Motor | F. Cyclone funnel |
| B. ON / OFF switch | G. Dust collection drum |
| C. Impeller housing | H. Casters |
| D. Inlet adapter | I. Dust collection bag |
| E. Upper cyclone Funnel | J. Canister filter |

SPECIFICATIONS

CODE	CDC-650P
MOTOR	1500 W
FAN DIAMETER	305 mm
INLET DIAMETER	125 mm
NUMBER OF INTAKE HOLES	2 x 100 mm
AIR FLOW MAX	650CFM
CARTRIDGE FILTER SIZE	Ø 340 x 600 mm
CARTRIDGE FILTER RATE	99% at 1 micron
COLLECTION DRUM SIZE	Ø 500 x 1100 mm
COLLECTION DRUM VOLUME	0.118 m³
COLLECTION BAG SIZE	Ø 500 mm x 1100 mm; Ø 370 mm x 750 mm
OVERALL SIZE (LxWxH)	1136 x 654 x 1810 mm
PACKING SIZE	1080 x 650 x 1044 mm 1150 x 715 x 140 mm 650 x 430 x 430 mm



ASSEMBLY

To keep freight costs to a minimum and reduce damage in transport, this cyclone dust collector will require a significant amount of assembly and will require some heavy lifting. Ensure you have additional people to assist with lifting etc.

- The cyclone dust collector is not pre-assembled. After unpacking, the machine must be installed.
- Transport the dust collector in its packing crate to a place near its final installation site before unpacking it.
- If the packaging shows signs of possible transport damage, take the necessary precautions not to damage the machine when unpacking.
- If any damage is discovered, the carrier and/or shipper must be notified of this fact immediately to establish any claim which might arise.

A. PLACEMENT LOCATION

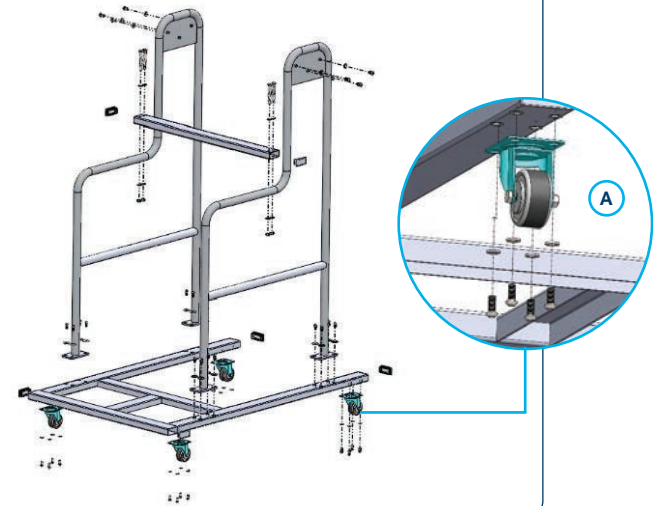
Consider anticipated workpiece sizes and additional space needed for auxiliary stands, work tables, or other machinery when establishing a location for this machine in the shop. See dimensions on page 13, for reference.

! CAUTION

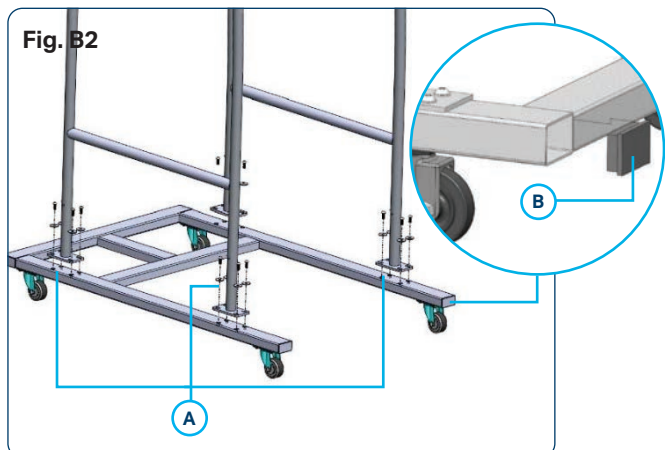
The machine is heavy.
DO NOT over-exert yourself while assembling the machine. Two or three people are required to safely assemble it.

**B. INSTALLING THE MAIN BRACKET**

1. Fix the casters on the base by hexagon socket flat head bolts and flat washers.

Fig. B1A**Fig. B1**

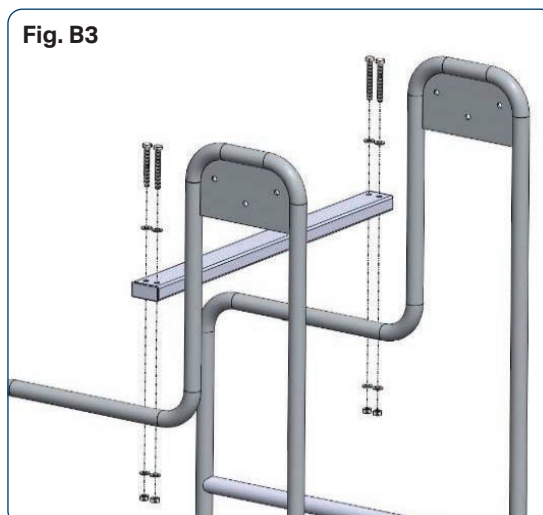
2. Fix the bracket on the base by hexagon socket flat head bolts and washers.

Fig. B2A**Fig. B2**

3. Insert the end cap into the four sides of the base.

Fig. B2B

4. Fix the connecting rod to the bracket by long bolts, flat washers and nuts.

Fig. B3**Fig. B3**

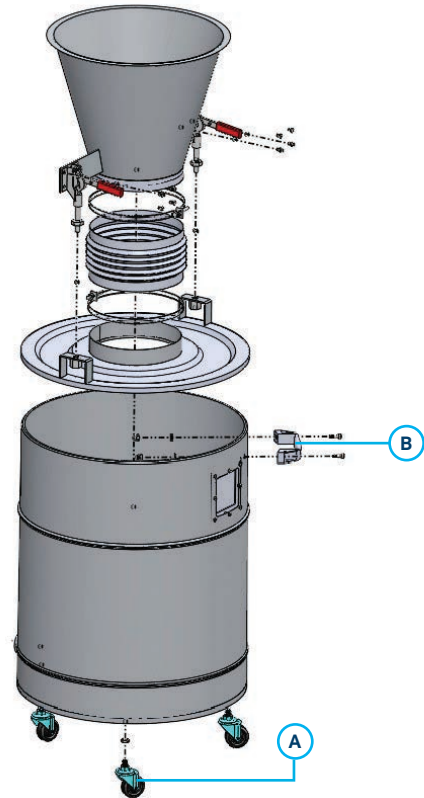
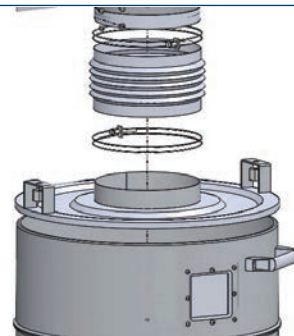
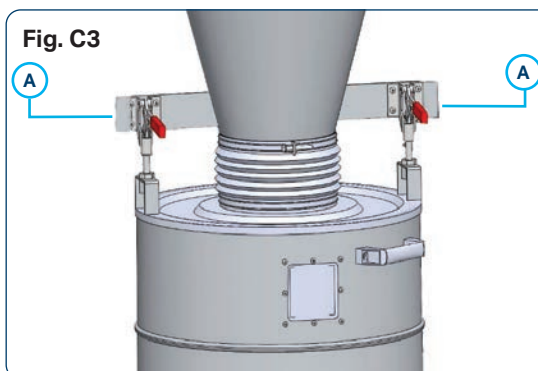
ASSEMBLY

**WARNING**

The main impeller housing is heavy and will require a total of three people to complete this final assembly.

C. DUST COLLECTION DRUM AND CYCLONE FUNNEL ASSEMBLY

1. Install the two inch casters on the bottom of the dust collection drum.
Fig. C1A
2. Install the handle on the drum by hexagon socket head bolts, flat washers and self-locking nuts.
Fig. C1B
3. Connect the cyclone funnel and the drum cover by steel clamps and flexible hose.
Fig. C2
4. Install the quick-locking handle with the 8 x machine screws and washers. Then lock the drum cover onto the cyclone funnel by the quick-locking handle. Adjust lid to drum seal with the 2 x nuts and locking nuts on the locking handles.
Fig. C3A

Fig. C1**Fig. C2****Fig. C3**

D. IMPELLER HOUSING ASSEMBLY

1. Connect the elbow, rubber gasket and impeller housing by hexagon socket pan head screws together.

Fig. D1A

2. Install the connector on the intake barrel.

Fig. D2A

Fig.D1

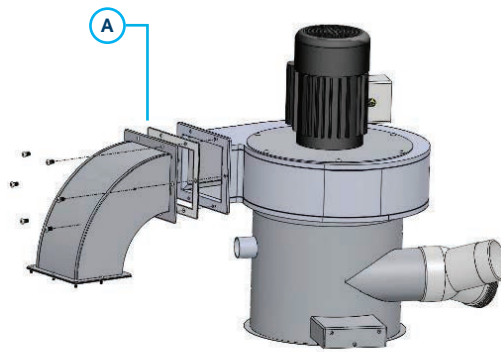
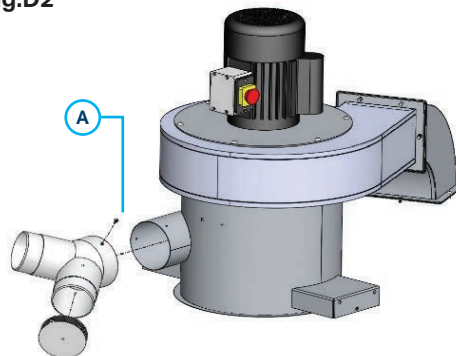


Fig.D2

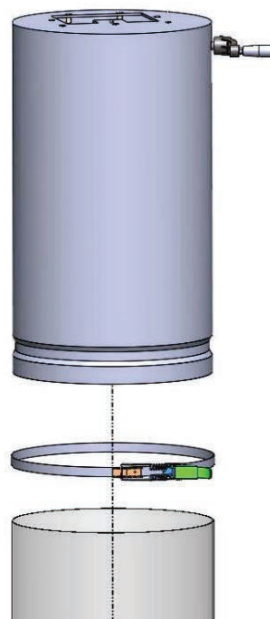


E. DUST COLLECTION BAG ASSEMBLY

1. Install the dust collection bag on the air filter by bag clamp.

Fig. E

Fig.E



ASSEMBLY

F. COMBINING BRACKET, FUNNEL, HOUSING & FILTER

This will require assistance.

1. Fix the intake barrel and impeller housing assembly on the bracket by hexagon socket flat head and flat washers.

Fig. F1A

2. Connect the intake barrel and cyclone funnel together.

Fig. F2

3. Connect the canister filter, rubber gasket and elbow together by the screws.

Fig. F1B

4. Place hose clamps on each end of vacuum hose, then connect hose to port on cyclone funnel and collection drum.

Fig. F3A&B

Fig. F1

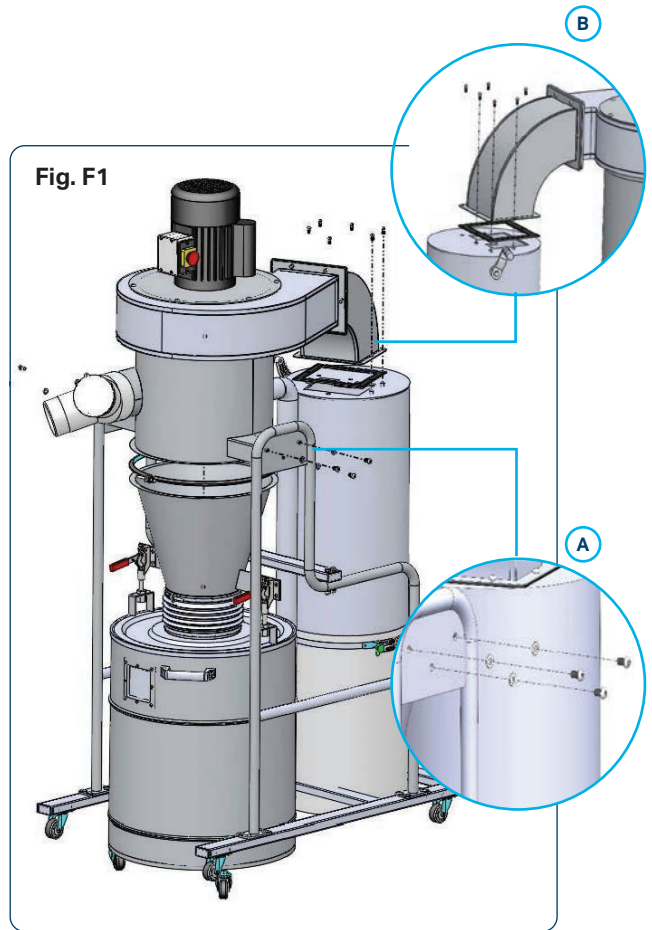


Fig. F2

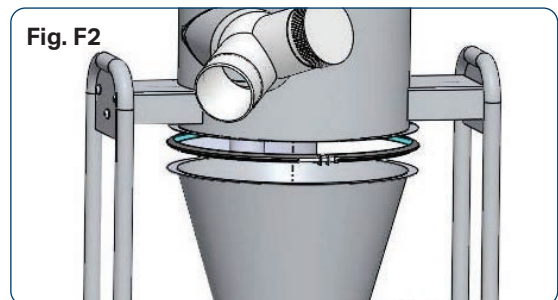
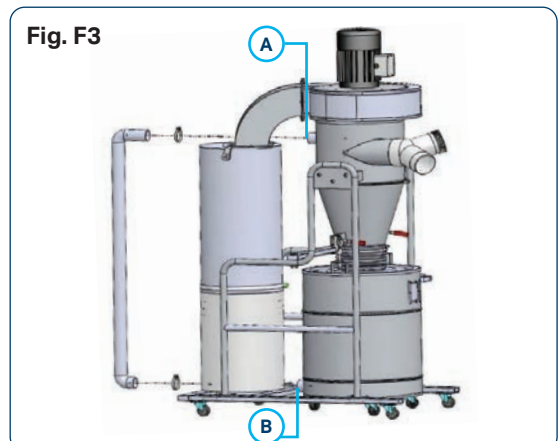


Fig. F3



G. CHECKING ASSEMBLY

1. This unit is fitted with a negative pressure system that retains the collection bag, within the collection drum. The small diameter hose is connected from the impellor housing, to the lower part of the collection drum with supplied hose clamps (Not illustrated).

If you wish to run the system in a bagless configuration, please ensure you use the supplied caps to block off the small diameter connections on both the impellor housing and collection drum.

Fig. G1

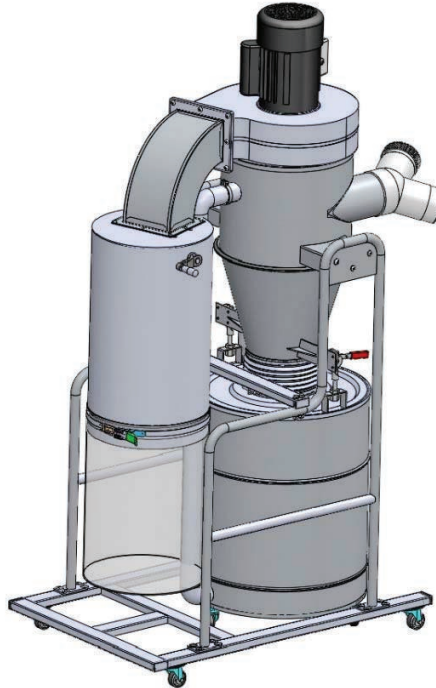
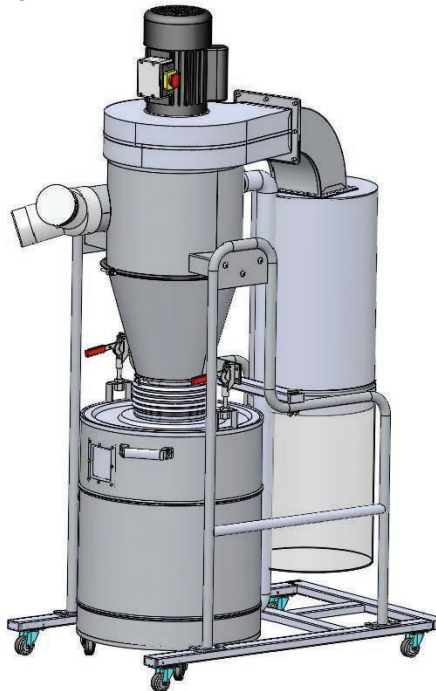


Fig. G2



ASSEMBLY

H. MACHINE TESTING

Once assembly is complete, test run the machine to ensure it is properly connected to power and safety components are functioning correctly. If you find an unusual problem during the test run, immediately stop the machine, disconnect it from power, and fix the problem BEFORE operating the machine again.



DANGER

DO NOT start machine until all preceding setup instructions have been performed. Operating an improperly set up machine may result in malfunction or unexpected results that can lead to serious injury, death, or machine/property damage.

1. Clear all setup tools away from machine.
2. Lock all swivel casters on base stand and dust collection drum.
3. Connect machine to the cyclone dust extractor or place covers over inlet adapter ports.

DO NOT operate the machine without first connecting it to a dust-collection system or covering an inlet adapter port. Otherwise, the lack of airflow resistance will cause the motor to operate at full amperage load, which could trip your circuit breaker or blow a fuse.

4. Connect machine to power.
5. Standing away from intake port, press button "ON" to turn machine on.
6. Verify motor starts up and runs smoothly without any problems or unusual noises.
7. Press "OFF" button to turn machine OFF.

I. OPTIONAL ACCESSORIES



- A. Blast gate
- B. Elbow
- C. Adaptor
- D. Connector
- E. Connector
- F. Grounding Kit
- G. Flexible hose
- H. Hose clamp
- I. Bag clamp
- J. Dust bag

More accessories available, please contact your local Carbatec store for more information.

OPERATION

J. OPERATION

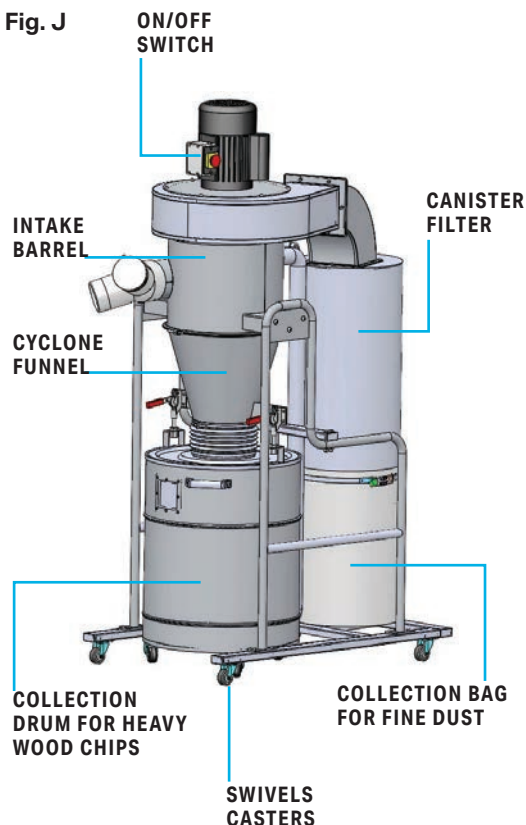
The purpose of this overview is to provide the novice machine operator with a basic understanding of how the machine is used during operation.

! CAUTION

If you are not experienced with this type of machine, we strongly recommend that you seek additional training outside of this manual. Read books, magazines or get formal training before beginning any projects.

- This cyclone dust extractor creates a vortex of incoming air that extracts heavy wood chips and large dust particles, and then drops them into the collection drum.
- The remaining fine dust travels past the impeller and is then caught by a canister filter and deposited in the plastic collection bag below.
- The spun-bond polyester filters are pleated to provide maximum surface area for efficient air flow.
- To maintain CFM during heavy dust extraction operations, turn the filter cleaning handle to knock caked-on dust into the plastic collection bag.
- Always lock the swivel casters before operation.

Fig. J



OPERATION

K. TIPS FOR OPTIMUM PERFORMANCE

- Avoid using more than 10" of flexible hose on any ducting line. The ridges inside flexible hose greatly increase static pressure loss, which reduces suction performance.
- Keep distance between the dust collector and machines as short as possible.
- Keep ducting directional changes to a minimum. The more curved fittings you use, the greater the loss of suction at the dust-producing machine.
- Gradual directional changes are more efficient than sudden directional changes (i.e. use 45° elbows in place of 90° elbows whenever possible).
- The simpler the system, the more efficient and less costly it will be.

L. CFM BY MACHINE TYPE

All woodworking machines require effective Dust extraction to ensure quality work and longevity of the machine itself. Most machines will have a minimum rated CFM extraction requirement available.

Please note that CFM requirement is usually measured at the point where the dust hose is connected to the machine's dust port, which is very different to the rated CFM of the dust collector. The length and complexity of your entire dust extraction and collection network should be taken into account.

Bandsaws & Table Saws

Lower volume waste producing machines (with smaller particles) such as bandsaws & table saws require a minimum airflow rating between 400 and 500 CFM to work efficiently

Thicknessers, Jointers & Router Tables

High volume waste producing machines (such as thicknessers, jointers & router tables) require a minimum airflow rating at the machine, between 750 and 950 CFM

Wide Drum & Belt Sanders

Wide Drum & Belt Sanders, despite their lack of heavy waste production, require significant CFM rating to remove the dust and keep the sandpaper from clogging prematurely, both types requiring in excess of 950 CFM at the machine to work efficiently and not affect the machine's warranty.

MAINTENANCE

M. MAINTENANCE SCHEDULE

For optimum performance from this machine, this maintenance schedule must be strictly followed ongoing.

If you ever observe any of the below, shut down the machine immediately and fix the problem before continuing operations:

- Loose mounting bolts
- Damaged filter canister, cleaning paddle components, or collection bags
- Worn or damaged wires
- Suction leaks
- Any other unsafe condition

Every month, clean and vacuum dust buildup off machine body and motor.

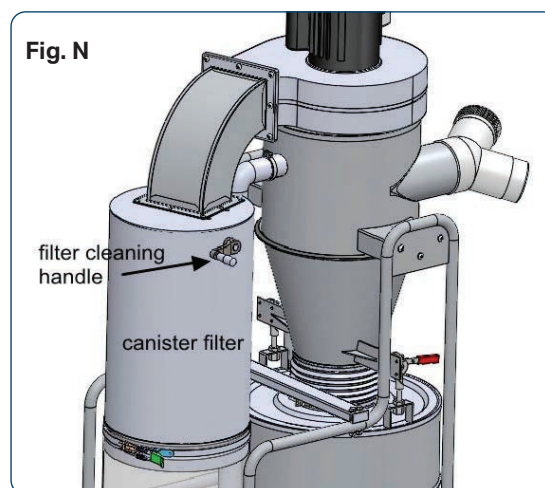
DO NOT allow the collection bag to fill completely.

N. CLEANING CANISTER FILTER

This dust extractor uses a handle and internal paddles to remove dust buildup and debris from the filter pleats.

1. Turn the handle through its range of motion to clean the canister filter.
2. Knock dust cake into the filter bag.

For a more thorough cleaning every few months under heavy use, wash the filter by hand.



CAUTION

To contain wood dust and minimize risk of exposure, firmly tie bag closed.

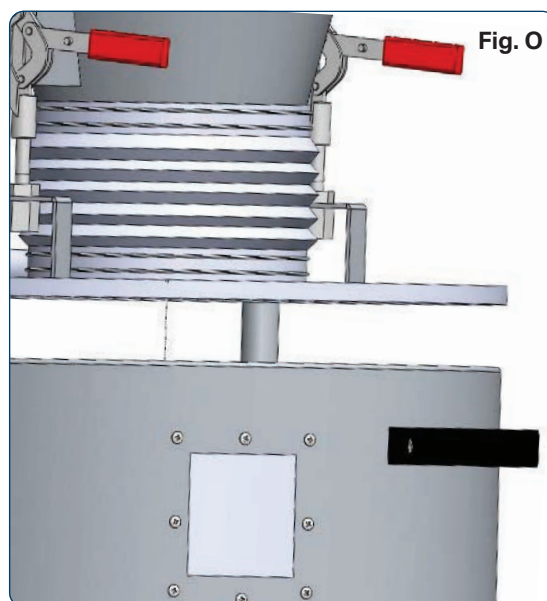
MAINTENANCE

O. REMOVING/REPLACING COLLECTION DRUM BAG

Dispose of the collection drum bag when dust fills it 3/4 full. Replace the bag if it develops a leak or becomes damaged.

Fig. O

1. Disconnect machine from power.
2. Loosen the two drum lock handles which tighten the drum cover to the collection drum.
3. Take out the inner drum from the collection drum.
4. Clean or replace the bag.
5. Put the inner drum into the cleaned or new bag.
6. Tighten the drum cover to the collection drum by using the clamps.



P. REMOVING/REPLACING FILTER BAG

Remove and replace the filter bag when it is about half full.

Fig. P

1. Disconnect machine from power.
2. Release clamp around bottom of canister filter
3. Remove filter bag
4. Attach new filter bag around bottom of canister filter and secure with clamp.

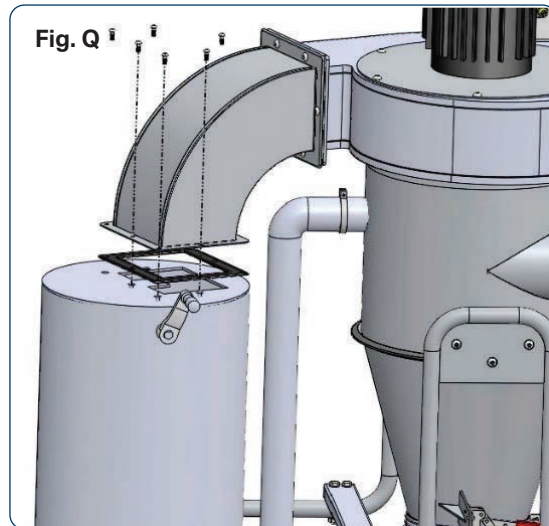


Q. REMOVING/REPLACING CANISTER FILTER

If the canister filter is clogged or dirty and cleaning it does not improve dust-extraction performance, the canister filter must be replaced.

Fig. Q

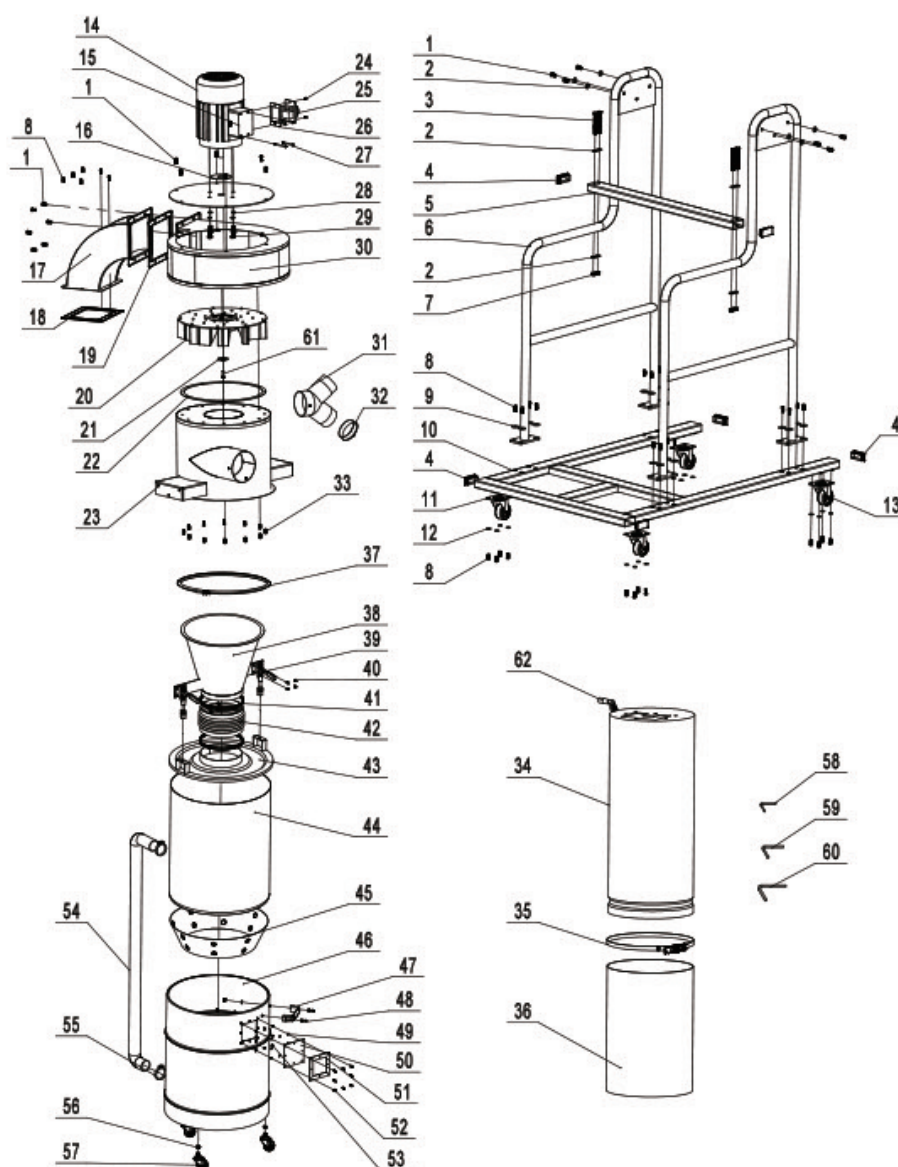
1. Disconnect machine from power.
2. Loose the screws which fixed the rubber gasket and canister filter to the elbow.
3. Install the rubber gasket and new canister filter to the elbow by the screws.



WARNING

Dust exposure created while using machinery may cause cancer, birth defects, or long-term respiratory damage. Always wear goggles and a AS/NZS 1716:2012 compliant approved respirator when working with the dust collection bags or canisters.

PARTS DIAGRAM



Cyclone Dust Extractor
CDC-650P

PARTS LIST

PART REF.	PART NUMBER	DESCRIPTION	QTY	PART REF.	PART NUMBER	DESCRIPTION	QTY
1	CDC-650P-001	HEXAGON SOCKET SCREW M8X16	18	33	CDC-650P-033	HEXAGON SOCKET SCREW M6X10	12
2	CDC-650P-002	FLAT WASHER 8	16	34	CDC-650P-034	CARTRIDGE FILTER	1
3	CDC-650P-003	HEXAGON SOCKET SCREW M8X70	4	35	CDC-650P-035	HOSE CLAMP	1
4	CDC-650P-004	END CAP	6	36	CDC-650P-036	DUST COLLECTION BAG	1
5	CDC-650P-005	CONNECTING ROD	1	37	CDC-650P-037	STEEL HOOP	1
6	CDC-650P-006	BRACKET	2	38	CDC-650P-038	CYCLONE FUNNEL	1
7	CDC-650P-007	HEXAGON NUT M8	4	39	CDC-650P-039	QUICK-LOCKING CLAMP	2
8	CDC-650P-008	COUNTERSUNK NUT M6X15	32	40	CDC-650P-040	SCREW M5X8	8
9	CDC-650P-009	WASHER	16	41	CDC-650P-041	STEEL CLAMP	2
10	CDC-650P-010	BASE	1	42	CDC-650P-042	FLEXIBLE HOSE	1
11	CDC-650P-011	CASTER	2	43	CDC-650P-043	DRUM COVER	1
12	CDC-650P-012	FLAT WASHER	23	44	CDC-650P-044	DUST COLLECTION BAG	1
13	CDC-650P-013	CASTER	2	45	CDC-650P-045	BRACKET	1
14	CDC-650P-014	MOTOR	1	46	CDC-650P-046	DUST COLLECTION DRUM	1
15	CDC-650P-015	SCREW M4X60	4	47	CDC-650P-047	HANDLE	1
16	CDC-650P-016	RUBBER GASKET	1	48	CDC-650P-048	HEXAGON SOCKET SCREW M8X20	2
17	CDC-650P-017	ELBOW	1	49	CDC-650P-049	FLAT WASHER	8
18	CDC-650P-018	RUBBER GASKET	1	50	CDC-650P-050	PLASTIC PLATE	1
19	CDC-650P-019	RUBBER GASKET	1	51	CDC-650P-051	RUBBER GASKET	1
20	CDC-650P-020	IMPELLER	1	52	CDC-650P-052	SCREW M4x12	8
21	CDC-650P-021	RETAINING RING	1	53	CDC-650P-053	HEXAGON THIN NUT M10	8
22	CDC-650P-022	RUBBER GASKET	1	54	CDC-650P-054	FLEXIBLE HOSE Ø 50	1
23	CDC-650P-023	DUST TUBE	1	55	CDC-650P-055	HOSE CLAMP	2
24	CDC-650P-024	SCREW M4X12	2	56	CDC-650P-056	HEXAGON THIN NUT M10	3
25	CDC-650P-025	SWITCH	1	57	CDC-650P-057	CASTER	3
26	CDC-650P-026	SWITCH BOARD	1	58	CDC-650P-058	ALLEN WRENCH S4	1
27	CDC-650P-027	SCREW M4X60	4	59	CDC-650P-059	ALLEN WRENCH S5	1
28	CDC-650P-028	SPRING WASHER	4	60	CDC-650P-060	ALLEN WRENCH S6	1
29	CDC-650P-029	HEXAGON HEAD BOLT M10X20	4	61	CDC-650P-061	HEXAGON SOCKET SCREW M6X20	1
30	CDC-650P-030	IMPELLER HOUSING	1	62	CDC-650P-062	FILTER HANDLE	1
32	CDC-650P-032	CAP	1				

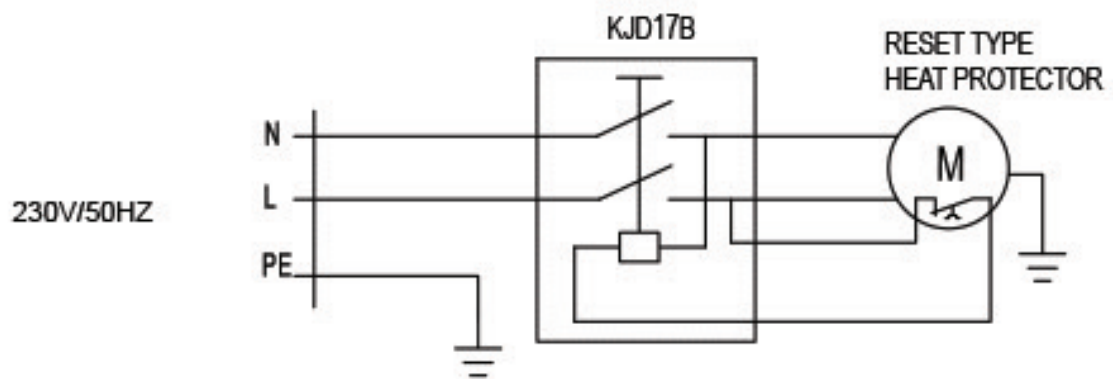
TROUBLESHOOTING

TO PREVENT INJURY TO YOURSELF or damage to the cyclone dust collector, turn the switch to the **"OFF"** position and unplug the power cord from the electrical receptacle before making any adjustments.

PROBLEM	LIKELY CAUSE(S)	SOLUTION(S)
Machine does not start, or power supply fuse or breaker trips immediately after startup.	1. Cyclone dust collector not properly connected to ducting.	Connect dust collector to ducting.
	2. Incorrect power supply voltage or circuit size.	Ensure correct power supply voltage and circuit size.
	3. Power supply circuit breaker tripped or fuse blown.	Ensure circuit is sized correctly and free of shorts.
	4. Motor overheated.	Reset circuit breaker or replace fuse.
	5. Wiring open / has high resistance.	Allow motor to cool, reset overload if necessary.
	6. Power switch at fault.	Check and fix broken, disconnected, or corroded wires.
	7. Capacitor at fault.	Test and replace.
	8. Motor at fault.	Test and repair or replace.
Machine seems underpowered.	1. Motor overheated.	Allow motor to cool, reset overload if necessary.
	2. Dust-extraction ducting problem.	Clear blockages, seal leaks, use smooth-wall duct, eliminate bends, close other branches.
	3. Canister filter clogged or at fault.	Clean canister filter. Replace canister filter.
	4. Dust extractor too far from machine or undersized for dust extraction system.	Move closer to machine or redesign ducting layout or upgrade dust extractor.
	5. Capacitor at fault.	Test and repair or replace.
	6. Motor bearings at fault.	Test by rotating shaft. Rotational grinding or loose shaft requires bearing replacement.
Machine has vibration or noisy operation.	1. Motor or component loose.	Inspect, replace damaged bolts and nuts, and retighten with thread-locking fluid.
	2. Motor fan rubbing on fan cover.	Fix replace fan cover. Replace loose or damaged fan.
	3. Motor mount loose or broken.	Tighten or replace.
	4. Impeller damaged, unbalanced, or loose.	Inspect, tighten or replace.
	5. Motor bearings at fault.	Test by rotating shaft. Rotational grinding or loose shaft requires bearing replacement.
	6. Motor shaft bent.	Test with dial indicator. Replace motor if damaged.

PROBLEM	LIKELY CAUSE(S)	SOLUTION(S)
Dust extractor does not adequately collect dust or chips; poor performance.	1. Collection bag full.	Empty collection bag.
	2. Canister filter clogged or at fault.	Clean canister filter. Replace canister filter.
	3. Ducting blocked or restricted.	Remove ducting from dust collector inlet and unblock restriction. A plumbing snake may be necessary.
	4. Dust collector too far away from point of suction. Duct clamps not properly secured. Too many sharp bends in ducting.	Relocate dust collector closer to point of suction. Re-secure ducts. Remove sharp bends.
	5. Lumber is wet and dust is not flowing smoothly through ducting.	Only process timber with less than 20% moisture content.
	6. Ducting has one or more leaks, or too many open ports.	Seal or eliminate all ducting leaks. Close dust ports for lines not being used.
	7. Not enough open branch lines at one time, causing velocity drop in main line.	Open 1 or 2 more blast gates to different branch lines to increase main line velocity.
	8. Ducting and ports are incorrectly sized.	Install correctly sized ducts and fittings.
	9. The machine dust-extraction design inadequate.	Use dust-extraction hood on stand.
	10. Dust collector undersized.	Install larger dust collector.
Dust extractor blows sawdust into the air.	1. Duct clamps or filter bag(s) are not properly clamped and secured. Ducting loose or damaged.	Re-secure ducts and filter bag, making sure duct and bag clamp are tight. Tighten or replace ducting.
	2. Cylinder or funnel seals are loose or damaged.	Retighten all mounting and sealing points. Replace damaged seals/gaskets.
Loud, repetitious noise, or excessive vibration coming from dust extractor (non-motor related).	1. Dust extractor not on a flat surface and wobbles.	Stabilize dust collector. Lock casters.
	2. Impeller damaged and unbalanced.	Inspect and replace.
	3. Impeller loose on the motor shaft.	Secure impeller. Replace motor and impeller as a set if motor shaft and impeller hub are damaged.

WIRING DIAGRAM



2 YEAR WARRANTY

WARRANTY

- A. We warrant that this Carbatec product will be free from defects caused by faulty workmanship or faulty materials for a period of 2 years from date of sale.
- B. This warranty is in addition to other rights and remedies you may have under a law in relation to the goods.
- C. This warranty does not apply in any of the following cases:
 - i. Defects arising from:
 - 1. fair wear and tear;
 - 2. corrosive atmosphere;
 - 3. damage or injury caused by deliberate act, lack of care or failure to comply with the recommended care and maintenance for the goods;
 - 4. improper use of the goods;
 - 5. alterations or repairs (not made by us) to the goods;
 - ii. defects arising from an event outside of our control such as fire, flood, earthquake or other natural calamity, motor vehicle or other accident, strike, civil unrest, terrorism or war;
 - iii. to accessory items such as after-market jigs, accessories or other items which are not sold or serviced by us and which are not sold with or were not included with the main unit purchased; or
 - iv. to wearable parts such as drive belts/shafts, bearings, bandsaw tyres, motor brushes, blades or abrasive belts/discs or other cutting or machining implements.
 - v. damage caused to any electrical component, where connected to a power supply outside the country for which it was designed (namely Australia or New Zealand).
- D. If this warranty applies and you have complied with the procedure below for making a claim, we will, at our election, either repair the goods (or those parts of the goods recognised as defective) or will provide a replacement within a reasonable time at our expense.
- E. If this warranty applies, the procedure for making a claim is:
 - i. you must contact us by email;
 - ii. you must include in the email the following information:
 - 1. a copy of the order or receipt for the goods;
 - 2. the serial or batch number printed on the machinery manufacturing plate; and
 - 3. a detailed description of the fault and how and when it arose; and
 - 4. If the fault is a type covered by this warranty, we will then make arrangements with you for the return of the goods to us (for repair or replacement) at our cost using our transport providers or we may decide to attend at your premises to repair or replace the goods.
- F. Our liability (and that of our resellers) under this warranty is wholly limited to repair or replacement of the goods (or those parts of the goods recognised as defective) in accordance with the procedure above and you have no right to other compensation, costs or damages under this warranty. But this does not mean that you may not have other rights under a law in relation to the goods.
- G. If following our inspection of goods returned by you under this warranty it is found that this warranty does not apply and you are not otherwise entitled to repair or replacement by us, you must, if requested by us, reimburse our costs including parts, labour and freight.
- H. This warranty is not transferable and only the person who purchased the goods may make a claim.

Where the goods have been exported outside Australia or New Zealand, the Company may not require the Purchaser to return any allegedly faulty or defective Product for evaluation. However, the Company has the right to request the return for evaluation at purchasers cost.

STATUTORY NOTICE

Our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.



Carbatec Pty Ltd

E info@carbatec.com.au

AU: 1800 658 111

NZ: 0800 444 329

1/364 New Cleveland Rd,
Tingalpa QLD 4173,
Australia

ABN 84 010 706 242

carbatec.com.au

carbatec®

2 YEAR
WARRANTY