

ICE ROBOTICS

Rider Auto
Scrubber
Operator Manual



i-SYNERGY
Cleaning Management in Motion

RS28L-CY



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.

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XiangShi Road LiaoBu DongGuan GuangDong China
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Specifications and parts are subject to change without notice.

READ OPERATOR MANUAL CAREFULLY!

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

Please fill out at the time of installation for future reference.

Model No. _____

Serial No. _____

Machine Options _____

Sales Rep. _____

Sales Rep. Phone No. _____

Customer ID Number _____

Installation Date _____

HOW TO ORDER PARTS

Only use ICE 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 part number is used from the parts list.
4. 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.

INHOUDSOPGAVE

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SAFETY PRECAUTIONS

This machine is intended for commercial use. It is designed exclusively to scrub hard floors in an indoor environment and is not constructed for any other use. Only use recommended accessories.

All operators shall read, understand and exercise the following safety precautions:

- 1. Do not operate machine:**
 - Unless trained and authorized.
 - Unless you have read and understand the operators manual.
 - In flammable or explosive areas.
 - With brake disabled.
 - If not in proper operating condition.
- 2. Before starting the machine:**
 - Make sure all safety devices are in place and operate properly.
 - Check brakes and steering for proper operation.
- 3. When using the machine:**
 - Go slow on inclines and slippery surfaces.
 - Follow all safety guidelines.
 - Be very careful when using the machine in reverse.
 - Reduce speed when turning.
 - Report and fix any damage to machine prior to operating it.
 - Never allow children to play on or around.
- 4. Before leaving or servicing the machine:**
 - Stop on a level surface.
 - Turn off the machine.
- 5. When servicing the machine:**
 - Read operators manual thoroughly prior to operating or servicing this machine.
 - Use manufacturer supplied or approved replacement parts.
 - Secure machine with wheel blocks prior to jacking the machine up.
 - Use approved jack or hoist to safely elevate the machine.
 - Disconnect batteries prior to working on machine.
 - Avoid moving parts. Do not wear loose fitting clothing while servicing machine.



WARNING:

Explosion or fire can result from hydrogen gas.
Keep sparks and open flames away!
Keep battery compartment open when charging.



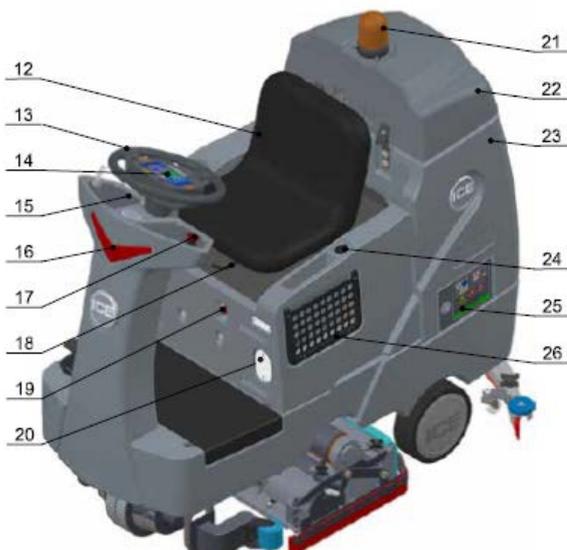
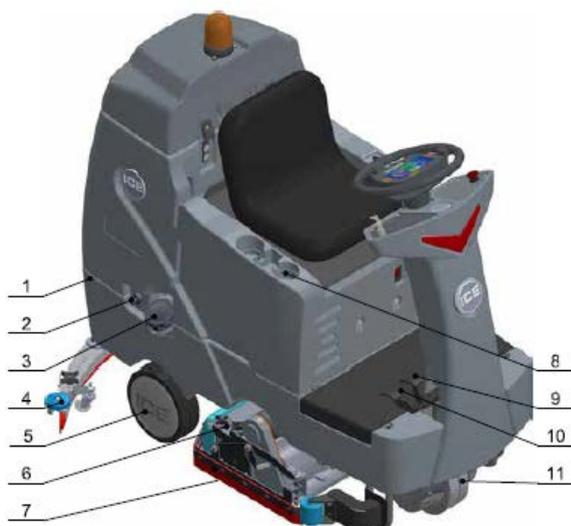
WARNING:

Flammable materials can cause an explosion or fire.
Do not use flammable materials in tanks.



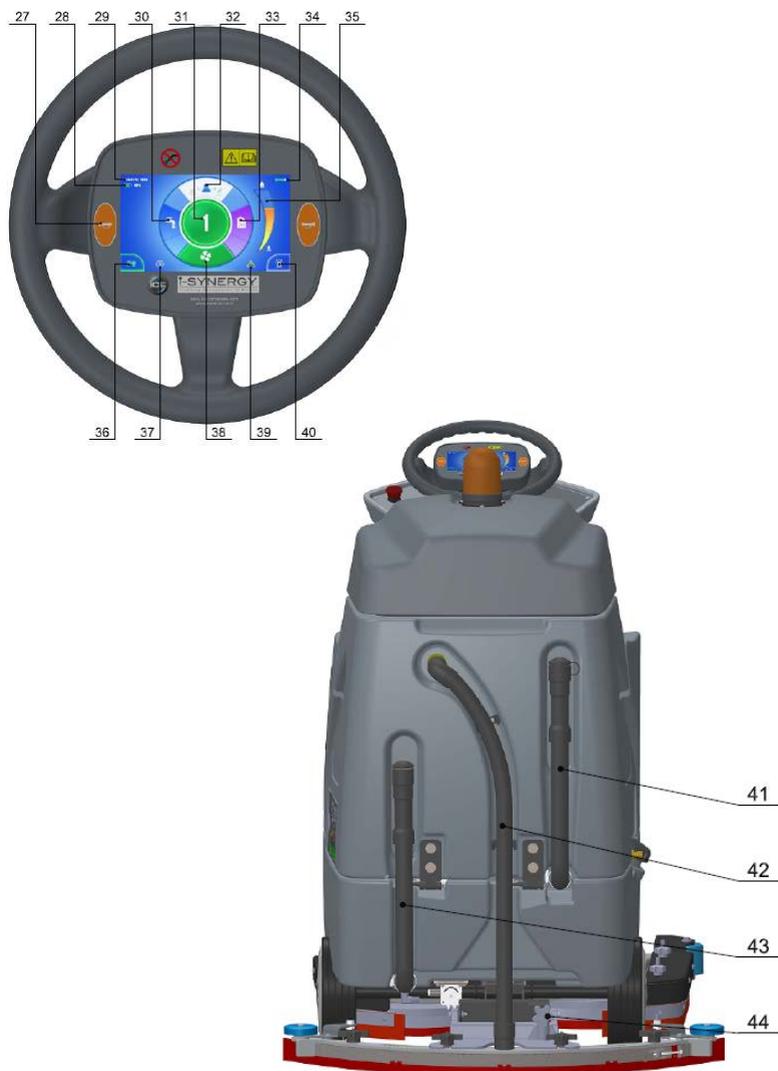
WARNING:

Flammable materials or reactive metals can cause an explosion or fire.
Do not pick up.



MACHINE COMPONENTS

1. Solution tank
2. Auto-fill hose port (Option)
3. Hose fill port & Cap
4. Squeegee assembly
5. Wheels, 10 inch
6. Cylindrical head assembly
7. Side squeegee assembly
8. Cup holder
9. Brake pedal
10. Propel pedal
11. Front drive wheel
12. Operator seat
13. Steering wheel
14. Control panel, Touch screen
15. i-Synergy™, ID card scanning area
16. LED light, work
17. Emergency Stop button
18. Adjusting handle, seat
19. Off-board battery charger port (Option)
20. Watching window, On board battery charger
21. Warning light
22. Recovery tank cover
23. Recovery tank
24. USB Charging port
25. Cabin door, Detergent bottle compartment
26. Mesh, Battery charger power cord.



MACHINE COMPONENTS

27. Horn button
28. Battery meter
29. Date & Time
30. Solution flow adjusting button
31. 1-Step starting button
32. Work mode select button
33. Detergent adjusting button
34. Timer
35. Brush pressure adjusting button
36. Direction button
37. Setting button
38. Vacuum motor button
39. Fault icon
40. Warning light button
41. Drain hose, recovery tank
42. Vacuum hose
43. Drain hose, solution tank
44. Adjusting knob, Squeegee

i-Synergy™ Introduction

i-Synergy™ collects operational data from cleaning machines and transmits the information to ICE's server. The ICE server generates daily reports and sends them to designated end users by email. From these reports, end users will have information about machines' usage and even specific timings.

Besides, i-Synergy™ also collects data on a lithium-ion battery, vacuum motor, brush deck motor, drive wheel motor, and other electrical components at least once every minute when the machine is in use and even during battery charging.

i-Synergy™ will send notifications instantly to the ICE server in case of any malfunction. ICE maintenance personnel will receive an SMS within minutes from the ICE server for immediate servicing.

MACHINE SET UP & INSTALLATION

Uncrating Machine

Be sure and check packing carton for any damage. Immediately report any damage to carrier. Check the contents of package to ensure that the following items are included:

- Machine
- Lithium-ion Batteries,
- Squeegee assembly
- 2- Cylindrical Brushes

1. Uncrate the wooden box, place the top board on the edge of pallet, lie in the front of the machine, as shown to the right.
2. Install batteries. (See INSTALLING BATTERIES)
3. Place the ID card on the scanning area (Machine components, #15) to turn on the machine, make sure the Squeegee assembly (Machine components, #4) and the Cylindrical assembly (Machine components, #6) is off the floor.
4. Sit in the operator seat (Machine components, #12), hold the steering wheel (Machine components, #13), press the propel pedal (Machine components, #10) and driving slowly the machine down from the slope.



WARNING:

Do not operate machine unless you have read & understood this manual.

Installing Batteries (for i-Synergy machines only)

The machine uses the Lithium-ion batteries, the batteries are already in the machine upon delivery; However you will need to connect the Lithium ion batteries to the machine.

1. Turn off the machine.
2. Open and prop up the Operator seat, plug the batteries connector to the machine adaptor, connect machine i-Synergy™ COM port to the batteries. (See Fig. 1 and 2)

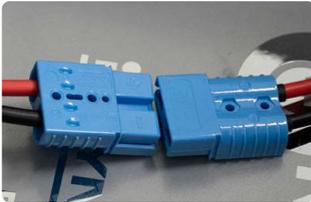


Figure 1



Figure 2



WARNING:

Fire or Explosion Hazard.

Keep sparks and open flames away!

Keep battery compartment open when charging.

Battery Charging

WARNING:

Fire or Explosion hazard.

Keep sparks and open flame away.

Keep battery compartment propped open when charging.

Use only ICE supplied or approved batteries charger, use unapproved charger may cause damage to the batteries and machine.

Batteries charger specifications:

- Applicable to charging Lithium-ion batteries
 - Automatic shut off circuit
 - Output current of 30 Amps
 - Output voltage of 24 Volt
1. Transport the machine to a well ventilated area.
 2. Turn the machine off.
 3. Prop up the Operator seat by the support stand for ventilation.
 4. Connect the charger's AC power supply cord (See Fig. 3 and 4) to a properly grounded receptacle.
 5. The charger will automatically begin to charge, you can watching the charging status on the window (Machine components, #20), once the charging cycle begins, the indicator lights will progress from red, yellow to green. when the green indicator light comes on, the charging cycle is done. Unplug the charger cord. (See Fig. 5)



Figure 3



Figure 4

NOTE:

The machine will not operate while charging.



Figure 5

Installing Brush

1. Turn off the 1-Step starting button (Machine components, #31) and raise the cylindrical assembly off the floor, then stop machine on the level surface, ensure the machine is turned off.
2. Remove brush door from the cylindrical scrub head assembly by loosening the knob.
3. Attach brush door to the brush end that has the double row of brushes to install brush.
4. Check the brushes to ensure they are properly adjusted.

Inspect The Brush Pattern

After installing a new set of cylindrical brushes check the brush pattern to ensure proper brush adjustment.

1. Measure the distance from the front edge of the scrub head to the floor and from the back edge of the scrub head to the floor. The measurements should be the same.
2. To level the scrub head, loosening the lock nut and the hex nut, adjusting the knob to adjust the cylindrical head properly, and then tighten them when adjusting finished. (See Fig. 6)
3. Position the machine on a dry dusty floor or apply a powdered substance, such as chalk.
4. Do not sit in the seat and adjust the solution flow to 0, turn on the 1-Step starting button to lower the cylindrical head on the floor.
5. Press down the propel pedal and let the cylindrical brushes work a while, and then turn off the 1-Step starting button to raise the cylindrical head and drive the machine away.
6. Observe the brush patterns. If the brush pattern is the same width across the entire length of each brush and both brushes are the same width (See Fig. 7), no adjustment is necessary. If it is uneven or tapered, adjustment is required.

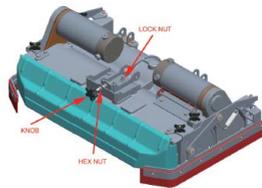


Figure 6

Correct Brush Pattern



Figure 7

To Adjust Tapered Brush Pattern

1. Remove the brush door from the brush by loosening the knob. (See Fig. 8)
2. Hold the brush plug shaft with a wrench and loosen the 6 mm hex screw. (See Fig. 9)
3. To lower the brush end, turn the shaft clockwise for the front brush and counter-clockwise for the rear brush. Retighten hex screw.
4. Recheck brush pattern.

NOTE:

Replace brushes when worn to 5/8" (15mm).

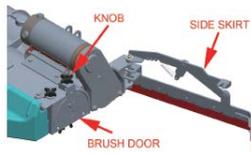


Figure 8

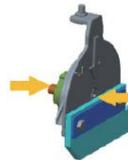


Figure 9

Mounting the Squeegee Assembly

1. Turn off the 1-Step switch and raise the squeegee assembly off the floor.
2. Mount the squeegee assembly to the squeegee pivot bracket. Make sure the knobs are completely seated into the slots before securing knobs.
3. Connect the vacuum hose (Machine components, #42) to the squeegee assembly. Loop the hose by using the hose clip provided.
4. Check the squeegee blades for proper adjustment by adjusting the Squeegee adjusting knob (Machine components, #44).

(See Fig. 10 and 11)



Figure 10



Figure 11

Filling the Solution Tank

The machine is equipped with a hose fill port (Machine components, #3, see Fig. 12) at the side of the machine, and a bucket fill-port located under the recovery tank.

NOTE:

Before accessing the bucket fill-port make sure that the recovery tank is empty. When filling the solution tank with a bucket, make sure that the bucket is clean.

Do not use the same bucket for filling and draining the machine.



Figure 12

Auto-fill Hose Port (Option)

The machine have a optional auto-fill hose port (Machine components, #2), you can fill the solution tank by using filling hose equipped with quick connectors.

1. Connect the quick connector of the filling hose to the auto-fill port and connect the another end to the water supply connector.
2. Turn the water supply on, the water flow will automatically shut off when solution tank is full, and then turn the water supply off.
3. Disconnect the quick connector from the water supply end first, and then disconnect the filling hose from machine and store in proper location.



WARNING:

**Do not put any flammable materials into solution tank.
This can cause an explosion or a fire.**

Filling The Detergent Bottle

The machine is equipped with a 4 liters detergent bottle under the recovery tank. You can fill the detergent bottle by opening the detergent bottle cabin door (Machine components, #25), and removing the detergent bottle cap.

The ratio of water and detergent is 0-5%, you can adjust this ratio via pressing the detergent adjusting button (Machine components, #33).

NOTE:

Only use recommended cleaning chemicals. Contact your janitorial supply distributor for recommendations on proper am chemicals.

MACHINE OPERATION

Pre-Operation Checks

1. Check the tank cover seals for damage.
2. Drain the recovery tank, check the vacuum fan inlet filter, clean them if necessary.
3. Check the vacuum hose for debris or blockage.
4. Check the squeegees for damage, wear and for deflection adjustment.
5. Check whether brushes is installed properly.
6. Check the brakes and steering for proper operation.

Operating the Machine

1. Sit on the Operator seat, adjusting the seat to comfortable place by pushing the seat adjustment handle (Machine components, #18). (See Fig. 12)

NOTE:

The machine will not travel unless the operator is sitting in the operator seat.

2. Turn on the machine.
Check the Touch screen (Machine components, #14) , if the machine has a fault there will be a Fault icon display and blinking (Machine components, #39), please DO NOT operate the machine unless the fault has been eliminated (please see FAULT CODES AND ELIMINATE section).
3. Select the proper working mode by pressing the work mode select button (Machine components, #32). The machine has 3 Modes of ECO, HEAVY Duty and User custom.
For the User custom mode, you can select the preferred settings by pressing the solution flow adjusting button (Machine components, #30), detergent



Figure 12

NOTE:

For energy saving, recommend to using the ECO mode as possible.

adjusting button (Machine components, #33), and the brush pressure adjusting button (Machine components, #35).

4. Turn on the 1-Step starting button, the scrub head assembly and the squeegee assembly will lower down automatically, all the presetting functions will turn on. (See Fig. 13)

5. The machine can scrub in both directions, forward and backward, press the Directional button (Machine components, #36) to select the direction. The horn will sound and the squeegee will raise automatically (the vacuum motor will turn off after a short delay) when driving machine backwards. This is to prevent damaging the squeegee. (See Fig. 14)

6. Press the propel pedal, the machine starts scrubbing, the speed can be adjusted by controlling the force of foot stepping, light is slow, heavy is fast. (See Fig. 15)

7. To stop scrubbing, turn off the 1-Step starting button, the scrub head will raise automatically, the squeegee will also raise after a short delay, please keep moving until the dirty water is picked up, and then release the propel pedal and stop scrubbing.

8. Turn off the machine.

NOTE:

Go slow when drive machine backwards.

NOTE:

Go slow on inclines and slippery surfaces.



Figure 13



Figure 14



Figure 15

WHILE OPERATING THE MACHINE



WARNING:

Fire or explosion hazard. Do not pick up flammable materials or reactive metals.

1. Go slow on inclines and slippery surfaces, go slow when turn and reverse. Do not operate the machine on inclines that exceed 7% (4°).
2. Drive machine in a straight path as possible, avoid turning the Steering wheel too sharply when machine is in motion. Avoid sudden turns except emergencies.
3. Do not keep the machine in the same position with pad / brush spinning, keep the machine moving to prevent damage to floor finish.
4. If the squeegee assembly leaves streaks on the floor, raise the squeegee off the floor and wipe the blades down with a damp cloth. Pre-sweep the area to prevent leaving streaks on the floor.
5. To obtain the optimum cleaning performance, you can adjust the brush pressure, solution flow and detergent dosage as you require. If poor picking up water performance is observed, please stop scrubbing and check the squeegee blade, adjust or replace if necessary.
6. If the dirty water path exceed the width of squeegee, please adjust the side squeegee assembly.

7. Pour a recommended defoamer into the recovery tank if excessive foam appears.
8. Press the horn button (Machine components, #27) to alert if necessary. (See Fig. 16)



WARNING:

The foam does not activate water level switch, excessive foam may result in vacuum motor damage.

9. The machine is equipped with a warning light (Machine components, #21), you can select turn ON or OFF by the warning light button (Machine components, #40).
10. If there have fault icon display and blinking on the touch screen, please stop using the machine and to eliminate the fault (Please see FAULT CODES AND ELIMINATE section).
11. For heavily soiled areas, please use HEAVY DUTY SCRUBBING mode by work mode select button.
12. If you only want to pick up water needn't scrubbing, turn on the vacuum motor button (Machine components, #38), the squeegee will lower down, and turn off the 1-Step starting button (if it is ON), the scrub head will raise and then start to picking water up.



Figure 16

Brake Device

The machine is driven by the front drive wheel (Machine components, #11), that is equipped with a brake device. When you release the propel pedal, the machine will stop travel, the park brake will engage after a short delay.

The machine is equipped with a brake pedal (Machine components, #9), that can be used to control the machine if quicker stopping is needed or if operating on an incline.

(See Fig. 17)



Figure 17

Emergency Stop Button

The machine is equipped with an emergency stop button (Machine components, #17), please push it if any emergency, that will shut off all power of machine and brake immediately.

To restart the machine, please reset the emergency stop button, and turn off the machine and then restart. (See Fig. 18)



Figure 18

NOTE:

Please hold the steering wheel when emergency stop.

TANK DRAINING

Draining The Recovery Tank

Any time scrubbing is completed, or when refilling solution tank, the recovery tank should be drained and cleaned.



WARNING:

If the recovery tank is not drained when the solution tank has been refilled, foam or water may enter the float shutoff screen and cause damage to the vacuum motor.

1. While holding the recovery tank drain hose (Machine components, #41) upward, remove the cap and lower hose to drain.
2. Open the recovery tank cover (Machine components, #22) and rinse out the tank. Use a rag to remove any excess dirt.
3. Remove and clean the vacuum fan inlet filter located in the recovery tank. Clean the filter with a damp cloth or low pressure water hose if dirty. Allow the vacuum fan filter to dry completely before reinstalling it in the machine.

Draining The Solution Tank

Any time scrubbing operation is completed, the solution tank should be drained and cleaned.

1. While holding the solution tank drain hose (Machine components, #43) upward, remove the cap and lower hose to drain.
2. Rinse the solution tank with clean water after every use. This will help prevent chemical buildup and clogging of the solution lines.

(See Fig. 19)



Figure 19

PREVENTIVE MAINTENANCE

Daily Maintenance



WARNING:

Before performing any maintenance on the machine, be sure that the power is turned off, or the batteries are disconnected!



WARNING:

Repairs are to be completed by authorized service centers only. Any repairs completed by unauthorized persons will not be covered by the warranty.

1. Remove pad driver/ brush and clean with approved cleaner.
2. Drain recovery and solution tanks completely and rinse out with clean water. Visually check the recovery tank for debris and clean out as necessary.
3. Raise the squeegee assembly off floor and wipe it down with a damp towel. **Be sure to store the squeegee in the up position.**
4. Remove the vacuum fan inlet filter and rinse it out with clean water.
5. Clean machine with an approved cleaner and a damp towel.
6. Recharge the batteries.
7. Check the condition of the squeegee blade wiping edge, rotate blade if worn.

Monthly Maintenance

1. Clean the battery tops to prevent corrosion.
2. Check for loose battery cable connections.
3. Inspect and clean the recovery tank cover seal. Replace it if damaged.
4. Lubricate all grease points and pivot points with silicon spray and approved grease.
5. Check the machine for loose nuts and bolts.
6. Check the machine for leaks.

Machine Storage

1. Always store the machine indoors.
2. Always store the machine in a dry area.
3. Always store the machine in its upright position.
4. Always store the machine with the pad driver/ brush raised off the floor.
5. Always store the machine with the squeegee assembly raised off the floor.
6. If storing in an area which may reach freezing temperatures, be sure to drain all fluids from the machine prior to storage. Any damage caused by freezing temperatures will not be covered by the warranty.
7. Drain the recovery tank.
8. Drain the solution tank of all fluid.

FAULT CODE AND SOLUTION

The machine equipped with a 7-inch touch screen (Machine components, # 14), the touch screen will display Battery meter (Machine components, #28), date and time (Machine components, #29), and Working accumulated hours (Machine components, #34).

When the machine detects a fault, there will be a Fault icon blinking (Machine components, #39) on the touch screen accompany an audible alarm occasionally.

The Fault icon have 2 colors. Yellow icon represents a low level fault, you can click it to pop up a fault message window, it will guide you how to eliminate the fault.

Red icon represents a serious fault, the fault message window will pop up automatically, you can not close it unless the fault is eliminated.

Once the fault icon occurring, please DO NOT continue operate machine unless the faults are eliminated.

Turn off the machine, then to solve the fault, the fault icon will be eliminated when machine re-start.

If the fault icon is occurred frequently, or can't be eliminated, please contact ICE service center.

Please refer to the below table to determine the fault cause and the solution.

FAULT CODE	FAULT MESSAGE	SOLUTION
F01	Seat Empty	Sit in seat
F02	Squeegee or Scrub head Actuator Overload	Check Squeegee or Scrub head Actuator
F04	Vacuum Motor Overload	Check Vacuum Motor
F05	Brush Motor (Left) Overload	Check Brush Motor (Left)
F06	Brush Motor (Right) Overload	Check Brush Motor (Right)
F07	Drive Motor Overload	Check Drive Motor
F08	Recovery Tank Full	Drain Recovery tank
F09	Solution Tank Empty	Refill Solution tank
F10	Battery Low	Charge battery
F11	Battery Discharged	Charge battery Immediately
F12	Brake Open Circuit	Check brake wiring
F13	Release Accelerate Pedal	Release the propel pedal
F14	Brake Short Circuit	Check brake wiring
F16	Main Controller Overheat	Turn off the machine and re-start after a while
F18	Accelerator Sensor Open Circuit	Check accelerator sensor
F19	Brake Sensor Open Circuit	Check Brake sensor
F20	Brush Motor (Left) Open Circuit	Check Brush Motor (Left) Wiring and Connector
F21	Vacuum motor Open Circuit	Check Vacuum motor Wiring and Connector
F22	Solenoid Valve Short Circuit	Check Solenoid valve Wiring and Connector

FAULT CODE	FAULT MESSAGE	SOLUTION
F23	Solenoid Valve Open Circuit	Check Solenoid valve Wiring and Connector
F24	Drive Motor Open Circuit	Check Drive motor wiring and Connector
F25	Brush Motor (Right) Open Circuit	Check Brush Motor (Right) Wiring and Connector
F40	Wheel Paluse Sensor Fault	Check Proximity switch
F43	Emergency Stop	Release Emergency stop button
F49	Main Controller Fault	Replace Main controller
F50	Main Controller Fault	Replace Main controller
F53	Detergent Pump Short Circuit	Check Detergent pump Wiring and Connector
F54	Detergent Pump Open Circuit	Check Detergent pump Wiring and Connector
F55	Scrub Head Actuator Open Circuit	Check Scrub head actuator Wiring and Connector
F56	Squeegee Actuator Open Circuit	Check Squeegee actuator Wiring and Connector
F57	Flashing Light Short Circuit	Check Flashing light Wiring and Connector
F58	Flashing Light Open Circuit	Check Flashing light Wiring and Connector
F61	Main Relay (#1) Short Circuit	Check Main Relay (#1) Wiring and Connector
F62	Main Relay (#1) Open Circuit	Check Main Relay (#1) Wiring and Connector

FAULT CODE	FAULT MESSAGE	SOLUTION
F63	Main Relay (#2) Short Circuit	Check Main Relay (#2) Wiring and Connector
F64	Main Relay (#2) Open Circuit	Check Main Relay (#2) Wiring and Connector
F65	Drive Motor Short Circuit	Check Drive Motor Wiring and Connector
F67	Brush Motor (Left) Short Circuit	Check Brush Motor (Left) Wiring and Connector
F68	Brush Motor (Right) Short Circuit	Check Brush Motor (Right) Wiring and Connector
F69	Vacuum Motor Short Circuit	Check Vacuum Motor Wiring and Connector
F70	Scrub Head Actuator Short Circuit	Check Scrub head actuator Wiring and Connector
F71	Squeegee Actuator Short Circuit	Check Squeegee actuator Wiring and Connector

TECHNICAL SPECIFICATIONS

Model	RS28L-CY
LENGTH	63.4in / 1.610mm
WIDTH (MACHINE WITH SCRUB HEAD)	34in / 860mm
HEIGHT	56.7in / 1.440mm
WEIGHT	640 lbs / 290 Kg
WEIGHT WITH BATTERIES	900 lbs / 410 Kg
RECOVERY TANK CAPACITY	27.7 Gal / 105 L
SOLUTION TANK CAPACITY	28.5 Gal / 108 L
SQUEEGEE WIDTH	40in / 1.030mm
CLEANING PATH WIDTH	27in / 710mm
PRODUCTIVITY RATE PER HOUR (IN THEORY)	49,500ft ² 4,600m ²
TRAVEL SPEED (TRANSPORT)	4 Mile / h 6.5 Km / h
MINIMUM AISLE TURN	75in / 1,900mm
PAD/BRUSH PRESSURE	80 lbs / 35 Kg 120 lbs / 55 Kg 160 lbs / 75 Kg
SOLUTION FLOW	0 – 0.7 Gal / Min 0 – 2.7 L / Min
BATTERIES	Lithium-ion batteries, 240 AH
VOLTAGE	24V DC
DRIVE WHEEL	1.1 hp / 0.8 KW
BRUSH MOTOR	(2) 0.75 hp / 0.56 KW, 750 RPM
VACUUM MOTOR	0.6 hp / 0.45 KW
VACUUM WATER LIFT (MAX)	70in. H2O / 1780mm. H2O
RUN TIME PER CHARGE	3–3.5 hours
DECIBEL RATE AT OPERATORS EAR, INDOORS	68 dB(A)
GRADE LEVEL, MAX	Scrubbing: 4°/7% Transporting (empty): 10°/17.5%

WEAR AND TEAR PARTS LIST

DIA NO	PART NUMBER	DESCRIPTION	NO REQ'D
1	8310119	10" WHEEL, PU TIRE	2
2	8116009	PROTECTIVE WHEEL	2
3	8310362	PROTECTIVE WHEEL	1
4	8310531	REAR BLADE, LINATEX, RS32L+	1
5	8310534	FRONT BLADE, LINATEX, RS32L+	1
6	8216105	CYLINDRICAL BRUSH, 28 INCH	2

Reference No. : WTS20S11085034E
 Holder : Guangdong ICE Co., Ltd.
 Address : Fushan Section Road, Xiangshi Road, Liaobu Town,
 Dongguan City, Guangdong Province, P.R. China
 Product : Ride-on Automatic Scrubber
 Model(s) : RS26L+, RS32L+, RS28L-CY, RS26+, RS32+, RS28-CY
 Ratings : Refer to report

Test Standards:

EN IEC 61000-6-2:2019
 EN IEC 61000-6-4:2019
 EN IEC 61000-3-2:2019
 EN 61000-3-3:2013+A1:2019

The above product has been tested by us with the listed standards and found in compliance with the European Electromagnetic Compatibility Directive 2014/30/EU. It is possible to use CE marking to demonstrate the compliance with this EMC Directive.

EN IEC 61000-6-2: Generic standards - Immunity standard for industrial environments
 EN IEC 61000-6-4: Generic standards - Emission standard for industrial environments
 EN IEC 61000-3-2: Electromagnetic Compatibility (EMC) Part 3-2: Limits for harmonic current emissions (Equipment input current up to and including 16A per phase)
 EN 61000-3-3: Electromagnetic Compatibility (EMC) Part 3-3: Limitation of voltage supply systems for equipment with rated current \leq 16A

The referred test report(s) show that the product complies with standard(s) recognized as giving presumption of compliance with the essential requirements in the above mentioned EU Directive. Other relevant Directives have to be observed.

After preparation of the necessary technical documentation as well as the conformity declaration, the CE marking as shown below can be affixed on the equipment.



Manager: Deval Qin
 Date: 2021-08-05

The statement is based on a single evaluation of the sample of above mentioned product(s). It does not imply an assessment of the whole production.

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Reference No. : WTS20F11085033J
 Applicant : Guangdong ICE Co., Ltd.
 Address : Fushan Section, Xiangshi Road, Liaobu Town,
 Dongguan, Guangdong, China
 Manufacturer : ICE Robotics EMEA
 Address : Airborne Avenue 55
 2133 LV Hoofddorp (The Netherlands)
 Product : Ride-on Automatic Scrubber
 Model No. : RS26+, RS26L+, RS28-CY, RS28L-CY, RS32+,
 RS32L+
 Technical data : Model list refer to test report

**Test Standards:**

EN 60335-1:2012+A11:2014+A13:2017+A1:2019+A2:2019+A14:2019
 EN 60335-2-72:2012
 EN 62233:2008

The above product has been tested by us with the listed standards and found in compliance with the European Directive MD 2006/42/EC. It is possible to use CE marking to demonstrate the compliance with this MD Directive.

Household and similar electrical appliances

Part 1: General requirements

Part 2: Particular requirements for floor treatment machines with or without traction drive, for commercial use

Measurement methods for electromagnetic fields of household appliances and similar apparatus with regard to human exposure

The referred test report(s) show that the product complies with standard(s) recognized as giving presumption of compliance with the essential requirements in the above mentioned EU Directive. Other relevant Directives have to be observed.

After preparation of the necessary technical documentation as well as the EU Declaration of Conformity, the CE marking as shown below can be affixed on the equipment under the sole responsibility of the manufacturer.



The statement is based on a single evaluation of the sample of above mentioned product. It does not imply an assessment of the whole production.

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