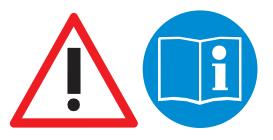


www.ice4usa.com



## **Operator & Parts Manual**





# READ OPERATOR MANUAL MANUAL CAREFULLY

# IMPORTANT: To ensure full warranty protection, Please fill out & return your warranty card.

Please fill out at time of installation for future reference.

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ustomer ID Number
Istallation Date

#### HOW TO ORDER PARTS

Only use ICE Cobotics Company supplied or equivalent parts. Parts and supplies may be ordered online,by phone, by fax or by mail.

- 1. Identify the machine model.
- 2. Identify the machine serial number from the data label.
- 3. Ensure the proper serial number is used from the parts list.
- Identify the part number and quantity. Do not order by page or reference numbers.
- 5. Provide your name, company name, customer ID number, billing and shipping address, phone number and purchase order number.



#### PROTECT THE ENVIRONMENT

Please dispose of packaging materials,old machine components such as batteries, hazardous fluids, including antifreeze and oil, in an environmentally safe way according to local waste disposal regulations.



Always remember to recycle.

ICE Cobotics (GuangDong) Company Limited XiangShi Road LiaoBu DongGuan GuangDong China Tel:0769-8186 9000 Fax:0769-8186 3000

Specifications and parts are subject to change without notice.

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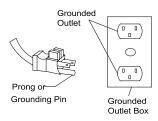
# SAFETY PRECAUTION



Carefully read and understand this manual before operating this machine. This machine must be grounded!

This machine shall be grounded while in use to protect theoperator from electric shock. Grounding provides a path of least resistance for electric current. This machine is equipped with a cord having an equipment-grounding conductor and grounding plug. The plug must be plugged into an appropriate outlet that is properly installed and grounded in accordance with all local codes and ordinances. Do not remove the ground pin under any circumstances.

This machine is for use on a nominal 120-volt circuit and has a grounding plug that resembles the plug illustrated in Figure. Make sure that the machine is connected to an outlet having the same configuration as the plug. No adapter should be used with this machine.



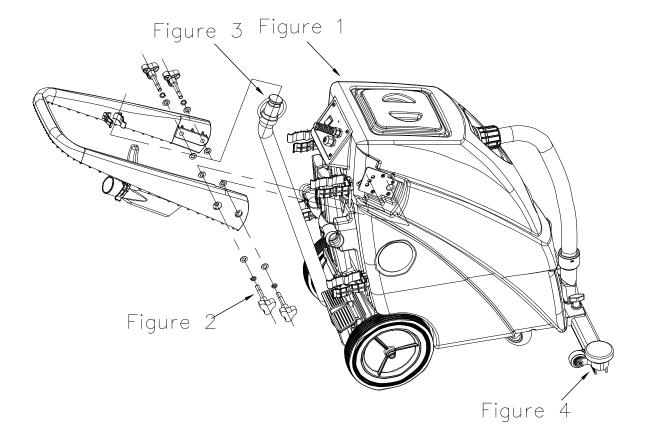
This machine is intended for commercial use. It is constructed for use in an indoor environment and is nor intended for any other use. Use only recommended accessories.

- 1. Do not operate machine:
- Unless trained and authorized.
- In flammable or explosive areas.
- With a damaged cord or plug
- If not in proper operating condition.
- 2. Before operating machine:
- Make sure all safety devices are in place and operating properly.
- 3. When using machine:
- Do not run machine over cord.
- Do not pull cord around sharp edges or corners.
- Do not handle plug with wet hands.
- Report machine damage or faulty operation immediately.
- 4. Before leaving or servicing machine:
- Turn off machine.
- 5. When servicing machine:
- Unplug cord from outlet.

- Unless you have read and understand the operators manual.
- With the use of extension cords.
- In outdoor areas and standing water.
- Do not pull machine by cord or plug.
- Do not unplug by pulling on the cord.
- Do not stretch cord.
- Keep cord away from heated surfaces.
  - Unplug cord from outlet.
- Use manufacturer supplied or approved replacement parts.



To avoid electrical shock, please replace the power cord immediately if any damage is being detected. The replacement must be performed only by an authorized person or by our customer service center.



## Handle Assembly Instructions

Attaching Handle

1] Remove handle from ship position (Figure 1).

2] Realign handle as shown and screw knobs (Adjustable handle has three height](Figure 2).

3] Attach Drain hose (Figure 3).

4] Attach front mount squeegee (Figure 4).

## Operation of Wet & Dry Vacuum



Read operators manual thoroughly prior to operating or servicing this machine.

Be sure that the handle is properly assembled on machine body prior to operating.

#### Wet Operation

1) Remove clear window and remove the cloth or paper filter form vacuum.

2) While clear window is removed, check to make sure that the float shut-off is unobstructed and fully functional.

3) Replace clear window on the top of the recovery tank.

4) Connect vacuum hose to inlet on the machine body.

5) Attach appropriate accessory tool for the job to be completed.

6) Make sure the Main Power Switch is in the OFF position, then plug power cord into a grounded outlet.

Do not use an extension cord in conjunction with the standard power cord.

7) If using the front-mounted squeegee assembly, be sure that squeegee is attached to front of machine.

8) If using the front-mounted squeegee assembly, lower squeegee to the floor by depressing the left half of the pedal [rear of the machine] forward with your foot.

9) Turn power switch to "on" position.

10) During wet pickup, the float shut-off will automatically prevent water from entering the recovery tank once the recovery tank is full.

If foam develops in the recovery tank during wet vacuuming, use defoamer chemical to help eliminate the foam. Foam will not activate the float shut-off, and therefore, may cause vacuum motor damage.

11) To raise the squeegee assembly back to transport position, depress the right half of the pedal (rear of the machine) downward with your foot.

## **Dry Operation**

 If the machine has been used for wet pick-up, empty the Recovery Tank, rinse it out and dry it completely and install the Dry Container System. DO NOT use the machine for dry pick-up without the Dry Container System in place.
Remove clear window, and be sure the cloth or paper filter is properly installed. Do not operate machine without bag or filter properly installed.

3) Replace clear window on the top of the recovery tank.

4) Connect vacuum hose to inlet on the machine body.

5) Attach appropriate accessory tool for the job to be completed.

6) Make sure the Main Power Switch is in the OFF position, then plug power cord into a grounded outlet.

Do not use an extension cord in conjunction with the standard power cord.

7) Turn power switch to "on" position.

8) Check the filter bag periodically to see if it is full. For optimal performance, replace bag when it is 3/4 full.

## DRAINING THE RECOVERY TANK

1) Unplug machine from power outlet.

2) Transport machine to nearest floor drain of bucket.

3) Remove drain hose form rear of machine. Remove ball plug from drain hose, and drain the contents of the tank.

4) After the contents have drained, remove the clear window and rinse recovery tank with clean water.

5) Replace the ball plug on the drain hose and hang hose back on the rear of the machine.

To prevent odors in the recovery tank, remover the vacuum head when machine is not in operation to allow air to circulate.

### MAINTENANCE

To keep the machine performing well for many years, please follow the following maintenance procedures.

Always confirm that the machine is unplugged prior to performing any maintenance or repairs.

1) Unplug machine as soon as you are done using it.

2) Check power cord for any damage. If any damage is detected, replace the cord immediately.

- 3) Lubricate casters with a water resistant lubricant every month
- 4) Check machine for loose or missing nuts and bolts, and replace as necessary.
- 5) Check the filter, and clean it after each use
- 6) Remove the vacuum hose and check it for any holes and clogs
- 7) Clean the outside of the machine with a mild cleaner.

### STORAGE

- 1) Unplug machine from power source and wrap cord on handle.
- 2) Store in upright position in a dry area.
- 3) Store with squeegee assembly off the ground.
- 4) Store with clear window off unit so that tank may breathe.

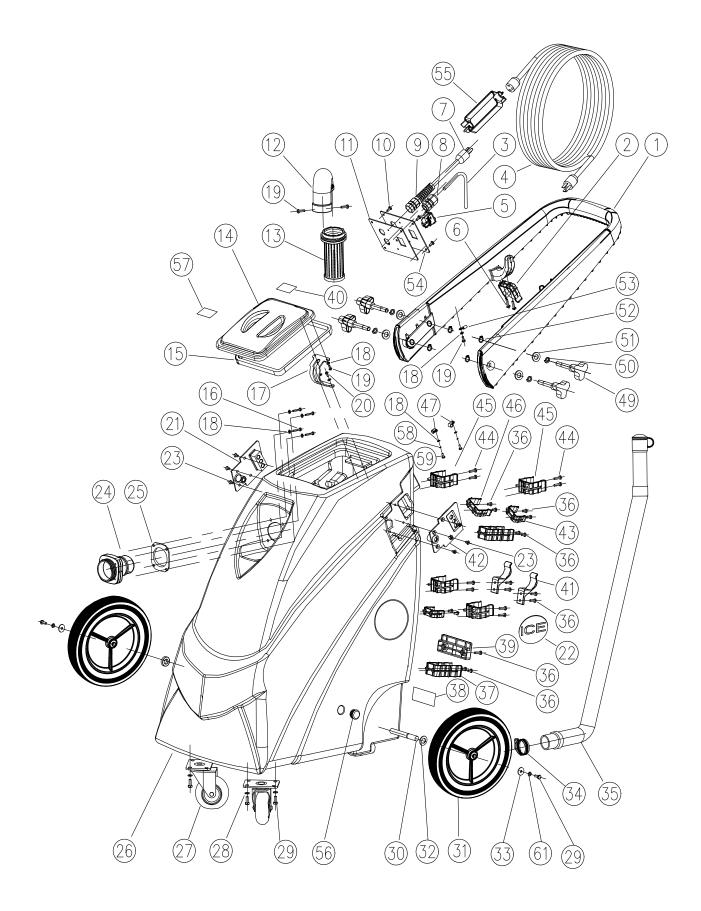
## MACHINE COMPONENTS

- 1.Handle 3.Knob
- 5.3.5" Caster
- 7.Hose Assy
- 9.Clear Window
- 11.Drain Hose
- 13.Wire Hook

- 2. Crevice Tool
- 4.10" Wheel
- 6. Front mount squeege
- 8. Tank
- 10. On/off switch
- 12. Pedal

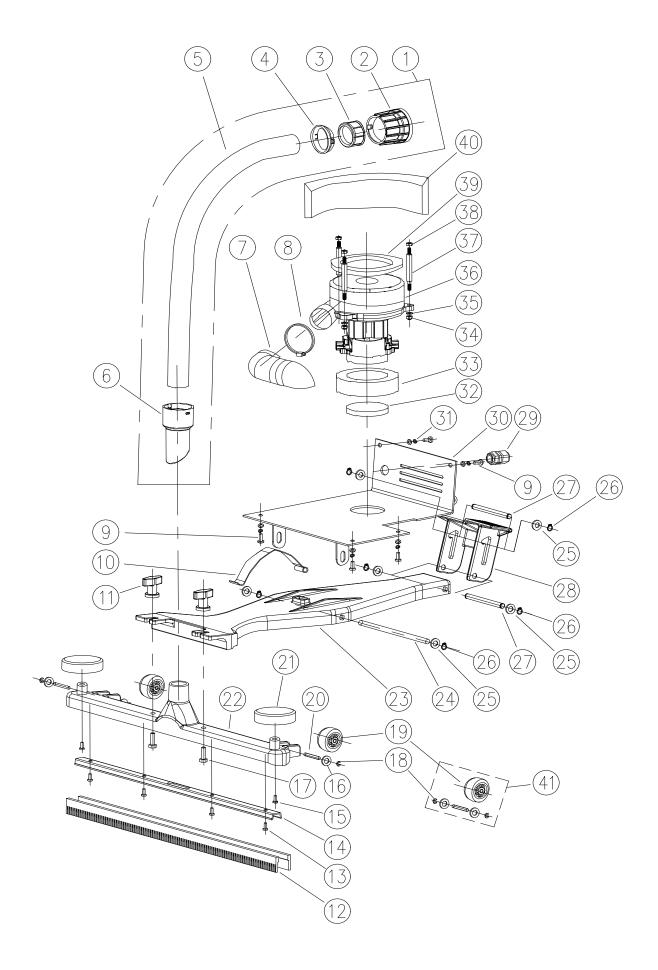






DIA NO	PART NUMBER	DESCRIPTION	SERIAL NUMBER	NO REQ'D
1	2320202	Handle		1
2	2310126	Clamp, Crevice		1
3	2320405U	Cord		1
4	6210519U	Power Cord		1
5	2110108	Switch		1
6	1313325	Screw, ST4.8 X 25		2
7	2320409	Power Cord		1
8	2320411	Cable Fixing Head		1
9	4020310	Strain Relief		1
10	1221510	Screw,Ph, M5 X 10		4
11	2320401	Panel, Switch		1
12	2320220	Bend		1
13	2320229	Float,Shut off		1
14	2320216	Clear Window		1
15	2320218	Gasket, Clear Window		1
16	1321225	Screw,Ph,ST4.2 X 25		4
17	2320217	Rubber Hinge		1
18	1421409	Washer, Plain, $\Phi$ 4.3X $\Phi$ 9X0.8		11
19	1321210	Screw, Ph, St4 X10		5
20	1221410	Screw, Ph, M4 X10		2
21	2320241	Bracket,Right,Handle		1
22	4010316	Logo		2
23	1222510	Screw,Fh, M5 X10		8
24	2420006	Hose Housing		1
25	2020202	Gasket,Intake		1
26	2320201	Tank		1
27	2320210	3.5" Caster		2
28	1421618	Washer, Plain, $\Phi$ 6.4X $\Phi$ 18X1.6		4
29	1021616	Screw,Hex, M6 X16		6
30	2320211	Axle		1
31	<del>2320223</del>	<del>Wheel,10"</del>	<del>000000-105359</del>	2
	2320228	Wheel,10"	105360-	2
32	<del>2320312</del>	Washer, Wheel, Al	<del>000000-105359</del>	2
52	1421132	FLAT WASHER $\Phi$ 13× $\Phi$ 32×1.5	105360-	2
33	1421622	Washer, Plain, $\Phi$ 6.6X $\Phi$ 22X2		2
34	1962050	Clamp, $\Phi$ 27~ $\Phi$ 51		1

DIA NO	PART NUMBER	DESCRIPTION	SERIAL NUMBER	NO REQ'D
35	<del>2230130</del>	Drain Hose	000000-000534	1
55	2320248	Drain Hose	000534-	1
36	1221514	Screw, Ph, M5 X14		16
37	2310128	Clamp, Straight Tube		2
38	2320603U	Serial Decal		1
39	2310131	Supportor,Pick-up Tool		1
40	2030414	Warning Decal		1
41	2310130	Clamp, Pick-up Tool		2
42	2320240	Bracket,Left, Handle		1
43	2310127	Clamp, Bend Tube		2
44	1221520	Screw, Ph, M5 X20		8
45	2310125	Clamp, Hose		4
46	2310129	Clamp, Dusting Tool		1
47	6150711	Stainless Steel Clip		2
48	<del>2230131</del>	Plug	00000-000534	1
49	2320219	Кпор		2
50	1422026	Washer, Lock,Ф10		4
51	1421020	Washer,Plain, $\Phi$ 10.5X $\Phi$ 20X2		4
52	1436010	Retaining Ring, $\Phi$ 10		4
53	2320207	Plate		1
54	2320419	Decal,Panel		1
55	6210123	Connector		1
56	7000283	Сар		2
57	2320415	Warning Decal		1
58	1422411	Lock Washer M4		2
59	1221412	Screw M4X12		2
60	<del>1436013</del>	Retaining Ring, $\Phi 13$	000000-105359	<del>2</del>
61	1422616	Lock Washer M6		2



DIA NO	PART NUMBER	DESCRIPTION	SERIAL NUMBER	NO REQ'D
1	2320500	Hose Assy		1
2	2230121	Machine End		1
3	2320501	Threaded Insert		1
4	2230123	Clip Ring		1
5	2320502	Hose		1
6	6210114	Coupler, 38mm		1
7	2320208	Acoustic Insulstion Pipe		1
8	1914300	Tie, Cable		1
9	1221616	Screw, Ph, M6 X16		5
10	2320214	Leaf Spring		1
11	2320304	Knob, Floor Tool		2
12	2320311	26" Blade(PU)		2
	2320309	26" Blade(Optional)		2
13	1221514	Screw, Ph, M5 X14		4
14	2320303	Clamp, Blade		1
15	1321310	Screw, Ph, St4.8 X10		2
16	1421618	Washer, Plain, $\Phi$ 6.4X $\Phi$ 18X1.6		4
17	1021825	Screw,Hex, M8 X25		2
18	1439005	Retaining Ring, $\Phi$ 5		4
19	2320308	2" Wheel		2
20	2320306	Axle, 2" Wheel		2
21	2320302	Bumper		2
22	2320301	26" Body,Pick-Up Tool		1
23	2320215	Mounting Plate, Floor Tool		1
24	2320212	Axle, Mounting Plate		1
25	1421020	Washer,Plain, $\Phi$ 10.5X $\Phi$ 20X2		6
26	1436010	Retaining Ring, $\Phi$ 10		6
27	2320213	Axle, Pedal		2
28	2320209	Pedal		1
29	2320411	Strain Relief		1
30	2320203	Bottom Plate, Assy		1
31	1422616	Washer, Lock,Фб		5
32	2310123	Filter		1
33	2310118	Gasket		2
34	1123608	Nut, Lock, M6		3
35	1421617	Washer, Plain, $\Phi$ 6.2X $\Phi$ 16X2		8

#### OPERATOR

#### PARTS LIST

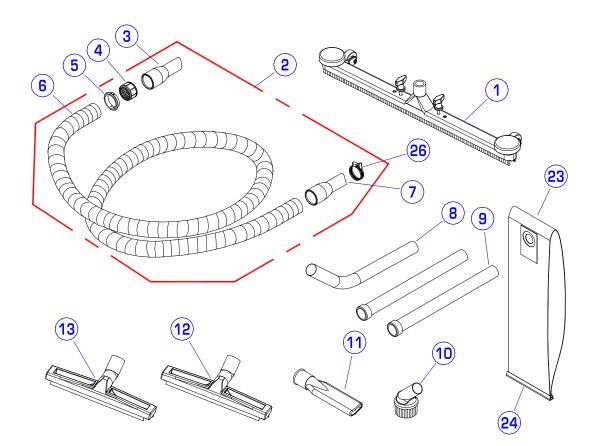
DIA NO	PART NUMBER	DESCRIPTION	SERIAL NUMBER	NO REQ'D
36	2310121A	Vac Motor,3-Stg,120V,With Terminal	000101-000150;000153-000592;105360-	1
50	8011025A	Vac Motor,2-Stg,120V,With Terminal	000593-003583;103584-105359	1
27	2310122	Stud,Vac Motor 3-Stg	Match the serial number of Vac Motor 3-Stg	3
37	8112006	Stud,Vac Motor 2-Stg	Match the serial number of Vac Motor 2-Stg	3
38	1121605	Nut, M6		3
39	2310116	Gasket,Vac Motor		1
40	2310120	Screen		1
41	2320308A	2" Wheel Assy		2

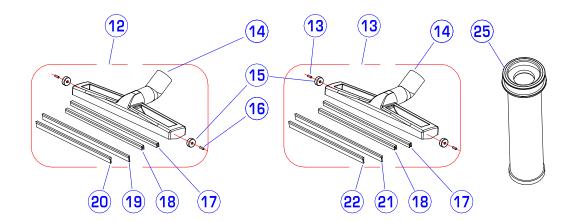
NOTES:

Use part number 8011025A for all the 2-stage serial numbers

Use part number 2310121A for all the 3-stage serial numbers.

ACCESSORIES

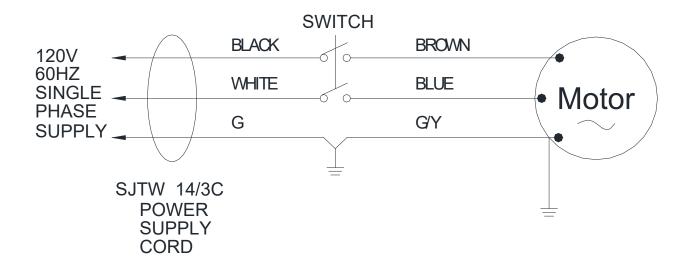




DIA NO	PART NUMBER	DESCRIPTION	SERIAL NUMBER	NO REQ'D
1	2320300	26" Front Mount Squeegee Assy		1
2	2330120	Hose, Vacuum Assy		1
3	2230124	Angeled Hose End, 38mm		1
4	2230122	Threaded Insert		1
5	2230123	Clip Ring		1
6	2330122	Hose		1
7	2330121	Hose End		1
8	2230115	Wand		1
9	2230116	Tube, SST		2
10	2230126	Dusting Tool		1
11	2230127	Crevice Tool		1
12	2230106	Dry Pick-Up Tool, 360mm		1
13	2230107	Wet Pick-Up Tool, 360mm		1
14	2230117	Body,Pick-Up Tool 360mm		1
15	2130101	Wheel, Assy		2
16	2130102	Axle, Wheel		2
17	2230109	Seat, Rubber Blades,Back		1
18	2230110	Seat, Rubber Blades,Back		1
19	2230111	Brush Strip, Back		1
20	2230112	Brush Strip, Front		1
21	2230113	Rubber Blade, Back		1
22	2230114	Rubber Blade, Front		1
23	2330130	Cloth Bag		1
23	2330132	Paper Bag(optional)		1
24	2330131	Clip, Cloth Bag(optional)		1
25	2330134	Catridge Filter		1
26	1962052	Clamp		1

TECHNICAL DATA		
Model	iW90	
Voltage	120V	
Power	1000W	
Current	9A	
Frequency	50-60Hz	
Capacitor	90L	
Vacuum	2319mmH2O(91")	
Flow rate	2910L/Min(104CFM)	
Sound pressure level	70 dP(A)	
at workstation	70 dB(A)	
Weight	40kg	
Length of Power cord	15m	
Dimensions	117.6cm(L)X45.3cm(W)X110cm(H)	

# Wiring Diagram iW90



### WEAR & TEAR PARTS

DIA NO	PART NUMBER	DESCRIPTION	NO REQ'D
1	2320210	3.5" Caster	2
2	2320228	Wheel,10"	2
3	2320309	26" Blade	2
4	2320308	2" Wheel	2
5	2230126	Dusting Tool	1
6	2230113	Rubber Blade, Back	1
7	2230114	Rubber Blade, Front	1
8	2230127	Crevice Tool	1

CERTIFICATE	OF QUALIFIED
MODEL : INSPECTOR :	SERIAL NO. : DATE :
ICE Cobotics(GuangD	ong)Company Limited
电话 (TEL): (769) 8186 9000	传真(FAX): (769) 8186 3000