

CD300A

Instruction Cyclone Dust Collector Manual

IMPORTANT

For your safety read instructions carefully before assembling or using this product. Save this manual for future reference.



HEALTH AND SAFETY GUIDELINES

Always follow the instructions provided with the manual. Always wear safety glasses when using woodworking equipment. Always disconnect the power before adjusting any equipment. Failure to observe proper safety procedures and guidelines can result in serious injury.

WARNING: Do not allow familiarity (gained from frequent use of your machine and accessories) to become commonplace. Always remember that a careless fraction of a second is sufficient to inflict severe injury.



Always wear safety glasses when using woodworking equipment.



Always read the instructions provided before using woodworking equipment.

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1. GENERAL INFORMATION

1.1 FOREWORD

Some information and illustrations in this manual may difer from the machine in your possession, since all the configurations inherent in the machine complete with all the optionals are described and illustrated. Therefore, refer only to that information strictly connected with the machine configuration you have purchased.

With this manual we would like to provide the necessary information for maintenance and proper use of the machine. The distribution network is at your service for any technical problem, spare parts or any new requirement you may have for the development of your activity.

This manual must be read and understood before operating the machine. This will provide a better working knowledge of the machine, for increased safety and to obtain the best results.

To facilitate its reading, the manual has been divided into sections pointing out the most important operations. For a quick research of the topics, it is recommended to consult the index. To better stress the importance of some basic passages, they have been marked by some preceding symbols:



Indicates imminent risks which may cause serious injury to the operator or other persons. Be careful and scrupulously follow the instructions.

A statement advising of the need to take care lest serious consequences result in harm to material items such as the asset or the product.

1.2 MACHINE IDENTIFICATION

There is a identification plate fixed to the machine, containing the manufacturer's data, year of construction, serial number and technical specifications.

1.3 CUSTOMER SERVICE RECOMMENDATIONS

Apply the machine to skilled and authorized technical staff to carry out any operation dealing with parts disassembly. Keep to the instructions contained in this manual for the correct use of the machine.



Only skilled and authorized staff shall use and service the machine after reading this manual. Respect the accident prevention regulations and the general safety and industrial medicine rules.

2. SAFETY PRECAUTIONS

2.1 SAFETY REGULATIONS

WARNING Read carefully the operation and maintenance manual before starting, using, servicing and carrying out any other operation on the machine.

The manufacturer disclaims all responsibilities for damages to persons or things, which might be caused by any failure to comply with the safety regulations.

- The machine operator shall have all necessary prerequisites in oder to operate a complex machiery.

- It is prohibited to use the machine when under the influence of alcohol, drugs or medication.

- All the operators must be suitably trained for use, adjustment and operation of the machine.

- The operators must carefully read the manual paying particular attention to the warning and safety notes. Furthermore, they must be informed on the dangers associated with use of the machine and the precautions to be taken, and must be instructed to periodically inspect the guards and safety devices.

- Before carrying out adjustment, repair or cleaning work, disconnect the machine from the electric power by setting the main switch to stop.

- The working area around the machine must be kept always clean and clear, in order to have an immediate and easy access to the switchboard.

- Never place hands among the moving parts and/or materials.

- Keep the tools tidy and far away from those not authorized persons.

- Never employ cracked nor uckled, neither not correctlyreground tools.

- Carefully clean the rest surfaces of tools and make surethat they find perfectly horizontally positioned, and with no dents at all.

- Always wear gauntlets when handling the tools.

- Never start the machine before having correctly installed all the protections.

- Never open doors or protections when the machine or the system is operating.

- Many unpleasant experiences have shown that anybody may wear objects which could cause serious accidents. Therefore, before starting working, take any bracelet, watch or ring off.

- Button the working garment sleeve well around the wrists.

- Take any garment off which, by hanging out, may get tangled in the MOVING UNITS.

- Always wear strong working footwear, as prescribed by the accident-prevention regulations of all countries.

- Use protection glasses. Use appropriate hearing protection systems (headsets, earplugs, etc.) and dust protection masks.

- Never let unauthorized people repair, service or operate the machine.

- The manufacturer is not responsible for any damage deriving from arbitrary modifications made to the machine.

- Any transport, assembly and dismantling is to be made only by trained staff, who shall have specific skill for the specified operation.

- The operator must never leave the machine unattended during operation.

- During any working cycle break, switch the machine off.

- In case of long working cycle breaks, disconnect the general power supply.

2.2 RESIDUAL RISKS

Despite observance of all the safety regulations, and use according to the rules described in this manual, residual risks may still be present, among which the most recurring are:

- contact with tool
- contact with moving parts (belts, pulleys, etc..)
- recoil of the piece or part of it
- accidents due to wood splinters or fragments
- tool insert ejection
- electrocution from contact with live parts
- danger due to incorrect tool installation
- inverse tool rotation due to incorrect electrical connection
- danger due to dust inhalation in case of working without vacuum cleaner.

Bear in mind that the use of any machine tool carries risks.

Use the appropriate care and concentration for any type of machining (also the most simple).

The highest safety is in your hands.

2.3 SAFETY AND INFORMATION SIGNALS

This signals may be applied on the machine; in some cases they indicate possible danger conditions, in others they serve as indication.

Always take the utmost care.

SAFETY SIGNALS:



Risk of eye injury. Wear eye protection.



Wear hearing protection systems.



Danger of electric shock. Do not access the area when the machine is powered.



Carefully read and understand the manual before using the machine.

INFORMATION SIGNALS:

Indicate the technical characteristics, direction of rotation and inclination, block and release, etc. Carefully following the directions to simply the use and adjustment of the machine. The signals are graphically described and do not require further explanation.

3. SPECIFICATIONS

MAIN COMPONENTS 3.1



- 1- Box assembly
- 2- Fan as
- 3- Base as

- 4- Switch box assembly5- Cartridge assembly

TECHNICAL SPECIFICATION 3.2

Air Flow	3000m³/hr
Motor Power	3HP
Motor Speed	2800rpm
Volt	220V-240V/50Hz,380-415V/50Hz
Amps	17A,4.5A
Filter Rating	1 Micron
Inlet Dia.	1atФ200mm,3atФ100mm
Canister Filter Length	660mm
Canister Filter Dia.	Ф400mm
Capacity	174L
Net Weight	145Kgs

4. WIRING DIAGRAM

This machine must be grounded. Replacement of the power supply cable should only be done by a qualified electrician.





5. CONTENTS OF PACKAGE

Unpacking and Checking Contents

Carefully unpack your cyclone dust collector from its carton and check to see that you have all of the following items. If any parts are missing or broken, please call Customer Service as soon as possible for replacements. Do not turn your machine ON if any of these items are missing. You may cause injury to yourself or damage to your machine.



-8-

6. ASSEMBLY



The machine must not be plugged in and the power switch must be in the OFF position until assembly is complete.

6.1 TOOLS REQUIRED FOR ASSEMBLY

Inner hexagon spanner,3mm、4mm、5mm and 6mm(provided)

Combination wrench,10mm and 13mm(provided)

6.2 UNPACKING AND CLEAN-UP

6.2.1.Open the wooden box of the main engine.(See FIG.6.2.1) -Loosen the hexagon head bolts E in the box and take out the

packing pressing plate C_{n} D from the spare parts.

-Loose the tapping screw B and take out the packing pressing plate C from the wooden pallet A.

Carefully remove all contents from the shipping carton and box Compare the contents with the list of contents to make sure that all of the items are accounted for, before discarding any packing material. Place parts on a protected surface for easy identification and assembly. If any parts are missing or broken, please call Customer Service as soon as possible for replacements. DO NOT turn your machine ON if any of these items are missing. You may cause injury to yourself or damage to the machine.

6.2.2.Report any shipping damage to your local distributor.Take photographs for any possible insurance claims.

6.2.3.Clean all rust protected surfaces. Do not use; gasoline, paint thinner, mineral spirits, etc. These may damage painted surfaces.

6.2.4.Set packing material and shipping carton to the side. Do not discard until machine has been set up and is running properly. The cyclone dust collector is to circulate air and filter wood and other non-metallic dust. The unit requires only minimal assembly. However, it is important to consider how and where to place the unit in your shop. When selecting a site, make sure there is a suitable power source.

6.3 SPECIFIC ASSEMBLY

6.3.1 Install the column assembly (See FIG.6.3.1)

-Fix the handle F on the left column C and the right column B through screws G and flange nuts E.

-Fix the left column C and the right column B on the base assembly H with flange bolts D .

-Fix both sides of the column support A with the left column C and the right column B respectively through flange bolts D .

6.3.2 Installing cardan wheel (See FIG.6.3.2)

-Align the bolts on the universal wheel B with the nuts on the bottom of the dust bucket A, and then fix the universal wheel B and the dust bucket A by rotating the screws.





FIG. 6.3.1



FIG. 6.3.2

6.3.3 Place the vacuum bucket plastic bag (See FIG.6.3.3)

-Turn the opening of the plastic bag B of the vacuum bucket along the edge of the vacuum bucket C, and the inside is close to the bucket body.

-Put the small steel ring of the support assembly A downward into the dust bucket C ,and press the plastic bag B smoothly.



FIG.6.3.3

6.3.4 Install the dust cover assembly (See FIG.6.3.4)

WARNING

-Connect the upper dust hood assembly A and the column assembly C with hexagon bolts B.

The dust cover assembly is heaby. Two-person lift, or use hoist.



FIG.6.3.4

6.3.5 Install the fan assembly and adapter assembly (See FIG.6.3.5)

-Connect the fan assembly B with the upper vacuum hood assembly C through the hexagon flange bolt A.

-Connect the adapter assembly D and the upper vacuum hood assembly C together with the hexagon socket flat head screw E.



FIG.6.3.5

6.3.6 Install the switch box assembly (See FIG.6.3.6)

-Align the four holes on the edge of the switch box assembly A with the four screws on the column assembly C,and then fix them to the bottom with nuts B.



FIG.6.3.6

6.3.7 Installing the vacuum bucket cover (See FIG.6.3.7)

-Align the holes on both sides of the dust suction barrel cover B with the two screws of the centrifugal assembly A,one gasket C and nut D on the upper and lower part respectively, and tighten the screw after aligning with the nut (both sides).

-Align the upper edge of dust suction barrel cover B with the inner hole of vent pipe E,and then tighten it with hose clamp F.



FIG.6.3.7

6.3.8 Install the cartridge assembly (See FIG.6.3.8)

-Align the edge hole of filter cartridge assembly B with the threaded hole of upper vacuum hood A, and fasten it with blue bolt C .

-Clamp the plastic bag D of the filter element with the spring clip on the filter cartridge assembly B, align the bag mouth with the filter element, and then fasten it together with the clip assembly E.



FIG.6.3.8

7. OPERATION

The cyclone dust collector can be operated directly using the control panel.

7.1 START/STOP

Press green start button A to start dust collector. Press red stop button B to stop.(See FIG. 7.1)

7.2 DUST HOSE CONNECTION

Use proper type hose to connect dust collector to machine(s) being operated. Dryer vent hose is not acceptable for this purpose. Secure hose at both ends with proper clamps.

If an inlet port is not being used, it should remain capped. An open port will diminish the machine's efficiency, and may create a safety hazard.

You can customize your installation and obtain maximum performance with dust hoods, hoses, clamps, fittings.



FIG. 7.1

8. MAINTENANCE

8.1 CHANGING THE FILTERS

NOTE: Care should be taken when handling soiled or contaminated filters.As certain fine dusts can be harmful .Always wear a suitable mask for additional protection.

Check the filters periodically, depending on the amount of use, and change the filters when needed. Clogged filters will reduce the amount of air circulating through the filter.

8.1.1.Loosen flange bolt C and remove filter cartridge assembly B from dust collection hood A.



FIG.8.1.1

8.1.2.Removing filter element (See GIG.8.1.2)
-Loosen screw B and take out upper fixing plate A.
-Loosen the screw C and take out the upper fixed disc D from the filter element E.

-Loosen screw G and take lower disc assembly F out of filter element E.

8.1.3.Replace with a new filter cartridge(See GIG.8.1.2)

-Replace the filter element assembly with a new one ,and align the peripheral holes of the upper fixed disc D with the threaded holes of the filter element E, and tighten them with screws C.

-Align the holes at both ends of the upper fixed plate A with the threaded holes of the filter element E, and then tighten the screws B.

-Align the peripheral holes of the lower fixed disc F with the threaded holes of the filter element E, and fasten them with screws G.

8.1.4.Install the cartridge assembly(See FIG.6.3.8)



FIG.8.1.2

8.2 CLEANING AND BAG INSPECTION (See FIG.6.3.8)

Clean canister filter frequently to keep the collector's performance at its optimum. To clean filter, turn handle a couple of rotations so dust falls into attached collection bag. Empty or replace canister and drum collection bags when full.

8.3 MOTOR INSPECTION

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

8.4 ADDITIONAL SERVICING

No lubrication is required for the dust collector. Any other servicing should be performed by an authorized service representative.

9. TROUBLESHOOTING

ELECTRICAL AND MOTOR PROBLEMS

Symptom	Possible cause	Correction
Motor will not start.	No incoming current.	Check connections at plug or circuit panel.
	Low voltage.	Check power line for proper voltage
	Open circuit in motor or loose connection.	Inspect all connections to switch box and motor for loose or open connections.
	Faulty start switch.	Inspect and replace switch if needed.
	Faulty start capacitor.	Replace capacitor.
	Faulty motor.	Inspect and replace motor if needed.
Motor will not start: fuse blows or circuit	Too many machines on shared circuit.	Connect dust collector to dedicated circuit.
breaker trips.	Short circuit in line cord or plug.	Inspect cord or plug for damaged insulation and shorted wires.
	Short circuit in motor or loose connections.	Inspect all connections on motor for loose or shorted terminals or worn insulation.
	Incorrect fuse or circuit breaker in power line.	Install correct fuse or circuit breaker at power source.
Motor overheats.	Motor overloaded.	Reduce load on motor.
	Air circulation through motor is restricted.	Clean motor fan with compressed air to restore normal air circulation.
Motor stalls, resulting	Motor overloaded.	Reduce load on motor.
tripped circuit.	Short circuit in motor or loose connections.	Inspect connections on motor for loose or shorted terminals or worn insulation.
	Low voltage.	Correct low voltage conditions.
	Incorrect fuse or circuit breaker in power line.	Install correct fuse or circuit breaker.
Loud noise or	Loose fasteners.	Inspect machine and tighten all fasteners
machine.	Motor fan is hitting the cover.	Tighten fan or shim cover. Replace fan cover if damaged.
	Impeller is damaged.	Replace impeller.
Poor performance; lack of suction.	Hose improperly secured at dust origination point.	Inspect and remedy.
	Inlet port is open.	Cap unused inlet ports.
	Collection bag is full.	Empty bag (check sight window).
	Collection drum not sealed properly.	Inspect drum for leaks, make sure lid is tight.
	Canister filter is dirty.	Clean filter.
	Wood has excess moisture content.	Use lumber with lower moisture content.
	Obstruction in dust hose or inlet port.	Inspect and clear obstruction.
	Dust hose too long.	Move collector closer to dust source.
Excess dust or large chips backing up into	Collection drum not sealed properly.	Inspect drum for leaks, make sure lid is tight.
canister filter.	Collection bag full.	Empty bag (check sight window).

* **WARNING:** Some corrections may require a qualified electrician.

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	Part number	1-M10X25GB5783Z	1-WSH10GB93Z	1-WSH10GB96D1B	1-M8X12GB77B12D9	1-CD300A020102	1-M10X35GB5783B	1-WSH10GB97D1Z	1-CD300A020101	1-M8X16GB5789Z	1-YYKH900222D	1-YSKH90522B	1-M10GB6170Z	
	Description	Hexagon headed bolt M10X25	Elastic washer 10	Large washer 10	Hexagon socket flat end set screw	Impeller	Hexagon headed bolt M10X35	Flat washer 10	Motor mounting plate	Hexagon flange bolt M8X16	Motor 3HP,1PH	Motor 3HP,3PH	Type 1 hex nut M10	
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SHE	Part number	1-KJD17F-D	1-KJD18-10F-400VA	1-M5X8GB819D1B	1-M8GB6177D1B	1-CD300A090003A	1-M5X12GB818Z	1-WSH5GB93Z	1-WSH5GB97D1Z	1-JL91046100B	1-CD300A090002B		
	Description	Electromagnetic switch	Electromagnetic switch	Cross recessed countersunk head screw	Hexagon flange nuts	Switch board	Cross ressed pan head screw	Standard elastic washer	Flat washer	Unable to pull off M20	Switch box body	External teetii jook washel Tumo 1 hov ant	
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	Upper dust bucket Hexagon headed bolt MBX60 Clamp Come barrel weldment Comoression spring Handle cover Hexagon lock thin nut Flat washer 8	-CD300A012001 -M8X60GB5781Z -CD300A012009 -CD300A012100 -CD300A012008 -JL45050013	-
	Hexagon headed bolt M8X60 Clamp Cone barrel weldment Comoression spring Handle cover Hexagon lock thin nut Flat washer 8	-MBX60GB5781Z -CD300A012009 -CD300A012100 -CD300A012008 -JL45050013	
	Clamp Cone barrel weldment Comoression spring Handle cover Hexagon lock thin nut Flat washer 8	-CD300A012009 -CD300A012100 -CD300A012008 -JL45050013	~
	Cone barrel weldment Comoression spring Handle cover Hexagon lock thin nut Flat washer 8	-CD300A012100 -CD300A012008 -JL45050013	~
	Comoression spring Handle cover Hexagon lock thin nut Flat washer 8	-CD300A012008 -JL45050013	~
_	Handle cover Hexagon lock thin nut Flat washer 8	-JL45050013	2
_	Hexagon lock thin nut Flat washer 8		2
_	Flat washer 8	-M8GB889D1Z	2
_		-WSH8GB97D1Z	4
~	Handle	-CD300A012005	2
	Hexagon headed bolt	-M8X25GB5781Z	7
	Hexagon socket countersunk head screw	-M6X16GB70D3Z	2
~ 1	Laryngeal hoop	-CD300A012003	7
\sim	Vent pipe	-CD300A012010	~
-+	Type 1 hex nut M8	-M8GB6170Z	5
10	Large washer 8	-WSH8GB96D1B	4
\sim	Screw	-CD300A012006	2
•	Pressure plate	-CD300A012004	2



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Ś	Description	Part number	Q'ty
~	Hexagon socket flat round head screw M6X16	1-M6X16GB70D2B	з
2	Type 1 hex nut M6	1-M6GB6170B	e
с	Standard elastic washer 6	1-WSH6GB93B	ო
4	Transfer interface	1-CD300A012007	-
2	Chain	1-CD300A012012	2
9	Adapter cover	1-CD300A012011-001S	7
2	Flat washer 6	1-WSH6GB97D1B	З

SHEET D



SHEET E

Q'ty	1	2	2	-	2	2	4	4	-	-	
Part number	1-JXBS1804010004A	1-WSH8GB97D1B	1-M8X30GB70D1Z	1-JL45030030A	1-WSH8GB93B	1-M8GB923Z	1-CD300A014003	1-M8GB6170B	1-CD300A014001	1-CD300A014100	
. Description	Door body window	Flat washer 8	Hexagon socket head cap screw	Handlebar	Standard elastic washer 8	Cap nut	Universal wheel	Type 1 hex nut	Dust bucket	End weldment	
2	-	2	ო	4	S	9	2	ω	ი	10	





	Description	Part number	Q'ty
SI	eel ring	1-CD300A015001	4
≯	ertical brace	1-CD300A015002	4
Ĭ	exagon lock nut M5	1-M5GB889D1B	20
C	ross recessed pan head screw M5X14	1-M5X14GB818B	20
S	mall steel ring	1-CD300A015004	~
	ust bucket plastic bag	1-SLD1000KX1000X12	-



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SHEET F



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Q't)	—	4	ω	4	ω	-	~
art number	0A013200	3GB5789Z	6177D1Z	30030A	JGB70D1Z	DA013100	0A013001
ВЧ	1-CD30(1-M8X16	1-M8GB	1-JL450	1-M8X30	1-CD30(1-CD30(
Description	Right column	Hexagon flange bolt M8X16	Hexagon flange nuts M8	Handlebar	Hexagon socket head cap screw M8X30	Left column	Column support
N	-	2	с	4	5	9	7





N	Description	Part number	Q'ty
-	Cushion cover	1-CD300A030011	2
2	Flat washer	1-WSH16GB97D1Z	2
ო	Thrust bearing washer	1-BRG1528AXKASGB4605-2	2
4	Square pipe clamp	1-CD300A030013A	12
S	Dust removal board	1-CD300A030003	ი
9	Dust removal shaft	1-CD300A030001	Ţ
2	Thrust bearing	1-BRG1528AXKASGB4605	-
œ	Clip as	1-CD300A030010	-
ი	Lower plate weldment	1-CD300A030107	~
10	Lower support plate	1-CD300A030002	~
1	Hexagon flange bolt M6X20	1-M6X20GB5789Z	22
12	Gear	1-JL45040010	7
13	Large washer 6	1-WSH6GB96D1B	2
14	A type external circlips	1-CLP17GB894D1B	2
15	Guide sleeve	1-CD300A030005	2
16	Ratation axis	1-CD300A030004	-
17	Hexagon socket flat round head screw M6X20	1-M6X20GB70D2B	9
18	Hexagon socket set screw with flat end M6X10	1-M6X10GB77B	-
19	Handlebar	1-CD300A030007	-
20	Rolling shaft sleeve	1-P19X17X15GB12613	2
21	Thrust bearing washer	1-BRG1730AXKASGB4605-1	2
22	Spring clip	1-CD300A030012	2
23	Hexagon flange nuts M6	1-M6GB6177D1Z	16
24	Filter element plastic bag	1-SLD680KX680X12	-



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Part number	1-CD300A030008	1-M6X20GB70D3Z	1-CD300A030104	1-M8X16GB5789Z	1-CD300A030100	
Description	Upper fixing plate	Hexagon socket countersunk head screw M6X20	Upper fixed plate	Hexagon flange bolt M8X16	Fiter element	
0 N	-	2	ო	4	Ŋ	





Q'tv	, –	16	4	16	
Part number	1-CD300A100100	1-M6X16GB70D2Z	1-CD300A100002	1-M6GB6177D1Z	
. Description	Base weldment	Hexagon socket flat round head screw M6X16	Universal wheel	Hexagon flange nuts M6	
g	-	2	ო	4	

SHEET J

