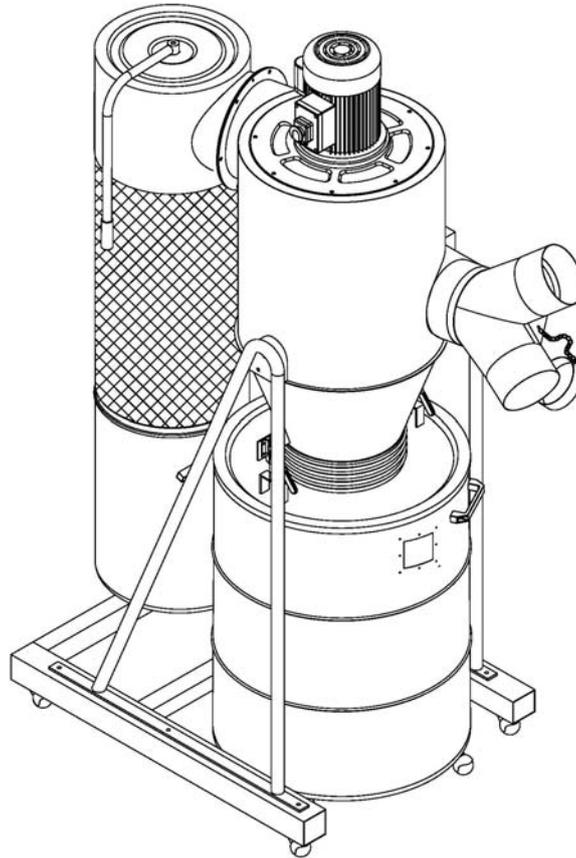


# OPERATION MANUAL

## 1.5HP DUST CYCLONE

MODEL NO.: CDC-1090P



### **WARNING :**

**The Operator must thoroughly Read and understand this Manual before operating the Dust collector or commencing Any servicing. Care should be Taken to follow all safety rules And warning instructions.**

### **CAUTION**



Read and understand operator's manual before using this machine. Failure to follow operating instructions could result in death or serious injury.



**Loud noise hazard.** Ear protection is required when operating this machine.



**Flying objects hazard.** Eye protection is required when operating this machine.



Respiratory hazard. Wear approved respirator in this area.

**READ THIS MANUAL CAREFULLY BEFORE ASSEMBLY, TESTING & OPERATING**

# CARBA-TEC

REVISION 1 – MAR./2017

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- **WARNING!**

Please read this manual carefully before assembly, testing and operating.

- **WARNING!**

Do not operate this unit until hose or pipe is installed onto the dust inlet port.

- **WARNING!**

This machine is for woodworking machinery use only, and prohibited from other purpose.

# IMPORTANT SAFETY RULES

Wood working can be dangerous if safe and proper operating procedures are not followed. As with all machinery, there are certain hazards involved with the operation of the product. Using the machine with respect and caution will considerably lessen the possibility of personal injury. However, if normal safety precautions are overlooked or ignored, personal injury to the operator may result.

Safety equipment such as guards, push sticks, hold-downs, feather boards, goggles, dust masks and hearing protection can reduce your potential for injury. But even the best guard won't make up for poor judgment, carelessness or inattention. Always use common sense and exercise caution in the workshop. If a procedure feels dangerous, don't try it. Figure out an alternative procedure that feels safer.

REMEMBER: Your personal safety is your responsibility.

## WARNING: FAILURE TO FOLLOW THESE RULES MAY RESULT IN SERIOUS PERSONAL INJURY

1. FOR YOUR OWN SAFETY, READ INSTRUCTION MANUAL BEFORE OPERATING THE TOOL. Learn the tool's application and limitations as well as the specific hazards peculiar to it.
2. KEEP GUARDS IN PLACE and in working order
3. ALWAYS WEAR EYE PROTECTION
4. GROUND ALL TOOLS. If tool is equipped with three-prong plug, it should be plugged into a three-hole electrical receptacle. If an adapter is used to accommodate a two-prong receptacle, the adapter plug must be attached to a known ground. Never remove the third prong.
5. REMOVE ADJUSTING KEYS AND WRENCHES. Form habit of checking to see that keys and adjusting wrenches are removed from tool before turning it "ON".
6. KEEP WORK AREA CLEAN. Cluttered areas and benches invite accidents.
7. DON'T USE IN DANGEROUS ENVIRONMENT. Don't use power tools in damp or wet locations, or expose them to rain. Keep work area well lighted.
8. KEEP CHILDREN AND VISITORS AWAY. All children and visitors should be kept a safe distance from work area.
9. MAKE WORKSHOP CHILDPROOF – with padlocks, master switches, or by removing starter keys.
10. DON'T FORCE TOOL. It will do the job better and be safer at the rate for which it was designed.
11. USE RIGHT TOOL. Don't force tool or attachment to do a job for which it was not designed.
12. WEAR PROPER APPAREL. No loose clothing, gloves, neck-ties, rings, bracelets, or other jewelry to get caught in moving parts. Non-slip footwear is recommended. Wear protective hair covering to contain long hair.
13. ALWAYS USE SAFETY GLASSES. Wear safety glasses. Everyday eyeglasses only have impact resistant lenses; they are not safety glasses. Also use face or dust mask if cutting operation is dusty.
14. SECURE WORK. Use clamps or a vise to hold work when practical. It's safer than using your hand and frees both hands to operate tool.
15. DON'T OVERREACH. Keep proper footing and balance at all times.
16. MAINTAIN TOOLS IN TOP CONDITION. Keep tools sharp and clean for best and safest performance. Follow instructions for lubricating and changing accessories.
17. DISCONNECT TOOLS before servicing and when changing accessories such as blades, bits, cutters, etc.
18. USE RECOMMENDED ACCESSORIES. The use of accessories and attachments not recommended by us may cause hazards or risk of injury to persons.
19. REDUCE THE RISK OF UNINTENTIONAL STARTING. Make sure switch is in "OFF" position before plugging in power cord.
20. NEVER STAND ON TOOL. Serious injury could occur if the tool is tipped or if the cutting tool is accidentally contacted.
21. CHECK DAMAGED PARTS. Before further use of the tool, a guard or other part that is damaged should be carefully checked to ensure that it will operate properly and perform its intended function – check for alignment of moving parts, binding of moving parts, breakage of parts, mounting, and any other conditions that may affect its operation. A guard or other part that is damaged should be properly repaired or replaced.
22. DIRECTION OF FEED. Feed work into a blade or cutter against the direction of rotation of the blade or cutter only.
23. NEVER LEAVE TOOL RUNNING UNATTENDED. TURN POWER OFF. Don't leave tool until it comes to a complete stop.
24. DRUGS, ALCOHOL, MEDICATION. Do not operate tool while under the influence of drugs, alcohol or any medication.
25. MAKES SURE TOOL IS DISCONNECTED FROM POWER SUPPLY while motor is being mounted, connected or reconnected.
26. WARNING: The dust generated by certain woods and wood products can be injurious to your health. Always operate machinery in well ventilated areas and provide for proper dust removal. Use wood dust collection systems whenever possible.

# IMPORTANT SAFETY RULES FOR DUST COLLECTORS

**WARNING:** Basic precautions should always be followed when using your dust collector. To reduce the risk of injury, electrical shock or fire, comply with the safety rules listed below:

1. READ and understand the instruction manual before operating the dust collector.
2. DO NOT leave the dust collector plugged into the electrical outlet. Unplug dust collector from outlet when not in use and before servicing, changing bags, unclogging and cleaning.
3. ALWAYS turn the power switch "OFF" before unplugging the dust collector.
4. WARNING: TO REDUCE THE RISK OF ELECTRICAL SHOCK do not use outdoors or on wet surfaces. Use for dry pickup only!
5. FOLLOW all electrical and safety codes, including the National Electric Code (NEC) and the Occupational Safety and Health Regulations (OSHA). All electrical connections and wiring should be made by qualified personnel only.
6. DO NOT use the dust collector to pick up flammable or combustible liquids, such as gasoline. NEVER use the dust collector near any flammable or combustible liquids.
7. USE the dust collector to pick up wood materials only. DO NOT use the dust collector to pick up metal shavings, dust, water, or parts.
8. NEVER use the dust collector to dissipate fumes or smoke. NEVER pick-up anything that is burning or smoking, such as cigarettes, matches or hot ashes.
9. USE only as described in this manual.
10. DO NOT pull the dust collector by the power cord. NEVER allow the power cord to come in contact with sharp edges, hot surfaces, oil or grease.
11. DO NOT unplug the dust collector by pulling on the power cord. ALWAYS grasp the plug, not the cord.
12. DO NOT handle the plug or dust collector with wet hands.
13. REPLACE a damaged cord immediately. DO NOT use a damaged cord or plug. If the dust collector is not operating properly, or has been damaged, left outdoors or has been in contact with water, return it to an Authorized Service Center for service.
14. DO NOT use the dust collector as a toy. DO NOT use near or around children.
15. DO NOT insert fingers or foreign objects into the dust intake ports. Keep hair, loose clothing, fingers, and all body parts away from openings and moving parts of the dust collector.
16. DO NOT use the dust collector without a filter bag and dust collection bag in place and properly secured.
17. DO NOT operate the dust collector with unused dust intake ports uncapped. ALWAYS cover exposed dust intake ports.
18. PERIODICALLY INSPECT dust and filter bags for any cuts, rips or tears. NEVER operate the dust collector with a damaged bag or vacuum hose.
19. The dust collector is designed for home use or light commercial duty ONLY!
20. CONNECT dust collector to a properly grounded outlet only. See Grounding Instructions.

**SAVE THESE INSTRUCTIONS**

# GROUNDING INSTRUCTIONS

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

**WARNING** – Improper connection of the equipment-grounding conductor can result in a risk of electric shock. Check with a qualified electrician or service person if you are in doubt as to whether the outlet is properly grounded. Do not modify the plug provided with the appliance – if it will not fit the outlet; have a proper outlet installed by a qualified electrician.

## **For grounded, cord-connected appliances:**

This appliance is for use on a circuit having a normal rating more than 120 volt and is factory-equipped with a specific electric cord and plug to permit connection to a proper electric circuit. Make sure that the appliance is connected to an outlet having the same configuration as the plug. No adaptor should be used with this appliance. If the appliance must be reconnected for use on a different type of electric circuit, qualified service personnel should make the reconnection.

## **For a permanently connected appliance:**

This appliance must be connected to a grounded metal, permanent wiring system; or an equipment-grounding conductor must be run with the circuit conductors and connected to the equipment grounding terminal or lead on the appliance.

# SPECIFICATIONS:

Motor ----- 1.5HP

AMP ----- 7A

Motor Speed ----- 2850 RPM

Suction Capacity ----- 1090 CFM

Static Pressure ----- 7.1 Inch H<sub>2</sub>O

Impeller Size ----- 13"

Inlet Size ----- 6" x 4" x 2

Switch ----- KJD-12 Switch

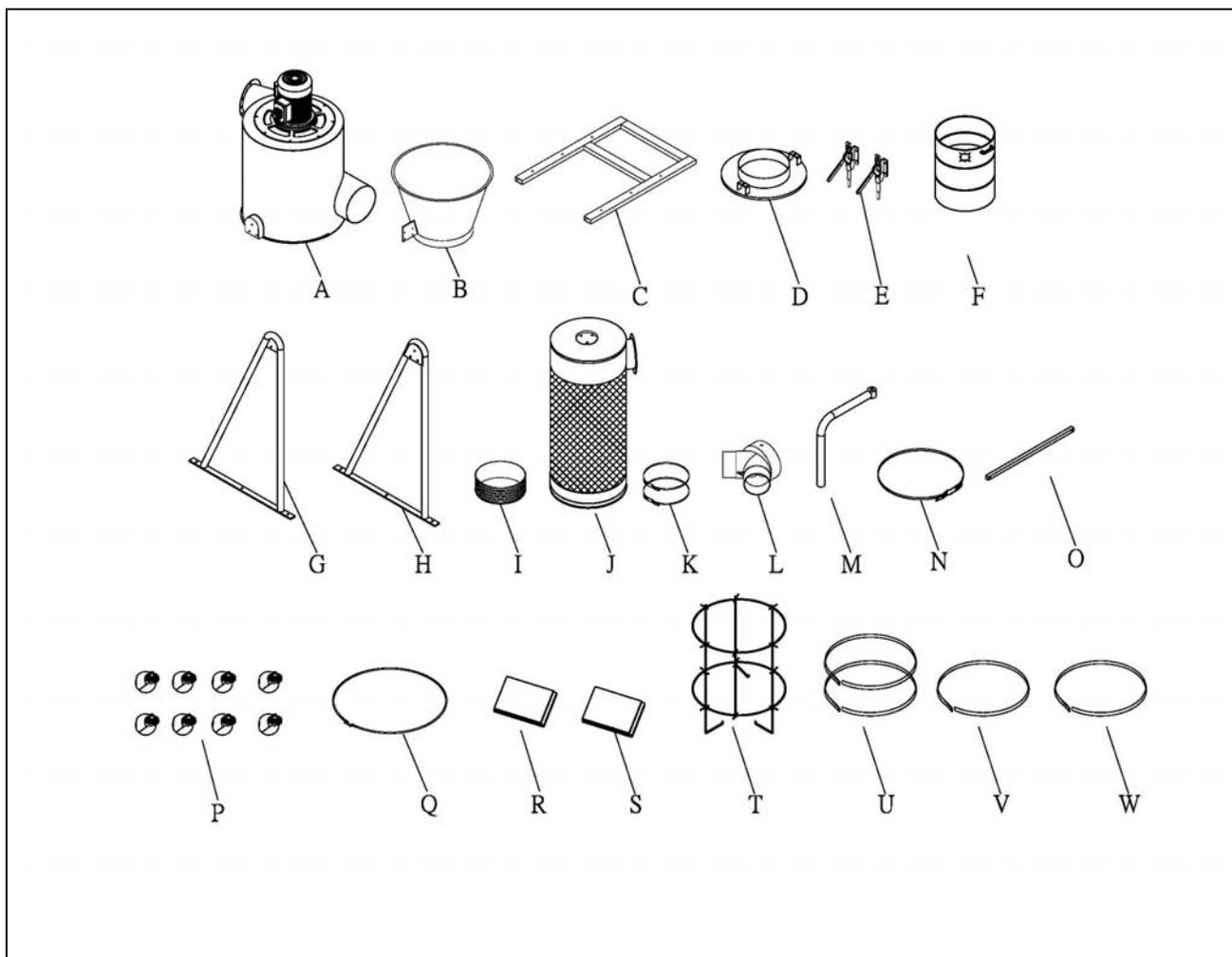
Packing Size ----- 1060 x 570 x 870 mm

N.W. ----- 60 KGS

G.W. ----- 70.9 KGS

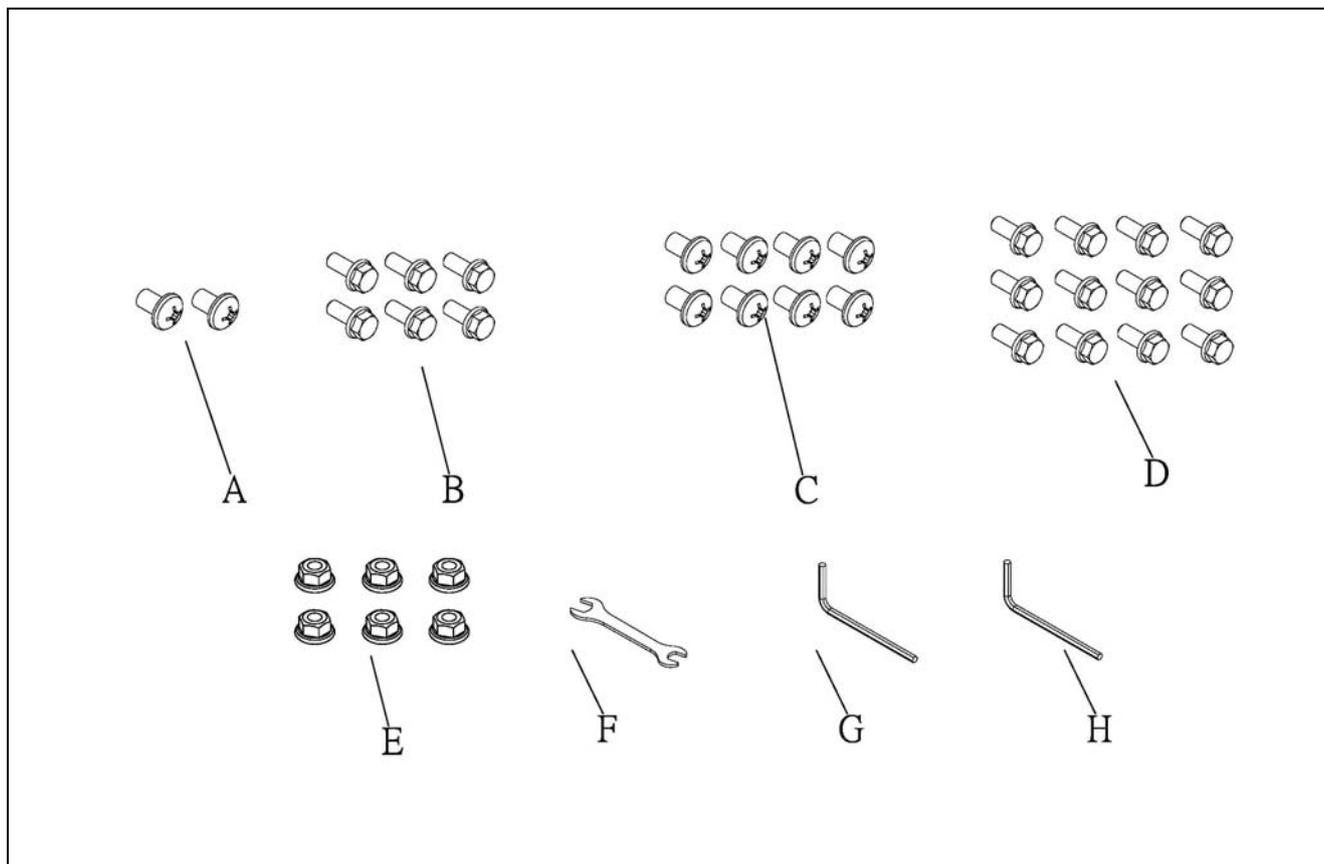
CUFT ----- 18.6'

## UNPACKING & CHECKING CONTENTS:



<u>NO.</u>	<u>Description</u>	<u>Q'TY</u>	<u>Part List NO.</u>	<u>NO.</u>	<u>Description</u>	<u>Q'TY</u>	<u>Part List NO.</u>
A	Main Housing	1	NO.16	N	Bag Clamp	1	NO.56
B	Cone	1	NO.40	O	Canister Filter Support	1	NO.25
C	Base	1	NO.31	p	Base Wheel	8	NO.29
D	Drum Lid	1	NO.44				
E	Quick Lever	2	NO.35	Q	Cone Clamp	1	NO.38
F	Drum	1	NO.51	R	PE Bag for Canister Filter	1	NO.55
G	Left Stand	1	NO.27	S	PE Bag for Drum	1	NO.18
H	Right Stand	1	NO.32	T	Inner Frame	1	NO.89~93
I	Hose	1	NO.43	U	Foam	2	NO.41
J	Canister Filter	1	NO.58	V	Gasket	1	NO.95
K	Hose Clamp 10-1/2"	2	NO.42	W	Foam	1	NO.57
L	Inlet Adaptor	1	NO.22				
M	Handle	1	NO.83				

# HARDWARE PACKAGE:



<u>NO.</u>	<u>Description</u>	<u>Specification</u>	<u>Q'TY</u>	<u>Part List No.</u>
A	Phillips Head Screw	1/4"x3/8"	2	NO.26
B	Flange Bolt Screw	5/16"x1/2"	6	NO.28
C	Phillips Head Screw	M5x8	8	NO.36
D	Flange Bolt Screw	5/16"x3/4"	12	NO.8
E	Nut	5/16"	6	NO.94
F	Open Wrench	10x12	1	NO.54
G	Allen Wrench	5mm	1	NO.53
H	Allen Wrench	4mm	1	NO.52

# ASSEMBLY INSTRUCTION:

## STEP 1-1.

Use the Open Wrench (NO.54) to secure the Base (NO.31) and Base Wheels (NO.29).

See FIG. 1

## STEP 1-2.

Place and secure the Left Stand (No.32) and Right Stand (No.27) with 5/16"x3/4" Flange Bolt Screw (No.8) as FIG. 1.

## STEP 1-3

Secure the Canister Filter Support (No. 25) to the Left Stand (No. 32) and Right Stand (No. 27) with 1/4"x3/8" Phillips Head Screw (No. 26). (See FIG. 2)

## STEP 2.

Tight the Drum Wheels (NO.29) under the collecting drum (NO.51) into the thread nuts.

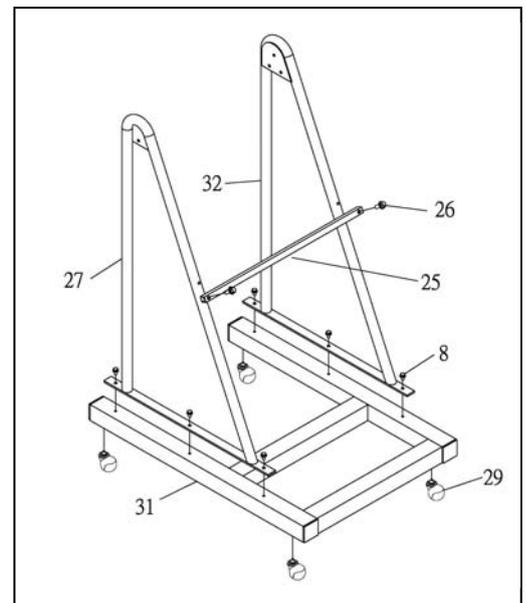
See FIG. 2

## STEP 3.

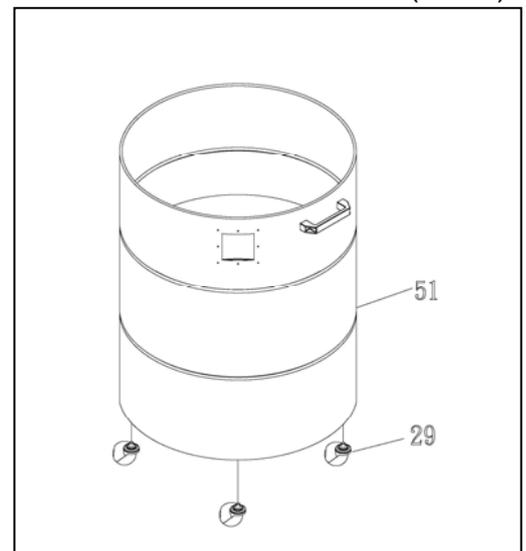
Please have 2 people lift up the Main Housing (NO.16) then place on the Left Stand (NO.27) and Right Stand (NO.32).

Using the Flange Bolt Screw 5/16"x1/2" (NO.28) to tight together.

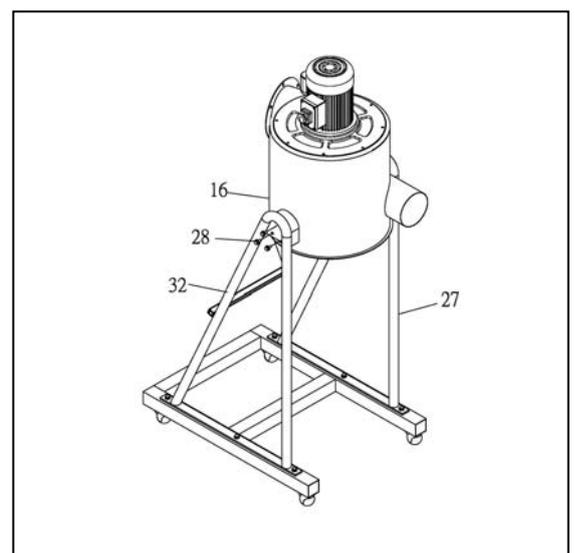
See FIG. 3



(FIG.1)



(FIG.2)



(FIG.3)

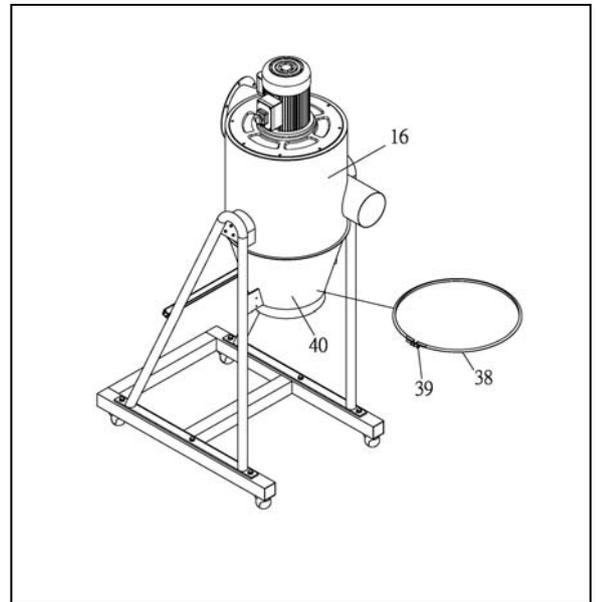
STEP 4.

Place and secure the Main Housing (NO.16) and Cone (NO.40) with Cone Clamp (NO.38) and Hex. Screw (NO.39).

See FIG. 4

**CAUTION!!!**

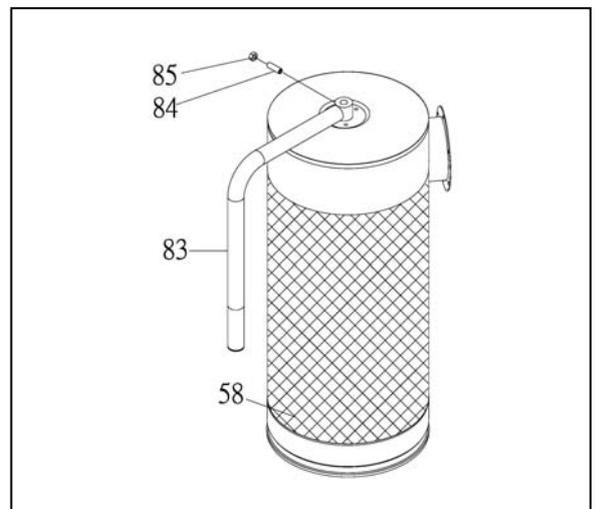
**The main housing set is heavy,  
please have at least 2 people  
work together when lifting**



(FIG.4)

STEP 5

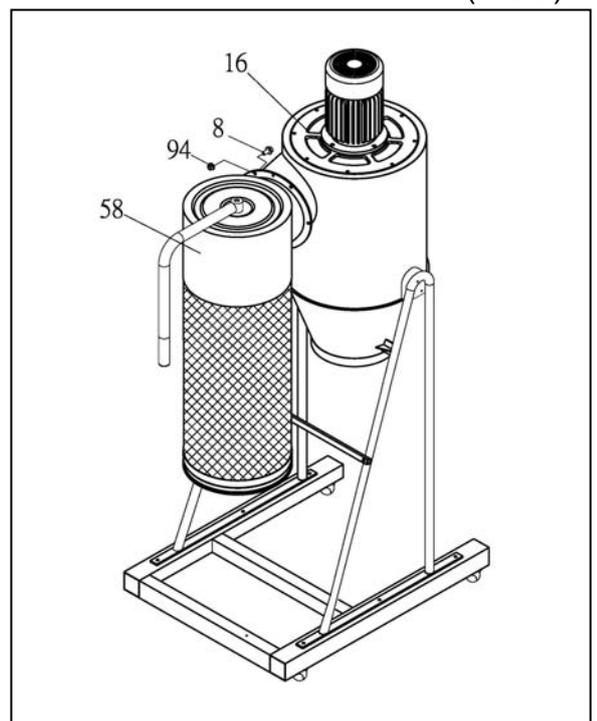
Use the Set Screw (NO.84) and Nut (NO.85) to assemble the Handle (NO.83) and Canister Filter (NO.58) as FIG. 5



(FIG.5)

STEP 6-1.

Assemble the Canister Filter (NO.58) on the Main Housing (NO.16) and tighten with Flange Bolt Screw (NO.8) and Nut (NO.94)



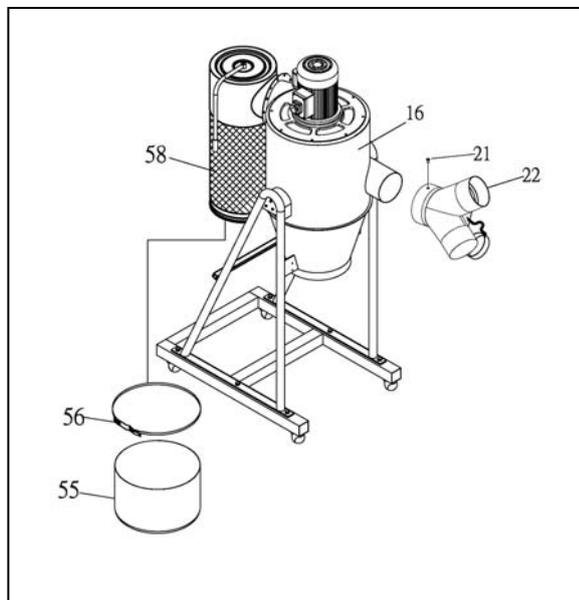
(FIG.6)

STEP 7-1.

Assemble Inlet Adaptor (NO.22) on Main Housing (NO.16) and tighten with Phillips Head Screw 3/16"×3/8" (NO.21).

STEP 7-2.

Assemble and tight PE bag (NO.55) on bottom of Canister filter with Steel bag clamp (NO.56) as FIG. 7



(FIG.7)

STEP 8-1:

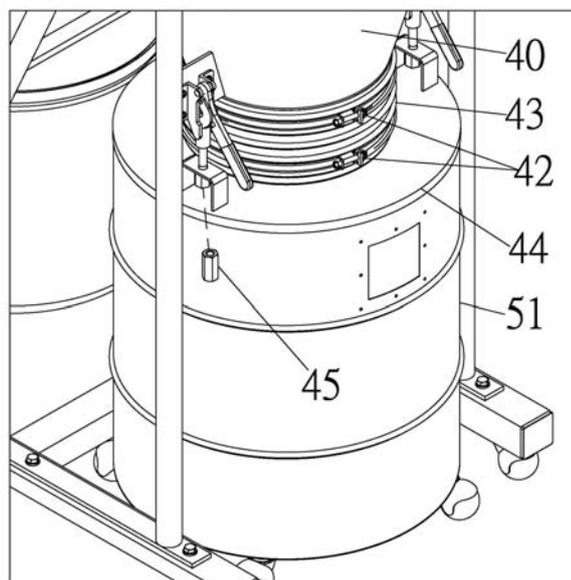
Assemble and tighten Hose (NO.43) on Cone (NO.40) and Drum lid (NO.44) with Hose clamp (NO.42).

See FIG. 8

STEP 8-2

Put the PE Bag (NO.18) into the Drum (NO.51) first, then placed the inner frame inside the PE bag in order to press the bag down.

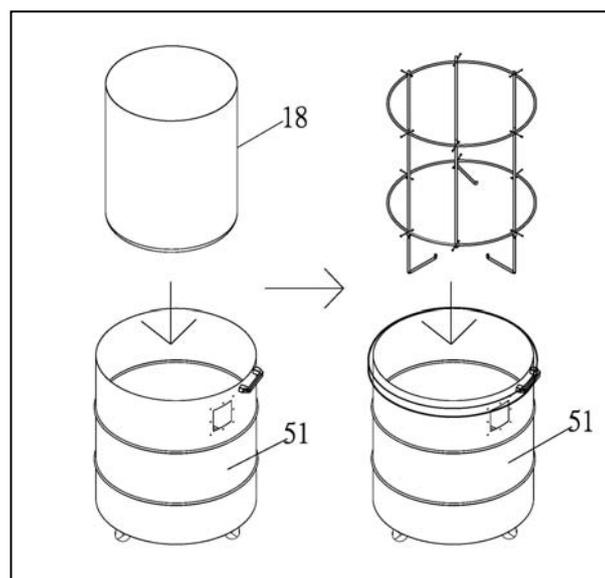
See FIG. 8-2



(FIG.8)

STEP 8-3:

Pull down the Quick Lever, and then assemble Drum Lid (No.44) and Quick Lever with Nut (No.45)

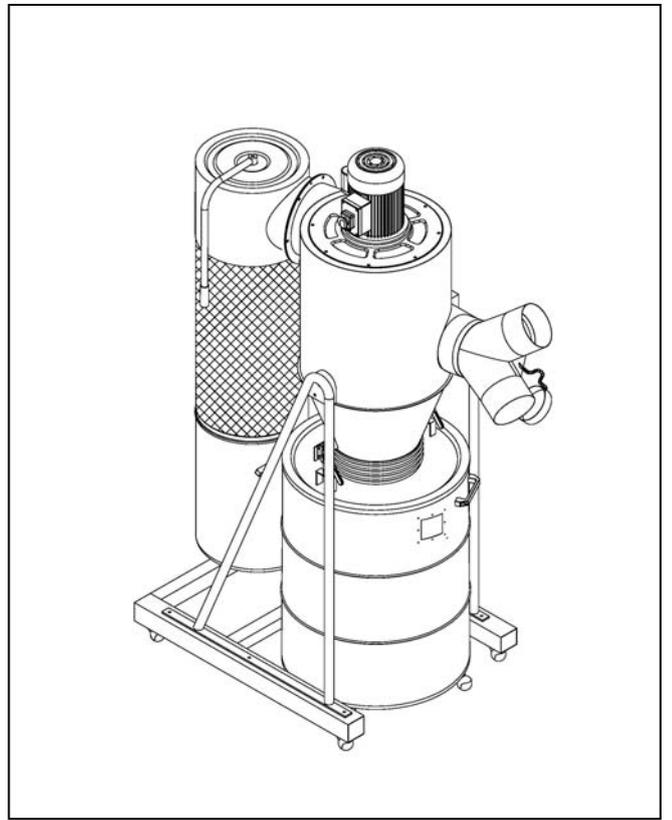


(FIG.8-2)

STEP 9.

All the assembly steps are completed.

See FIG. 9



(FIG.9)

## Assembly Instructions for the 1.5HP Cyclone Bag Frame

### STEP - 1

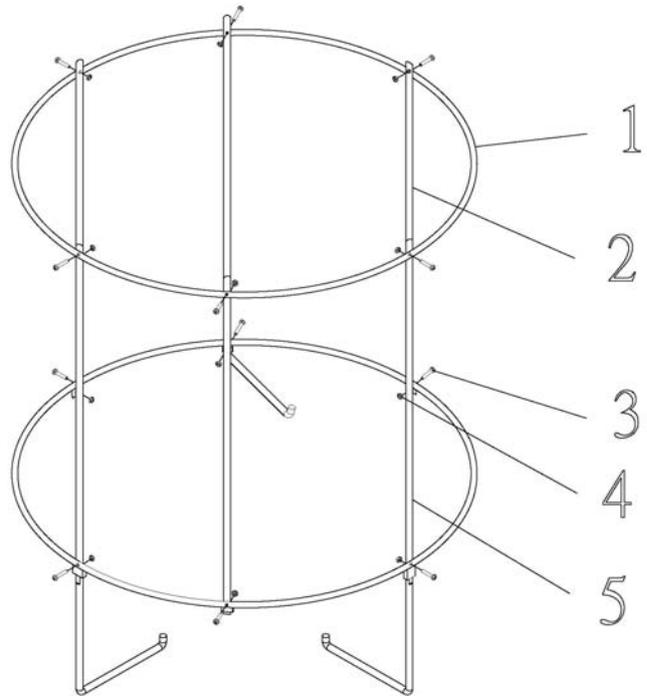
Screw each Long Side Support Rod (NO.5) & Short Side Support Rod (NO.2) into the Ring (NO.1).

### STEP - 2

Place around the frame and secure to the Long Side Support Rod (NO.5) & Short Side Support Rod (NO.2) with the 12 Bolts (NO.3) and 12 Nuts (NO.4).

### Assembly is Complete.

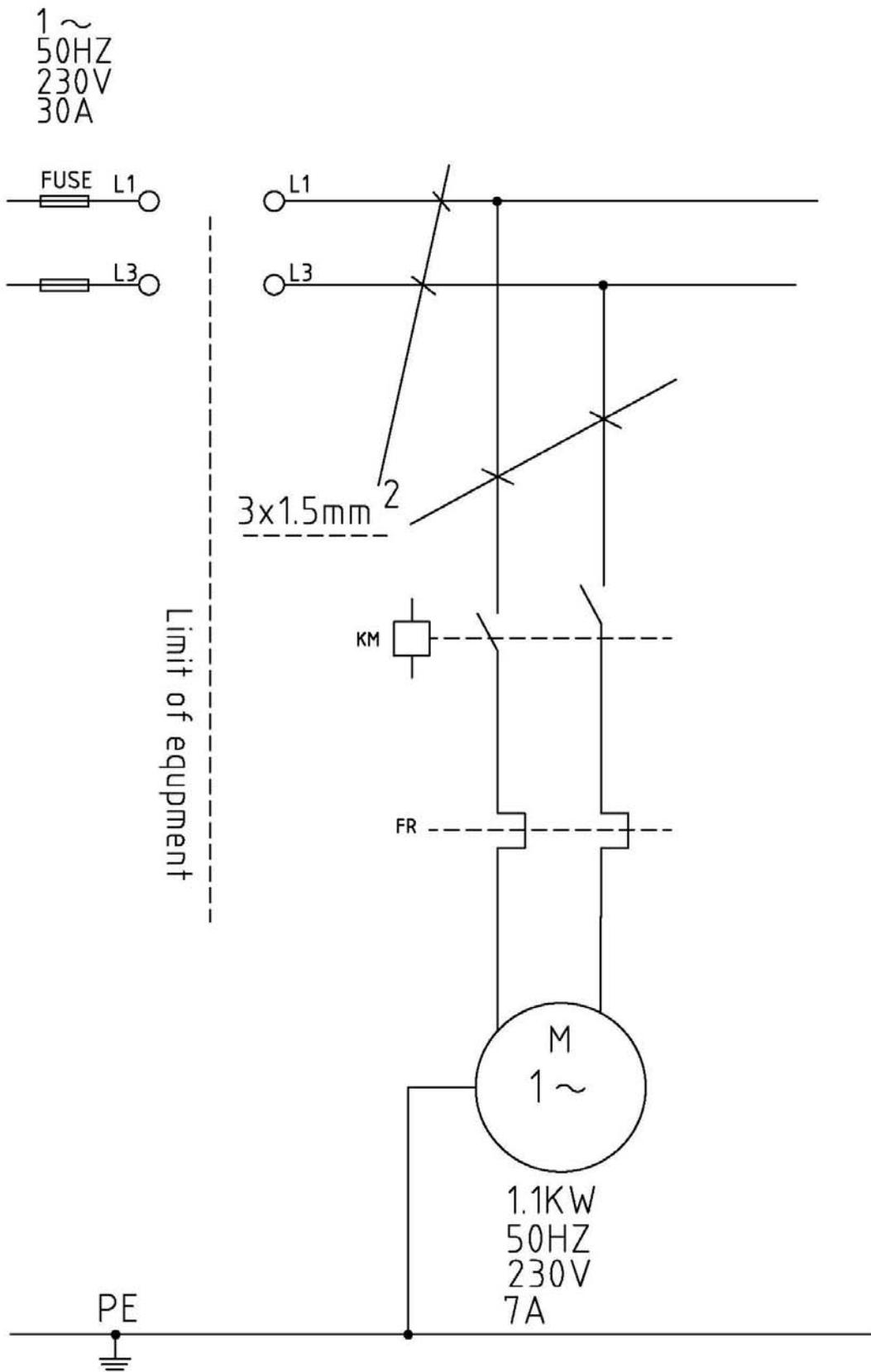
This Frame can now be placed inside a plastic bag to keep the bag shape in the negative pressure environment of a cyclone drum. Once the bag is full, remove frame and dispose of waste.



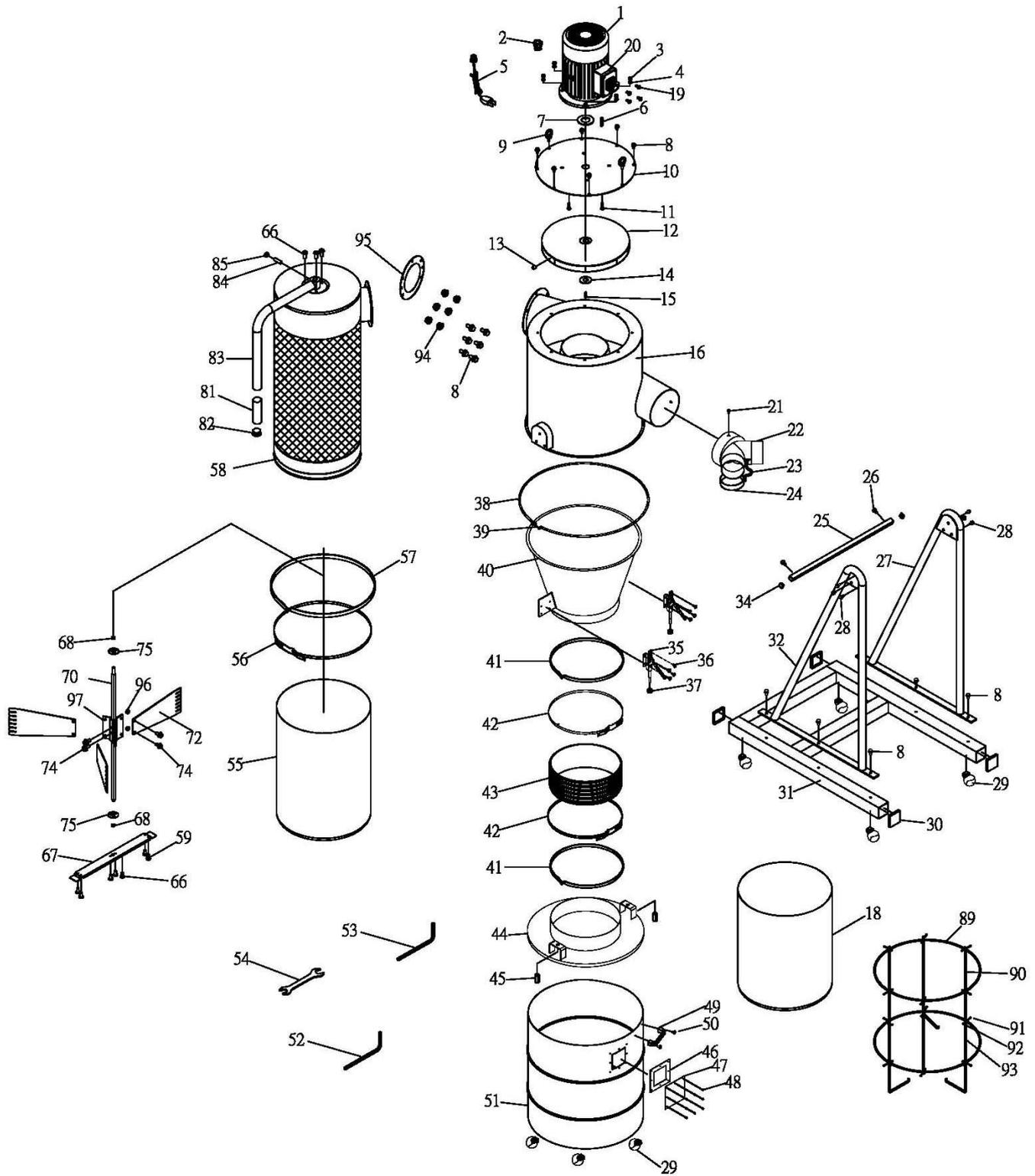
## PART LIST:

<u>NO</u>	<u>Description</u>	<u>Specification</u>	<u>Q'TY</u>	<u>NO</u>	<u>Description</u>	<u>Specification</u>	<u>Q'TY</u>
1	Ring		2	4	Nut	M3	12
2	Side Support Rod	Short	3	5	Side Support Rod	Long	3
3	Bolt	M3*12	12				

# WIRING DIAGRAM:



# DIAGRAM:



**PART LIST:**

<u>NO.</u>	<u>Description</u>	<u>Specification</u>	<u>Q'TY</u>
1	Motor	1-1/2HP	1
2	Bushing		1
3	Nut	5/16"	4
4	Spring Washer	5/16"	4
5	Power Cord		1
6	Key	6x6x25	1
7	Motor Washer		1
8	Flange Bolt	5/16"x3/4"	18
9	Hanger	5/16"	2
10	Motor Plate		1
11	Hex. Bolt	5/16"x1"	4
12	Impeller	13"	1
13	Set Screw	5/16"x5/16"	1
14	Washer		1
15	Cap Screw	M6x20	1
16	Main Housing		1
18	PE Bag	66x70	1
19	Screw		4
20	Switch		1
21	Philips Head Screw	3/16"x3/8"	1
22	Inlet Adaptor	6"x4"	1
23	Chain		1
24	Cap	4"	1
25	Canister Filter Support		1
26	Philips Head Screw	1/4"x3/8"	2
27	Right Stand		1
28	Flange Bolt Screw	5/16"x1/2"	6
29	Drum Wheel	3/8"x1-1/2"	8
30	Plug	30x30	4
31	Base		1
32	Left Stand		1
34	Plug	3/4"	2
35	Quick Lever		2
36	Philips Head Screw	M5x8	8
37	Nut	3/8"	2
38	Cone Clamp		1
39	Hex. Screw	1/4"x2-1/2"	1
40	Cone		1
41	Foam	1mx30x810	2
42	Hose Clamp	10-1/2"	2
43	Hose	10"x150	1
44	Drum Lid		1
45	Long Nut	3/8"	2
46	Packing		1
47	PC Plate		1
48	Rivet	4-2	8
49	Drum Handle		1
50	Philips Head Screw	1/4"x1/2"	2
51	Drum	420x500	1

52	Allen Wrench	4mm	1
53	Allen Wrench	M5	1
54	Open Wrench	10x12	1
55	PE Bag for Canister Filter	Φ370x450	1
56	Bag Clamp	Φ370	1
57	Foam	3x20x1205	1
58	Canister Filter	370	1
59	Philips Head Screw	M5x8	4
60	Spring Washer	M5	4
66	Bottom Head Screw	M5x6	6
67	Upper Fixing Support		1
68	Bearing	1206	2
70	Spindle		1
72	Flapper		3
74	Flange Bolts Screw	M5x12	8
75	Bearing Support		2
81	Sponge	7/8"	1
82	Cap	3/4"	1
83	Handle		1
84	Set Screw	5/16"x3/4"	1
85	Nut	5/16"	1
89	Loop		2
90	Barrel Fixing Stick (Short)		3
91	Philips Head Screw	M3x12	12
92	Nut	M3	12
93	Barrel Fixing Stick (Long)		3
94	Nut	5/16"	6
95	Gasket		1
96	Nut	M5	6
97	Plate Fixing Block		1