

# SCRUBBER 50



Developed based on machine version V4 - Documentation version V1.0

SHANGHAI GAUSSIAN AUTOMATION TECHNOLOGY DEVELOPMENT CO., LTD

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## Amendment record

Version	Scope of application	Revised content	Reviser	Revision time	Approver	Approval date
v1.0	V4	Initial draft	Xiangyang Zhao	2023/0 7/15	Wenjie Hu	2022/08/03

## Disassembly Tools

Tools name	Picture
Hex wrench ( one set)	
Flat-head Screwdriver & Flat-head screwdriver	
Open end wrench (set)	
Hex socket wrench 7mm&8mm&10mm	

Adjustable wrench	
Thread-locking fluid	
Needle nose pliers	
Electrical tape	
Soldering iron & tin wire	

## Disassembly Precautions

1. Remove the screws carefully to prevent them from slipping.
2. When inserting and unplugging the wiring harness, take a photo in advance for recovery.
3. When inserting and removing the plug, do not use too much force to damage the plug.
4. When the wiring harness plug is restored, it needs to be fixed with white glue to prevent the plug from falling off.
5. When disassembling electrical components, power off (turn off the air switch) before disassembling.

## Exterior shell

### Little front shell

Duration: 30s

Tools: /	Auxiliary material: /
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### Disassembly



		<p>1. The small front shell of the model 4.1 is fixed on the shell by magnetic suction. Pull directly outward from the position indicated by the arrow so that you can remove the small front shell (no line behind the main body connection)</p>
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### Installation


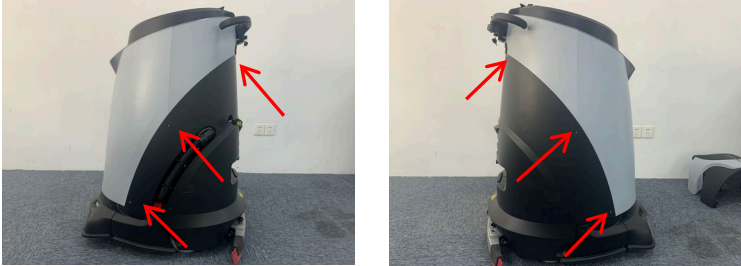
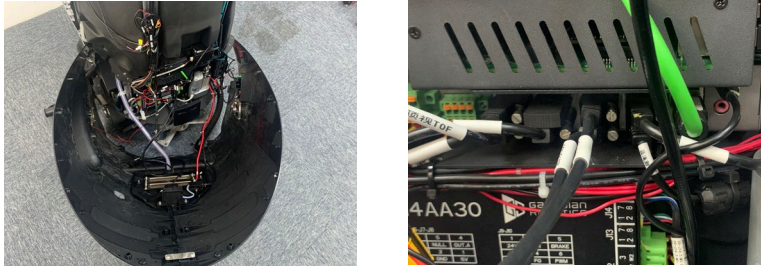


Please install the machine in a reverse order of removal.

## Rear low shell

Duration: 0.5h

Tools: Hex wrench、 3mm flat-head screwdriver		Auxiliary material:
		

### Disassembly


	<p>1、 Turn off the air switch and remove the telescopic blowdown pipe at the left rear of the fuselage</p>
	<p>2. Disconnect the circuit breaker and remove the 6 rear lower case fixing screws.</p>
	<p>3. Gently pull out the rear lower shell, being careful not to break the wiring harness. Loosen the screws and remove the rear laser and rear camera harness from the host computer.</p>
	<p>4. Remove the fan connector, pull out the automatic drain pipe, remove the power amplifier wire harness, loosen the screws and remove the electrode wire harness.</p>
	<p>5. Carefully remove the rear lower shell.</p>

## **Installation**

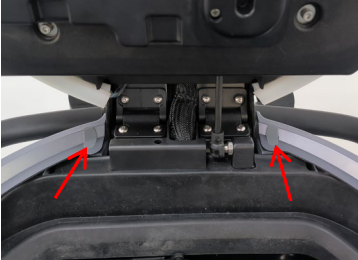



Installation is carried out in the reverse order of disassembly.

## Head cover Frame

Duration: 0.5h

Tools: needle nose pliers, hexagon socket	Accessories:
	

## Disassembly


		<ol style="list-style-type: none"> <li>1. Disconnect the circuit breaker and pull out the two silicone plugs. (Note that the silicone plugs are divided into left and right, please mark them properly)</li> <li>2. Take out two hexagon socket screws.</li> </ol>
		<ol style="list-style-type: none"> <li>3. Loosen the screw from the HUB in the lower left corner of the small front shell and remove the USB harness of the front laser and camera.</li> <li>4. Remove the head cover frame assembly.</li> </ol>

## Installation






Installation is carried out in the reverse order of disassembly.

## Large front shell

Duration: 0.5h

Tools: hexagon socket	
	

### Disassembly

			<ol style="list-style-type: none"> <li>1. Disconnect the circuit breaker and remove the head cover frame assembly first - Refer to Head Cover Frame - Disassembly for details.</li> <li>2. Remove the rear lower shell - Refer to Rear Lower Shell - Disassembly for details.</li> <li>3. Open both sides of the water-retaining rubber ring and remove the fixing screws on both sides.</li> </ol>
		<ol style="list-style-type: none"> <li>3. Remove the two screws behind the large front shell.</li> <li>4. Slowly separate the front shell buckle from the rear upper shell buckle and then remove the large front shell.</li> </ol>	

### Disassembly

Installation is carried out in the reverse order of disassembly.

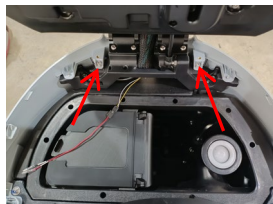
## Rear upper shell

Duration: 0.5h

Tools: hexagon socket



## Disassembly





1. Disconnect the circuit breaker and remove the head cover frame assembly.
2. Remove the large front shell. Refer to Large Front Shell - Disassembly.
3. Remove the two screws indicated by the arrows to remove the rear upper case.

## Installation


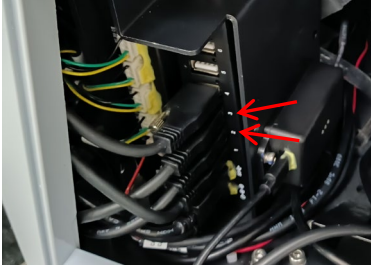
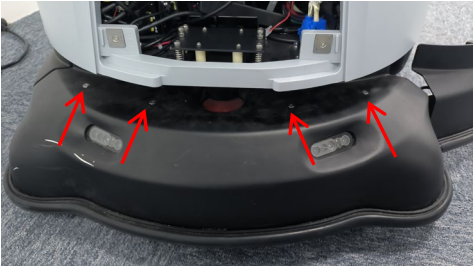
Installation is carried out in the reverse order of disassembly.

## Anti-collision shell

Duration: 0.5h

Tools: Allen, needle nose pliers, diagonal pliers	Accessories
	

## Disassembly


	<p>1. Disconnect the circuit breaker, open the small front case, disconnect the connector on the anti-collision plate, and cut the rolling strip that fixes the wiring harness.</p>
	<p>2. Loosen the screws of the left camera (USB2) and the right camera (USB3), and unplug the USB cable harness.</p>
	<p>3. Use an Allen wrench to remove the upper screws. Remove the bumper shell.</p>

## Installation

Installation is carried out in the reverse order of disassembly.

## Left anti-collision shell

Duration: 0.5h

Tools: Internal hexagon	
	

### Disassembly


	<ol style="list-style-type: none"> <li>1. Turn off the circuit breaker and open the anti-collision shell.</li> <li>2. Unplug the air pressure harness plug-in</li> <li>3. Remove 1 screw of the cable clamp on the right side.</li> <li>4. Remove the 2 screws on the left side.</li> <li>5. Remove the collision shell.</li> </ol>
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### Installation

Installation is carried out in the reverse order of disassembly.

## Right anti-collision shell

Duration: 0.5h

Tools: Internal hexagon	
	

## Disassembly

		<ol style="list-style-type: none"> <li>1. Open the anti-collision shell.</li> <li>2. Unplug the air pressure harness plug-in.</li> <li>3. Remove 1 screw of the cable clamp on the right side.</li> <li>4. Remove the 2 screws on the left side.</li> <li>5. Remove the collision shell.</li> </ol>
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## Installation

Installation is carried out in the reverse order of disassembly.


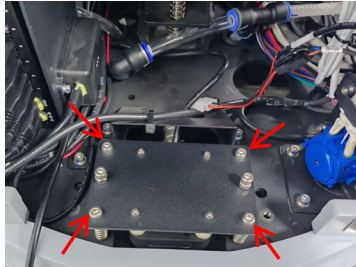
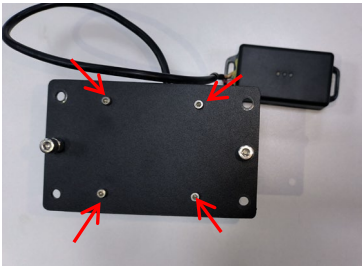
## Sensor

### Front flat laser

Duration: 1h

Tools: Internal hexagon	Accessories: Kraft electronic glue
	

## Disassembly

		<ol style="list-style-type: none"> <li>1. Disconnect the circuit breaker and remove the small front shell. (For details, Refer to Shell-Small Front Shell-Disassembly).</li> <li>2. Remove the suction motor assembly (for details, Refer to - Motor - Suction Motor - Disassembly).</li> </ol>
		<ol style="list-style-type: none"> <li>3. Remove the two fixing screws of the left laser conversion module.</li> <li>4. Remove the laser fixing bracket.</li> </ol>
		<ol style="list-style-type: none"> <li>5. Remove the laser from the bracket.</li> </ol>

## Installation

Installation is carried out in the reverse order of disassembly.


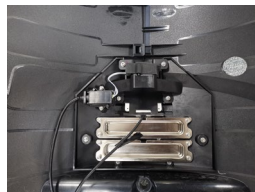
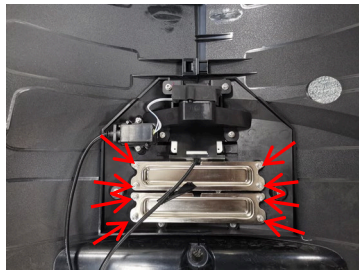
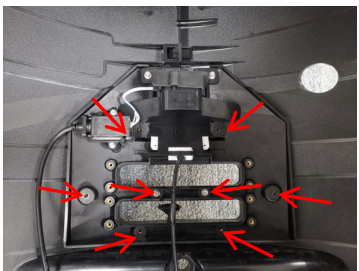
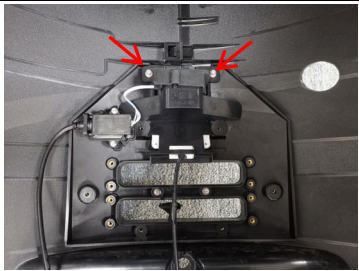
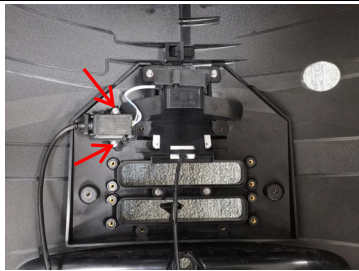
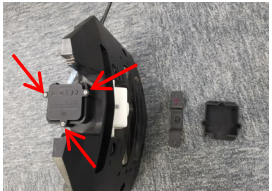
## Rear laser

Duration: 0.5h

Tools: Internal hexagon, Slotted screwdriver



## Disassembly



		<p>1. Disconnect the circuit breaker and remove the rear lower shell. Refer to rear lower shell-Disassembly.</p>
		<p>2. 8 fixing screws for disassembly electrode pads. Remove the electrode pads. 3. Disassembly the 8 fixing screws of the rear cover. Remove the middle and rear cover.</p>
		<p>4. Disassembly and disinfect the 2 fixing screws of the fixing plate. Remove the sterilization fixing plate. 5. 2 fixing screws for the Disassembly laser conversion module. Remove the laser conversion module.</p>
		<p>6. Remove the 3 screws on the laser base and remove the laser from the middle and rear cover.</p>

## Installation


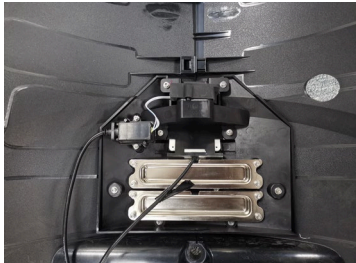
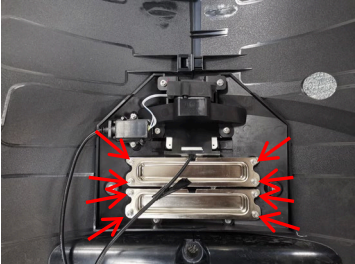
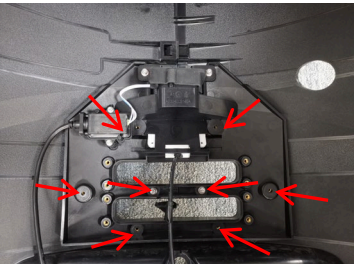
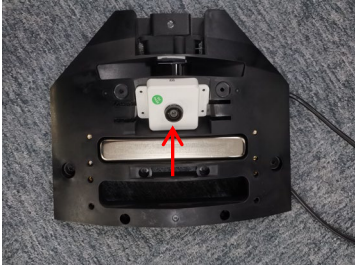
Installation is carried out in the reverse order of disassembly.

## Rear camera

Duration: 0.5h

Tools: Internal hexagon,3mm Slotted screwdriver	Accessories
	

## Disassembly



 	<p>1. Disconnect the circuit breaker and remove the rear lower shell. Refer to rear lower shell-Disassembly.</p>
 	<p>2. 8 fixing screws for disassembly electrode pads. Remove the electrode pads. 3. Disassemble the 8 fixing screws of the rear cover. Remove the middle and rear cover.</p>
	<p>4. Remove the rear camera from the middle rear cover.</p>

## Installation

Installation is carried out in the reverse order of disassembly.

## Front level camera

Duration: 0.5h

<p>Tools: Internal hexagon 、 3mm Slotted screwdriver</p>	<p>Accessories</p>
	

## Disassembly




	<p>1. Disconnect the circuit breaker and remove the small front door. Refer to Small Front Door-Disassembly. Loosen the USB fixing screws of the front flat camera (USB4) and the front oblique camera (USB1), and unplug the wiring harness.</p>
	<p>2. Remove the head cover frame assembly, Refer to Head Cover Frame-Disassembly.</p>
	<p>3. Remove the 4 screws on the middle and rear cover brackets, and slowly remove the front camera from the fixing buckle.</p>

## Installation

Installation is carried out in the reverse order of disassembly.

## Frontal oblique camera

Duration: 0.5h

Tools: Internal hexagon、 3mmSlotted screwdriver	Accessories
 	

## Disassembly



		<p>1. Disconnect the circuit breaker and remove the small front door. Refer to Small Front Door-Disassembly. Loosen the USB fixing screws of the front flat camera (USB4) and the front oblique camera (USB1), and unplug the wiring harness.</p>
		<p>2. Remove the head cover frame assembly, Refer to Head Cover Frame-Disassembly.</p>
		<p>3. Remove the 4 screws on the middle and rear cover bracket, then remove the two fixing screws on the front oblique camera, and remove the front oblique camera.</p>

## Installation

Installation is carried out in the reverse order of disassembly.

## Left camera

Duration: 0.5h

Tools: Internal hexagon、Diagonal pliers	Accessories: Kraft glue, cable ties,
	

## Disassembly

	<p>1. First remove the front collision shell, Refer to Anti-collision Shell-Disassembly.</p>
	<p>2. Remove the two fixing screws of the left camera, remove the clamp screws that fix the wiring harness, cut the tie that fixes the wiring harness, and remove the left camera.</p>

## Installation


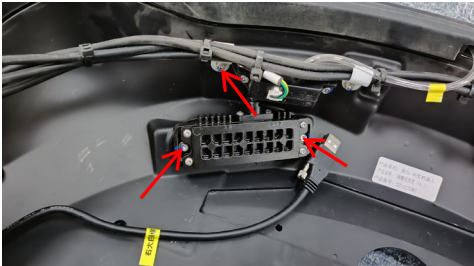
Installation is carried out in the reverse order of disassembly.

## Right camera

Duration: 0.5h

<p>Tools: Internal hexagon 、 Diagonal pliers</p>	<p>Accessories: Kraft glue, cable ties</p>
	

## Disassembly

	<p>1. First remove the front collision shell, Refer to Anti-collision Shell-Disassembly.</p>
	<p>2. Remove the two fixing screws of the right camera, remove the clamp screws that fix the wiring harness, cut the tie that fixes the wiring harness, and remove the right camera.</p>

## Installation

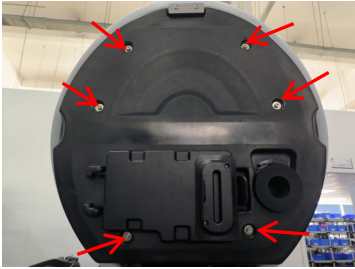

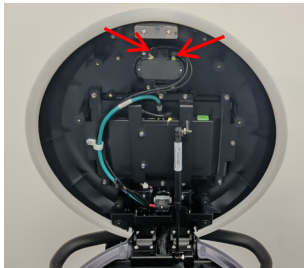
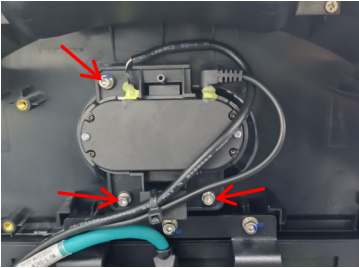

Installation is carried out in the reverse order of disassembly.

## Top view camera

Duration: 0.5h

<p>Tools: Internal hexagon 、 Phillips screwdriver</p>	<p>Accessories: Phillips screwdriver</p>
	

## Disassembly

 	<ol style="list-style-type: none"> <li>1. Remove the 6 fixing screws of the water tank cover assembly and store the silicone pad behind the screws to prevent loss. (Note that there is a negative pressure sensor harness behind the water tank cover, do not pull it off).</li> <li>2. Unplug the negative pressure sensor harness.</li> </ol>
 	<ol style="list-style-type: none"> <li>3. Remove the camera harness (USB cable on the left, power cable on the right)</li> <li>4. Remove the 3 screws that fix the camera assembly.</li> </ol>
	<ol style="list-style-type: none"> <li>5. Take the camera assembly out of the head cover, use a Phillips screwdriver to remove the fixing screws of the camera assembly, and remove the camera.</li> </ol>

## Installation

Installation is carried out in the reverse order of disassembly.

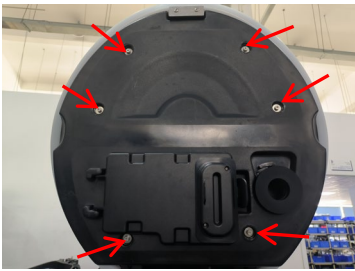

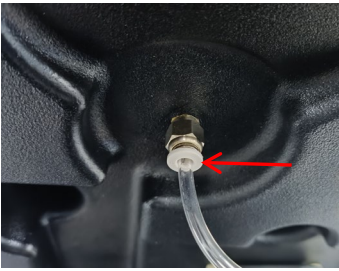
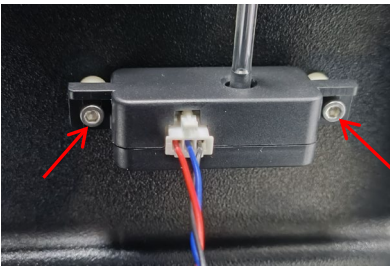


## Negative pressure sensor

Duration: 0.5h

Tools: Internal hexagon	Accessories: Kraft glue
	

### Disassembly

 	<ol style="list-style-type: none"> <li>1. Remove the 6 fixing screws of the water tank cover assembly and store the silicone pad behind the screws to prevent loss. (Note that there is a negative pressure sensor harness behind the water tank cover, do not pull it off)</li> <li>2. Unplug the negative pressure sensor harness.</li> </ol>
 	<ol style="list-style-type: none"> <li>3. Press the white interface and unplug the trachea of the negative pressure sensor.</li> <li>4. Remove the two fixing screws of the air pressure sensor and take off the air pressure sensor.</li> </ol>

### Installation


Installation is carried out in the reverse order of disassembly.

## Air pressure sensor

Duration: 0.5h

Tools: Internal hexagon	Accessories: Kraft glue
	

## Disassembly

		1. First remove the front collision shell, Refer to Anti-collision Shell-Disassembly.	
			2. Remove the air pipe and two fixing screws of the air pressure sensor of the front collision shell and the left and right collision shell respectively, and then the air pressure sensor can be removed.

## Installation

Installation is carried out in the reverse order of disassembly.

## Liquid level sensor

Duration: 1.5h

Tools: Internal hexagon、 17mmopen end wrench	Accessories
	

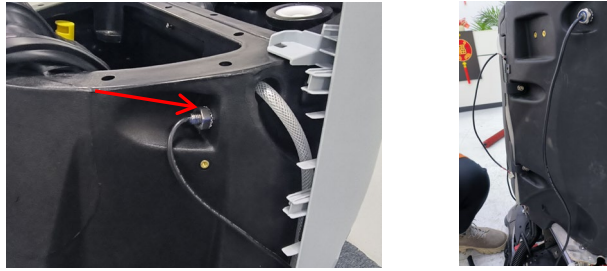
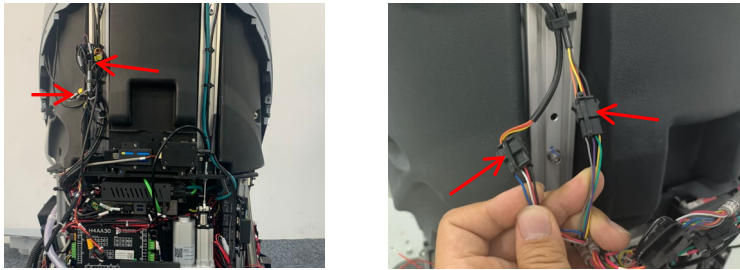
## Disassembly



The liquid level sensor is divided into a clean water tank liquid level sensor and a sewage tank liquid level sensor (replacing the clean water tank sensor does not require disassembly of the rear shell). Here we take the Disassembly sewage tank level sensor as an example:

1. Remove the rear lower shell. Refer to Rear Lower Shell-Disassembly.
2. For head cover frame assembly, please refer to Head Cover Frame-Disassembly.
3. Small front shell Refer to small front shell-Disassembly.
4. Large front shell Refer to Large Front Shell-Disassembly.

After disassembling the shell, you can find that the liquid level sensors are on the left side of the fuselage. There are nuts on the outside of the water tank at the corresponding positions to fix the liquid level sensors to the water tank.


	<p>6. Disassemble the nuts that fix the liquid level sensor separately.</p>
	<p>7. There are clean water tank float ball and sewage tank float ball harness on the left column of the fuselage. Remove the float ball after unplugging the docking connector.</p>

## Installation



Installation is carried out in the reverse order of disassembly.

## Hall detection module

Duration: 1.5h

Tools	Accessories
	

## Disassembly

	<ol style="list-style-type: none"> <li>1. Remove the rear lower shell. Refer to Rear Lower Shell-Disassembly.</li> <li>2. For head cover frame assembly, please refer to Head Cover Frame-Disassembly.</li> <li>3. Small front shell Refer to small front shell-Disassembly.</li> <li>4. Large front shell Refer to Large Front Shell-Disassembly.</li> </ol> <p>After disassembling the shell, you can find that the Hall sensors are on the left side of the fuselage. Between the clean water tank and the sewage tank.</p> <ol style="list-style-type: none"> <li>5. Remove one fixing screw and pull out the Hall sensor bracket.</li> <li>6. Unplug the wiring harness of the Hall sensor.</li> </ol>
	<ol style="list-style-type: none"> <li>7. Remove the two fixing screws of the Hall sensor and cut off the wire harness fixing tie to remove the Hall sensor.</li> </ol>

## **Installation**

Installation is carried out in the reverse order of disassembly.

## Motor

### Suction motor

Duration: 0.5h

Tools: Internal hexagon、	Accessories
	

### Disassembly

		<p>1. After removing the small front door, you can Refer to the suction motor assembly.</p>
		<p>2. Remove the two screws fixing the suction motor bracket and take out the suction motor assembly.</p>
		<p>3. Unplug the power supply and signal cable connector of the suction motor to remove the suction motor assembly.</p> <p>4. Remove the 5 screws around the suction motor assembly and remove the suction motor assembly from the fixed sheet metal.</p>

### Installation

Installation is carried out in the reverse order of disassembly.




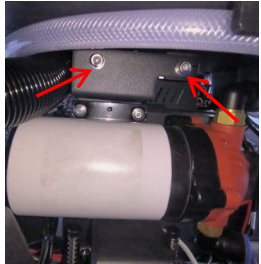
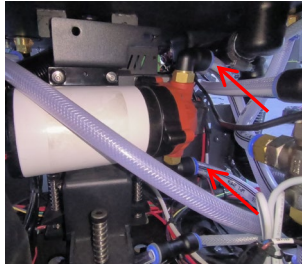

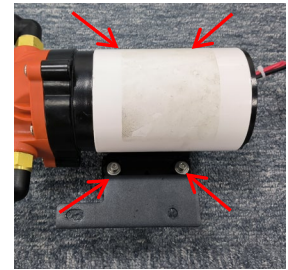

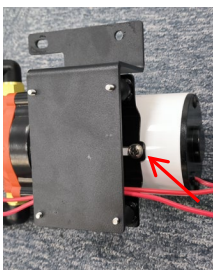


## Filter pump

Duration: 1h

Tools: Internal hexagon 、 Phillips screwdriver	Accessories
 	

## Disassembly


  	<ol style="list-style-type: none"> <li>1. Drain the water from the sewage tank.</li> <li>2. Remove the small front door.</li> <li>3. Remove the suction motor assembly and refer to Suction Motor-Disassembly.</li> </ol>
  	<ol style="list-style-type: none"> <li>4. Remove the two fixing screws on the bracket above the filter pump.</li> <li>5. Unplug the water inlet and outlet pipes of the filter pump (note that there will be a small amount of residual water when removing the water pipes, please use an absorbent rag underneath to prevent water from wetting other electrical components).</li> </ol>
  	<ol style="list-style-type: none"> <li>6. After taking out the filter pump assembly from the machine, remove the 4 screws on the front of the filter pump and the fixing bracket.</li> <li>7. Remove the two screws on the back of the filter pump and the fixing bracket to remove the filter pump.</li> </ol>

## **Installation**

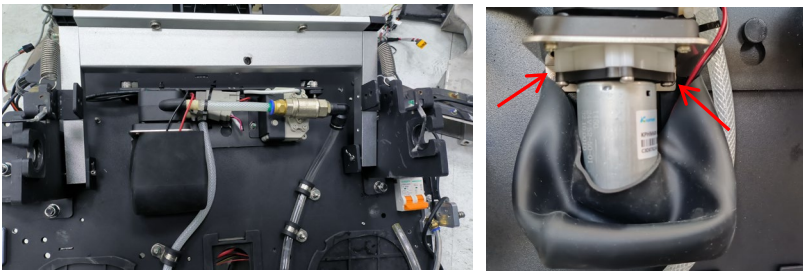

Installation is carried out in the reverse order of disassembly.

## Water jet pump

Duration: 1h

<p>Tools: Internal hexagon 、 Phillips screwdriver</p>	<p>Accessories</p>
	

## Disassembly

	<p>1. Before disassembling the hub motor, the ground needs to be covered with cushioning materials such as foam board or cardboard. After removing the squeegee assembly, lay the machine body along the side and use cartons to fix the machine front and back to avoid rotation.</p> <p>2. Open the rubber on the water pump and remove the two fixing screws.</p>
	<p>3. Unplug the water pipe. The water pump can be removed by unplugging the water pump's wiring harness.</p>

## Installation



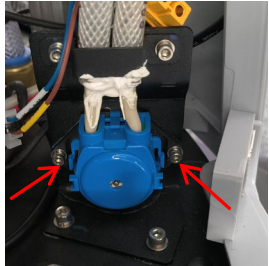
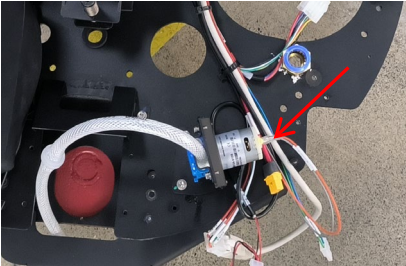
Installation is carried out in the reverse order of disassembly.

## Peristaltic pump

Duration: 0.5h

Tools: Internal hexagon,	Accessories
	

## Disassembly

		<ol style="list-style-type: none"> <li>1. Disassembly Small front shell Refer to small front shell-Disassembly.</li> <li>2. Disassemble the two screws that fix the bracket.</li> </ol>
		<ol style="list-style-type: none"> <li>3. Disassemble the two screws that fix the peristaltic pump.</li> <li>4. Unplug the wiring harness behind the peristaltic pump.</li> <li>5. Remove the peristaltic pump water pipe to remove the peristaltic pump.</li> </ol>

## Installation


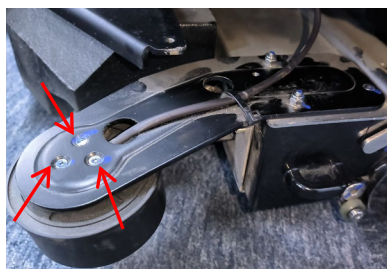
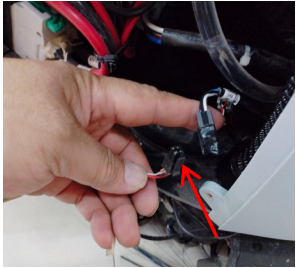
Installation is carried out in the reverse order of disassembly.

## Side brush motor

Duration: 0.5h

Tools: Internal hexagon 、 Diagonal pliers, open-end wrench	Accessories
  	

## Disassembly



		<ol style="list-style-type: none"> <li>1. Remove the anti-collision assembly. For details, Refer to Anti-collision Shell-Disassembly.</li> <li>2. Remove the 3 fixing screws of the side brush motor.</li> </ol>
		<ol style="list-style-type: none"> <li>3. Find the side brush motor wiring harness from the pillars on both sides, unplug the connector, and remove the side brush motor.</li> </ol>

## Installation

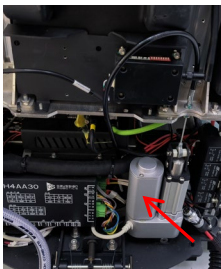
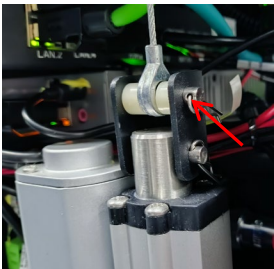


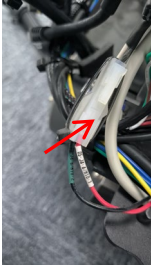

Installation is carried out in the reverse order of disassembly.

## Squeegee lift motor

Duration: 1h

Tools: Internal hexagon、Diagonal pliers	Accessories: cable tie
 	

## Disassembly



  	<ol style="list-style-type: none"> <li>1. Disassembly rear lower shell, Refer to rear lower shell-Disassembly.</li> <li>2. Find the squeegee lift motor in the lower right corner of the machine and remove the R-shaped pin connected to the wire rope. Remove the pin. (Note the white rubber isolation column storage).</li> <li>3. Remove the fixing pin from the base.</li> </ol>
  	<ol style="list-style-type: none"> <li>4. Unplug the power cord of the motor, and then remove the squeegee motor.</li> <li>5. Remove the R-shaped pin and pin of the connector on the push rod of the squeegee lift motor to remove the separate squeegee lift motor.</li> </ol>

## Installation


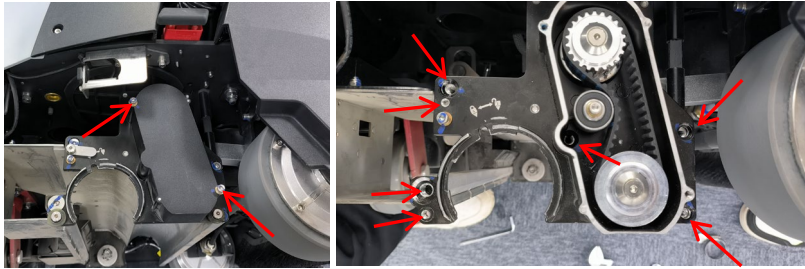
Installation is carried out in the reverse order of disassembly.

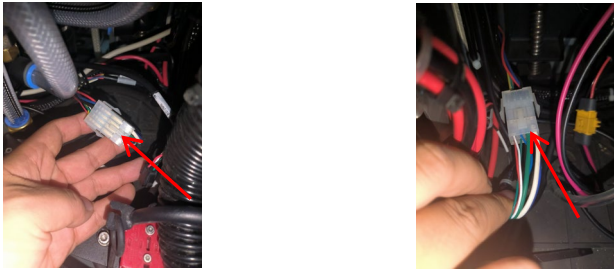
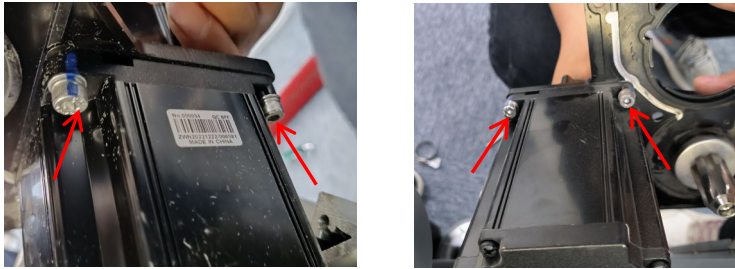
## Roller brush motor

Duration: 0.5h

Tools: Internal hexagon 、 Diagonal pliers	Accessories
	
	

## Disassembly

	<p>The roller brush motor is divided into a front roller brush motor and a rear roller brush motor. When disassembly of the front roller brush motor, the fuselage needs to be tilted to the left. When disassembly of the rear roller brush motor, the fuselage needs to be tilted to the right.</p> <p>1. Before disassembling the roller brush motor, the floor needs to be covered with cushioning materials such as foam board or cardboard. After removing the squeegee assembly, lay the machine body along the side and use cartons to fix the machine front and back to avoid rotation.</p>
	<p>2. Remove the two screws of the roller brush transmission case cover and take off the transmission case cover.</p> <p>3. Remove the 7 screws as shown in the picture (note that the dust box safety buckle and the rubber pad of the roller brush assembly are stored well) to remove the roller brush assembly.</p>

	<p>4. Unplug the wire harness of the roller brush motor next to the left and right pillars.</p>
	<p>4. Remove the 4 screws connecting the roller brush motor and the fixed sheet metal to remove the roller brush motor.</p>

## Installation


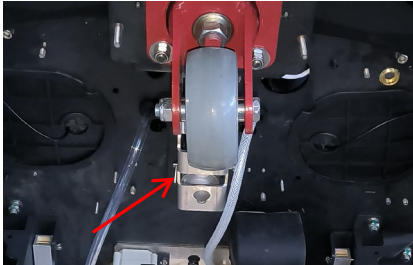
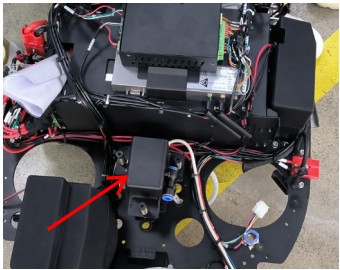

Installation is carried out in the reverse order of disassembly.

## Rolling brush lifting motor

Duration: 2h

<p>Tools: Internal hexagon 、 Phillips screwdriver</p>	<p>Accessories</p>
	

## Disassembly


		<ol style="list-style-type: none"> <li>1. Disassemble roller brush assembly, please refer to roller brush assembly-Disassembly.</li> <li>2. Unplug the brush lift motor wiring harness plug.</li> <li>3. Remove the R-shaped pin and pin shaft.</li> <li>4. For details of Disassembly suction motor, Refer to Suction Motor Disassembly.</li> </ol>
		<ol style="list-style-type: none"> <li>5. Remove the roller brush lifting motor from under the chassis.</li> </ol>

## Installation

Installation is carried out in the reverse order of disassembly.

## Disk brush motor


Duration: 0.5h

<p>Tools: Internal hexagon, Diagonal pliers, needle nose pliers</p>	<p>Accessories</p>
	

### Disassembly

		<ol style="list-style-type: none"> <li>1. Drain all the liquid in the machine. To disassembly the rear lower shell, Refer to Disassembly of the rear lower shell.</li> <li>2. Place a rubber pad or paper shell behind the machine and tilt the machine backwards.</li> <li>3. Remove the brush plate</li> </ol>
		<ol style="list-style-type: none"> <li>4. Disassemble The side shell limit plates on the left and right sides are fixed by two hexagon socket screws.</li> <li>5. Remove the brush plate skirts on the left and right sides.</li> </ol>
		<ol style="list-style-type: none"> <li>6. Disassemble suction motor, Refer to suction motor Disassembly.</li> <li>7. Use needle-nosed pliers to remove the R-shaped pin that fixes the brush tray lift motor.</li> <li>8. Take out the holed pin that fixes the brush tray lift motor.</li> </ol>
		<ol style="list-style-type: none"> <li>9. Use needle-nosed pliers to remove the R-shaped pin that fixes the brush tray lifting motor from the bottom of the machine chassis.</li> <li>10. Take out the holed pin and nylon pulley that fixes the</li> </ol>

	<p>brush tray lifting motor from the bottom of the machine chassis.</p>
	<p>11. Pull out and rotate the index pin threaded buckles, one on the left and one on the left.</p>
	<p>12. Pull the brush tray assembly upward with both hands to separate the brush tray assembly from the quick-plug connecting plate. 13. Use an adjustable wrench and a hexagon socket head screw to fix the drive shaft assembly, and remove the drive shaft assembly.</p>
	<p>14. After removing the drive shaft assembly, keep the positioning pin properly.</p>
	<p>15. Disassemble the 4 hexagonal socket screws that fix the brush plate motor. 16. Unplug the power supply and signal wires of the brush plate motor.</p>


	<p>17. Take out the brush plate motor.</p>
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## Installation

Installation is carried out in the reverse order of disassembly.

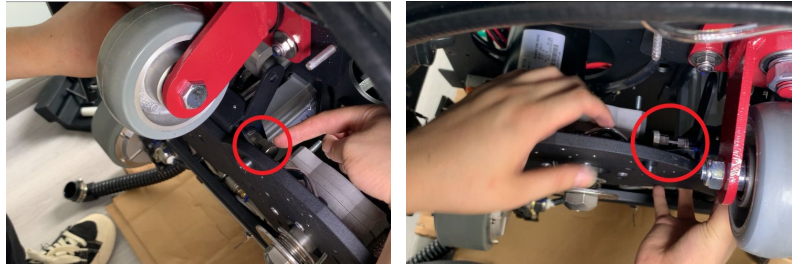

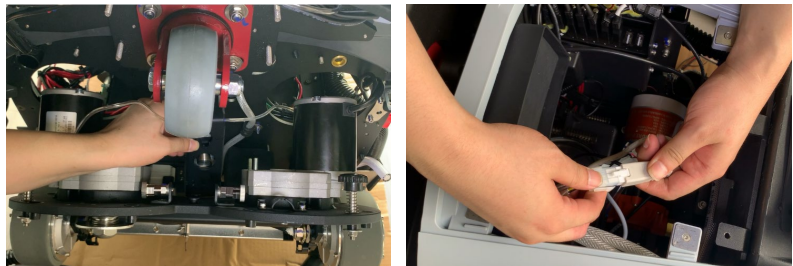

## Disk brush lift motor

Duration: 0.5h

Tools: Internal hexagon 、 Diagonal pliers, needle nose pliers	Accessories
	

### Disassembly

		<ol style="list-style-type: none"> <li>1. Drain all the liquid in the machine. To disassembly the rear lower shell, refer to the disassembly of the rear lower shell.</li> <li>2. Place a rubber pad or paper shell behind the machine and tilt the machine backwards.</li> <li>3. Remove the brush plate</li> </ol>
		<ol style="list-style-type: none"> <li>4. Disassemble the side shell limit plates on the left and right sides are fixed by two hexagon socket screws.</li> <li>5. Remove the brush plate skirts on the left and right sides.</li> </ol>
		<ol style="list-style-type: none"> <li>6. Disassembly suction motor, Refer to suction motor Disassembly.</li> <li>7. Use needle-nosed pliers to remove the R-shaped pin that fixes the brush tray lift motor.</li> <li>8. Take out the holed pin that fixes the brush tray lift motor.</li> </ol>
		<ol style="list-style-type: none"> <li>9. Use needle-nosed pliers to remove the R-shaped pin that fixes the brush tray lifting motor from the bottom of the machine chassis.</li> <li>10. Take out the holed pin and nylon pulley that fixes the brush</li> </ol>

	<p>tray lifting motor from the bottom of the machine chassis.</p>
	<p>11. Pull out and rotate the index pin threaded buckles, one on the left and one on the left.</p>
	<p>12. Pull the brush tray assembly upward with both hands to separate the brush tray assembly from the quick-plug connecting plate. 13. Take out the two water spray pipes on the brush plate assembly, and use needle-nose pliers to take out the R-shaped pin that fixes the quick-connect connecting plate.</p>
	<p>14. Take out the pin with hole that fixes the quick-plug connecting plate, and remove the quick-plug connecting plate. 15. Unplug the power cord of the brush tray lifting motor, and use diagonal pliers to cut off the tie that secures the power cord.</p>
	<p>16. Take out the brush tray lifting motor.</p>

## **Installation**

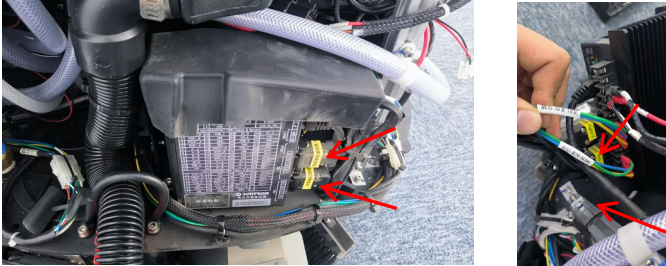
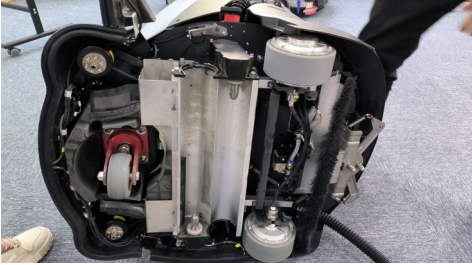
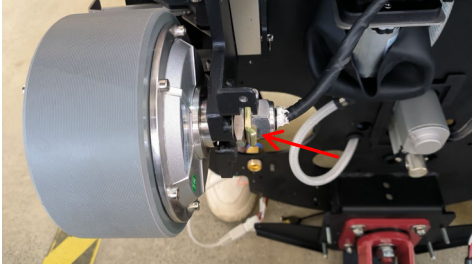
Installation is carried out in the reverse order of disassembly.

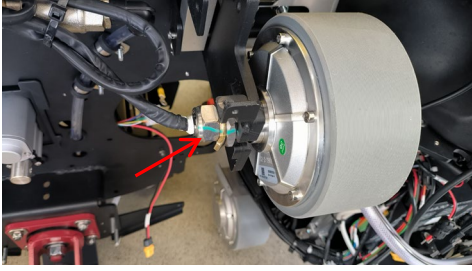
## Hub motor

Duration: 1.5h

Tools: Internal hexagon 、 Phillips screwdriver、 Diagonal pliers	Accessories
	

## Disassembly

	<p>The wheel hub motor is divided into left and right wheel hub motors</p> <ol style="list-style-type: none"> <li>1. Disassemble the rear lower shell. Refer to rear lower shell-Disassembly.</li> <li>2. Remove the corresponding hub motor wiring harness from the wheel hub driver and organize the wiring harness.</li> </ol>
	<ol style="list-style-type: none"> <li>3. Before disassemble hub motor, the ground needs to be covered with cushioning materials such as foam board or cardboard. After removing the squeegee assembly, lay the machine body along the side and use cartons to fix the machine front and back to avoid rotation.</li> </ol>
	<ol style="list-style-type: none"> <li>4. Use an open-end wrench to remove the motor lock nut (one), making sure that the stopper and thread sleeve are not lost.</li> </ol>

	<p>5. Use an open-end wrench to remove the motor lock nut (one), making sure not to lose the stopper and thread sleeve.</p>
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## Installation

Installation is carried out in the reverse order of disassembly.



## Valve

### Three-way electric ball valve

Duration: 1h

Tools: Internal hexagon 、 Phillips screwdriver	Accessories
	

### Disassembly

	<ol style="list-style-type: none"> <li>1. Before disassembling the ball valve, the water in the machine must be drained.</li> <li>2. Disassembly suction motor, please refer to suction motor-Disassembly.</li> <li>3. Unplug the water pipe from the three-way ball valve (put an absorbent rag underneath).</li> <li>4. Remove the two screws from the three-way electric ball valve fixing bracket.</li> </ol>
	<ol style="list-style-type: none"> <li>5. Unplug the power harness of the electric ball valve to remove the electric three-way ball valve.</li> </ol>

## **Installation**


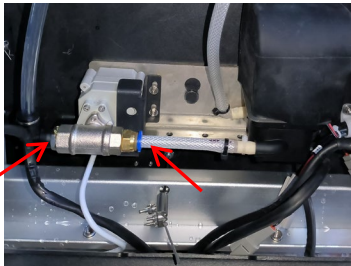
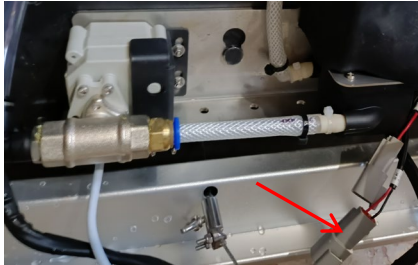
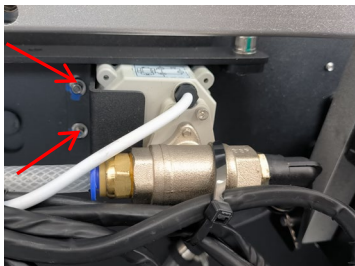
Installation is carried out in the reverse order of disassembly.

## Two-way electric ball valve

Duration: 1.5h

<p>Tools: Internal hexagon 、 Phillips screwdriver</p>	<p>Accessories</p>
	

### Disassembly

		<ol style="list-style-type: none"> <li>1. Disassemble roller brush assembly, Refer to roller brush assembly-Disassembly.</li> <li>2. Press the blue connectors on the water pipes on both sides of the two-way electric ball valve and pull them out.</li> </ol>
		<ol style="list-style-type: none"> <li>3. Unplug the power cord of the two-way electric ball valve.</li> <li>4. Remove the two fixing screws of the two-way electric ball valve bracket to remove the two-way electric ball valve.</li> </ol>

### Installation

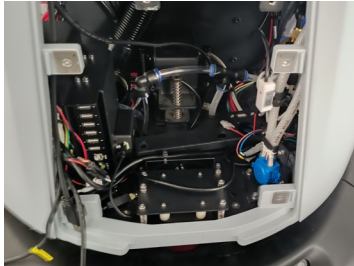
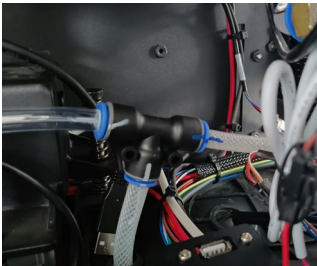
Installation is carried out in the reverse order of disassembly.

## Pneumatic three-way valve

Duration: 0.5h

Tools: \	Accessories

### Disassembly

		<ol style="list-style-type: none"> <li>1. Disassembly Small front shell Refer to small front shell-Disassembly.</li> <li>2. Unplug the water pipe (put an absorbent rag underneath).</li> </ol>
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### Installation

Installation is carried out in the reverse order of disassembly.

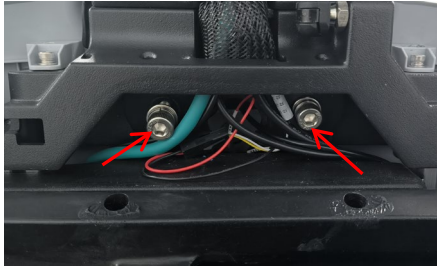



## Structure

### Handle

Duration: 0.5h

Tools: Internal hexagon,	Accessories
	

### Disassembly

		<ol style="list-style-type: none"> <li>1. Remove the two fixing screws.</li> <li>2. Unplug the wiring harness behind the key switch.</li> </ol>
		<ol style="list-style-type: none"> <li>6. Remove a screw on the right side of the handle and remove the handle cover.</li> <li>7. Remove one screw from the power-assist handle and remove the power-assist handle to remove the handle.</li> </ol>

### Installation


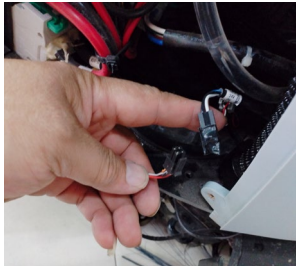


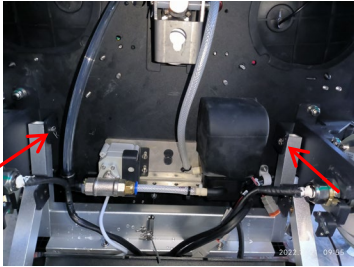

Installation is carried out in the reverse order of disassembly.

## Roller brush assembly

Duration: 0.5h

Tools: Internal hexagon 、 Phillips screwdriver	Accessories
	

## Disassembly

 	<p>1. Before disassembling the roller brush assembly, the ground needs to be covered with cushioning materials such as foam board or cardboard. After removing the squeegee assembly, lay the machine down along the side and use cartons to fix the machine front and back to avoid rotation.</p>
 	<p>3. Pull out the pin as shown in the picture and rotate it.</p>
 	<p>4. Remove the R-shaped pins and pins on both sides to remove the roller brush assembly.</p>

## **Installation**


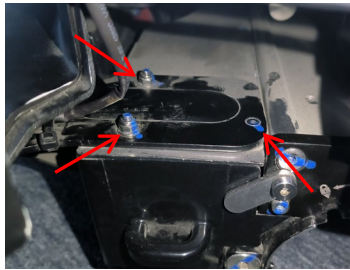
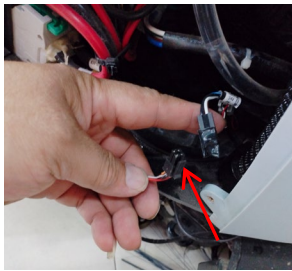
Installation is carried out in the reverse order of disassembly.

## Side brush component

Duration: 0.5h

<p>Tools: Internal hexagon、7mm 开口扳</p>	<p>Accessories</p>
	

## Disassembly

		<ol style="list-style-type: none"> <li>1. Open the anti-collision door.</li> <li>2. Remove two nuts and 2 screws.</li> </ol>
		<ol style="list-style-type: none"> <li>3. Find the side brush motor wiring harness from the pillar on one side, unplug the connector, and remove the side brush motor.</li> </ol>

## Installation

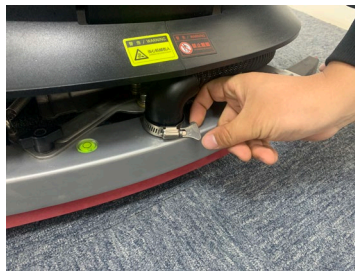
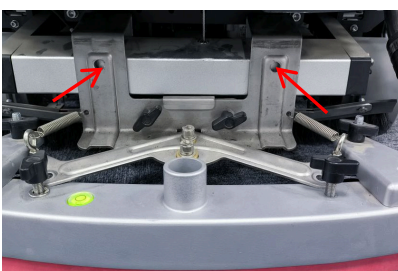
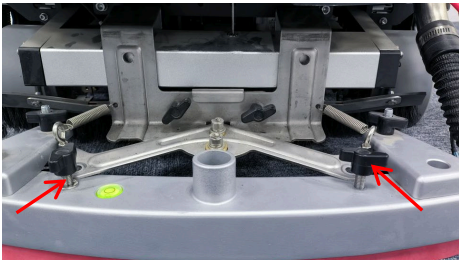

Installation is carried out in the reverse order of disassembly.

## Water suction assembly

Duration: 0.5h

Tools: Internal hexagon,	Accessories
	

## Disassembly

		<ol style="list-style-type: none"> <li>1. Manually loosen the air suction pipe clamp and remove the air suction pipe.</li> <li>2. Disassemble the two screws of the squeegee fixing bracket to remove the squeegee bracket assembly.</li> </ol>
		<ol style="list-style-type: none"> <li>3. Remove the two screws connecting the squeegee to the bracket to remove the squeegee.</li> </ol>

## Installation

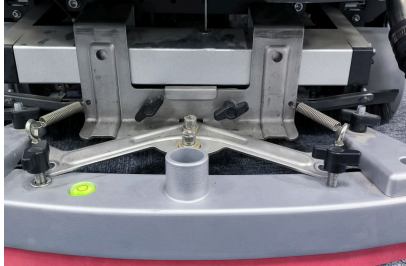
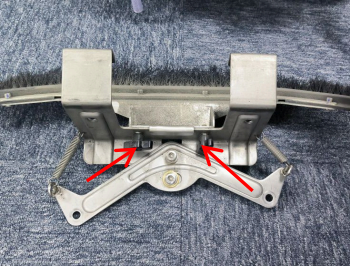
Installation is carried out in the reverse order of disassembly.

## Filter fur

Duration: 0.5h

Tools: \	Accessories

## Disassembly


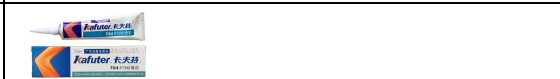
		<ol style="list-style-type: none"><li>1. Remove the squeegee assembly. Refer to Squeegee Assembly-Disassembly.</li><li>2. Remove the two screws of the squeegee bracket and the filter assembly to remove the filter assembly.</li></ol>
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## Installation

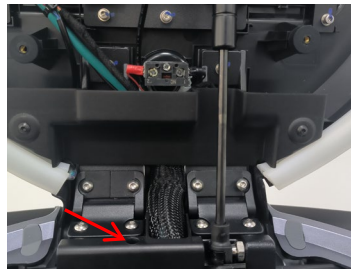
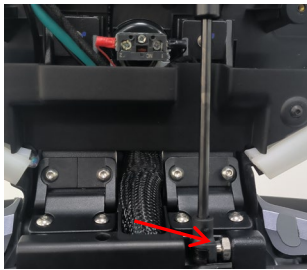
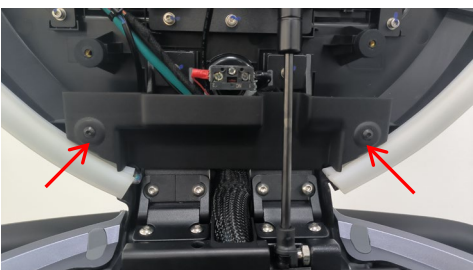
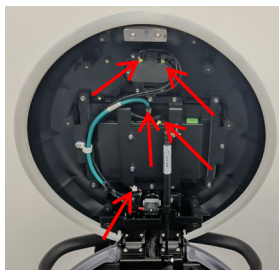
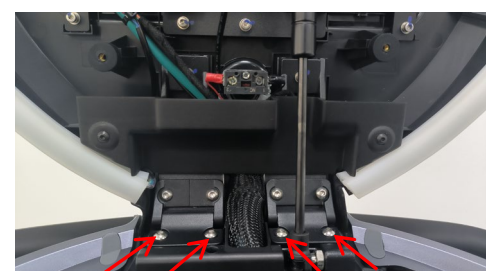
Installation is carried out in the reverse order of disassembly.

## Headcover assembly

Duration: 0.5h

Tools: Internal hexagon wrench, diagonal pliers	Accessories
	

## Disassembly

 	<ol style="list-style-type: none"> <li>1. Remove one screw from the hole indicated by the arrow in Figure 1 to remove the wire housing.</li> <li>2. Remove the nut indicated by the arrow in Figure 2 and remove the air support.</li> </ol>
 	<ol style="list-style-type: none"> <li>3. Disassemble the two screws indicated in the first picture on the left and remove the crimping frame.</li> <li>4. Unplug the head cover Internet cable, all-in-one machine power cable, top-view camera cable harness, negative pressure sensor cable harness and other wire harnesses.</li> </ol>
	<ol style="list-style-type: none"> <li>5. After removing the 4 screws indicated by the arrows, you can remove the head cover assembly.</li> </ol>

## Installation

Installation is carried out in the reverse order of disassembly.

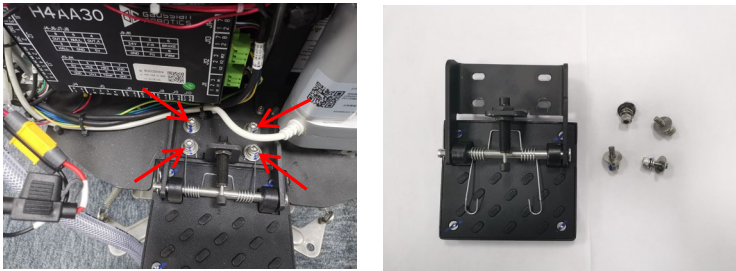


## Foot pedal flip component

Duration: 0.5h

Tools: Internal hexagon	Accessories
	

## Disassembly

	<ol style="list-style-type: none"> <li>1. Disassemble rear lower shell, Refer to rear lower shell - Disassembly.</li> <li>2. Disassemble the 4 screws shown in the picture and remove the foot pedal flip assembly. (Note that when pressing the two screws with springs under the Disassembly, press the screws first and then remove the screws. Be careful of the spring rebounding and hurting your hands.)</li> </ol>
--	--

## Installation

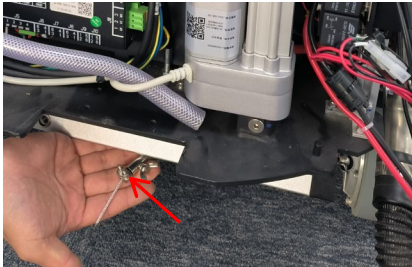



Installation is carried out in the reverse order of disassembly.

## Wire rope

Duration: 0.5h

Tools: Internal hexagon	Accessories
	

## Disassembly

		<ol style="list-style-type: none"> <li>1. Disassemble the rear lower shell. Refer to rear lower shell-Disassembly.</li> <li>2. Disassembly squeegee assembly, Refer to squeegee assembly-Disassembly.</li> <li>3. Use a sleeve tool to remove the wire rope lock and the wire rope positioning sleeve.</li> </ol>
		<ol style="list-style-type: none"> <li>4. Remove the R-shaped pin connecting one end of the wire rope to the motor.</li> <li>5. Remove the pin and pull out the wire rope.</li> </ol>

## Installation

Installation is carried out in the reverse order of disassembly.


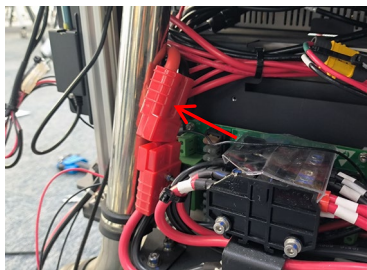



## Core electrical components

### Battery

Duration: 0.5h

Tools: Internal hexagon	Accessories
	

### Disassembly

 	<ol style="list-style-type: none"> <li>1. Disassemble rear lower shell, Refer to rear lower shell - Disassembly.</li> <li>2. Disassemble battery communication line and battery power supply line.</li> </ol>
  	<ol style="list-style-type: none"> <li>3. Disassemble wheel hub driver. Refer to wheel hub driver-Disassembly.</li> <li>4. Disassemble the two screws of the sewage pipe fixing bracket and remove the bracket.</li> <li>5. Remove the two screws holding the battery and pull out the battery.</li> </ol>

### Installation

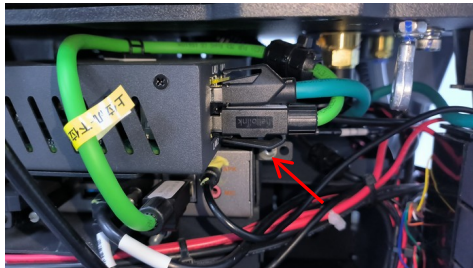

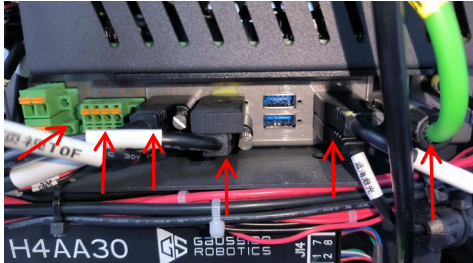
Installation is carried out in the reverse order of disassembly.

## Upper computer

Duration: 0.5h

Tools: Internal hexagon,	Accessories
	

## Disassembly

	<p>1. Remove one screw from the fixing bracket of the upper and lower machines.</p>
	<p>2. Remove a screw on the left side of the host computer.</p>
	<p>3. Remove all the wiring harnesses on the host computer, and then pull the host computer out of the machine. (Pay attention to the wiring harness serial number and location).</p>

## Installation

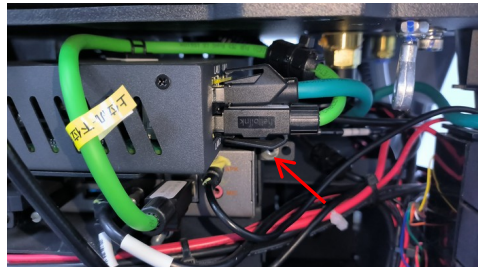
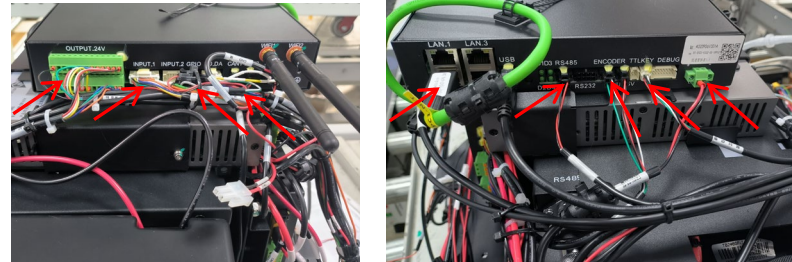
Installation is carried out in the reverse order of disassembly.

## Lower computer

Duration: 0.5h

Tools: Internal hexagon、 Diagonal pliers, needle nose pliers	Accessories
  	

## Disassembly

	<p>1. Remove one screw from the fixing bracket of the upper and lower machines.</p>
	<p>2. Unplug the corresponding wire harnesses on both sides of the lower machine and cut the fixed ties to pull out the lower machine (note the wire sequence and position).</p>

## Installation

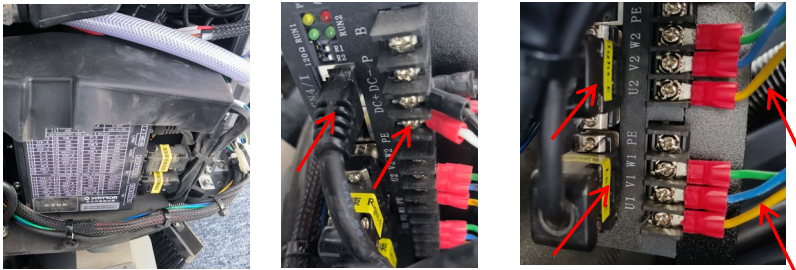
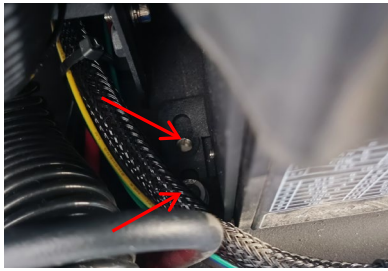
Installation is carried out in the reverse order of disassembly.

## Hub drive

Duration: 0.5h

<p>Tools: Internal hexagon 、 Phillips screwdriver</p>	<p>Accessories</p>
	

## Disassembly



	<ol style="list-style-type: none"> <li>1. Disassemble the rear lower shell. Refer to rear lower shell-Disassembly.</li> <li>2. Remove the corresponding network cables, power cables, and wheel hub motor harness from the wheel hub driver.</li> </ol>
	<ol style="list-style-type: none"> <li>3. Remove the 2 fixing screws on the left side of the wheel hub driver to remove the wheel hub motor.</li> </ol>

## Installation

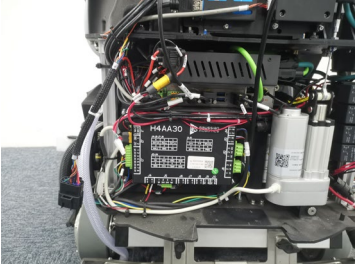
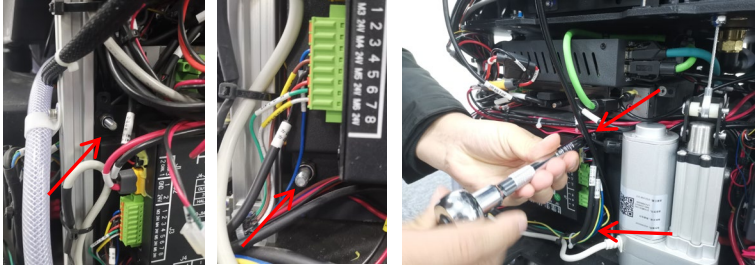
Installation is carried out in the reverse order of disassembly.

## Hybrid drive

Duration: 0.5h

<p>Tools: Internal hexagon、No. 10 sleeve</p>	<p>Accessories</p>
	

## Disassembly



	<p>1. Disassemble the rear lower shell. Refer to rear lower shell-Disassembly.</p>
	<p>2. Use a socket tool to remove the 4 fixing screws at the four corners of the driver, and remove the wiring harness around the driver to remove the driver.</p>

## Installation

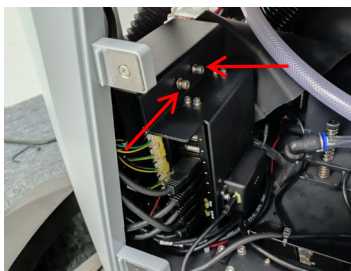

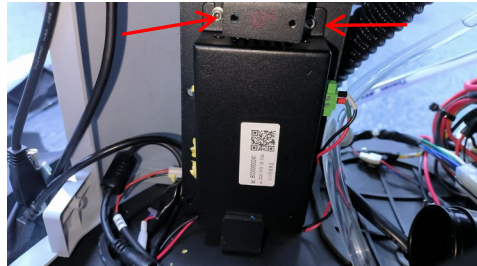
Installation is carried out in the reverse order of disassembly.

## Air pressure hits the motherboard

Duration: 0.5h

Tools: Internal hexagon,	Accessories
	

### Disassembly

 	<ol style="list-style-type: none"> <li>1. For the small front shell after Disassemble, please refer to the small front shell-Disassembly</li> <li>2. Remove the waterproof rubber cover in the lower left corner and unscrew the HUB fixing bracket in the upper left corner.</li> <li>3. Remove the HUB bracket and HUB.</li> </ol>
	<ol style="list-style-type: none"> <li>4. Unplug the two brackets of the anti-collision motherboard, unplug the corresponding wiring harness, and remove the anti-collision motherboard.</li> </ol>

### Installation

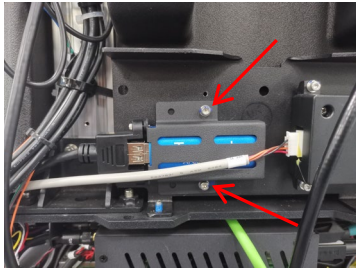
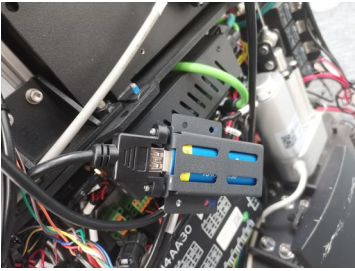
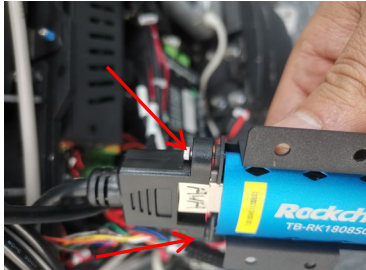

Installation is carried out in the reverse order of disassembly.

## Nerve rods

Duration: 0.5h

Tools: Internal hexagon,	Accessories
	

## Disassembly

		<ol style="list-style-type: none"> <li>1. Disassemble the rear lower shell. Refer to rear lower shell-Disassembly.</li> <li>2. Remove the two screws, Refer to Figure 1 on the left.</li> </ol>
		

## Installation

Installation is carried out in the reverse order of disassembly.

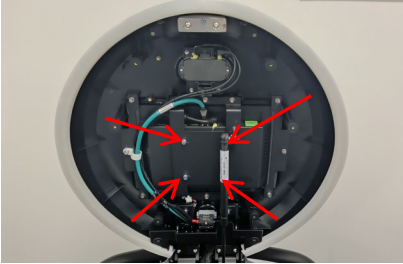
## All-in-one powered by Android

Duration: 0.5h

Tools: Internal hexagon 、 Phillips screwdriver	Accessories
	

### Disassembly

 	<ol style="list-style-type: none"> <li>1. Remove the 6 fixing screws of the water tank cover assembly and store the silicone pad behind the screws to prevent loss. (Note that there is a negative pressure sensor harness behind the water tank cover, do not pull it off)</li> <li>2. Unplug the negative pressure sensor harness.</li> </ol>
 	<ol style="list-style-type: none"> <li>3. Disassemble two screws to remove the cable guard.</li> <li>4. Unplug the network cable and power cable.</li> </ol>
 	<ol style="list-style-type: none"> <li>5. Remove the two nuts of the air support on the right side and take off the air support.</li> <li>6. Remove the 12 screws around the fixed bracket.</li> </ol>

	<p>7. Remove the 4 screws in the middle and separate the screen from the screen bracket.</p>
---	--

## Installation


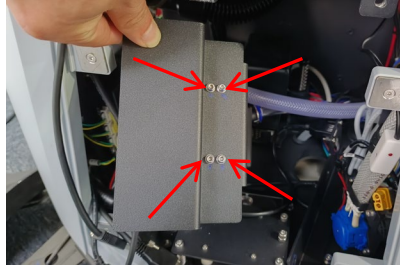
Installation is carried out in the reverse order of disassembly.

## HUB

Duration: 0.5h

<p>Tools: Internal hexagon 、 Slotted screwdriver</p>	<p>Accessories</p>
	

## Disassembly

	<ol style="list-style-type: none"> <li>1. For the small front shell after Disassemble, please refer to the small front shell-Disassembly.</li> <li>2. Remove the waterproof rubber cover in the lower left corner and unscrew the HUB fixing bracket in the upper left corner.</li> <li>3. Remove the USB harness and HUB network cable.</li> </ol>
	<ol style="list-style-type: none"> <li>4. Remove the 4 screws of the HUB bracket and take off the HUB bracket.</li> </ol>

## Installation

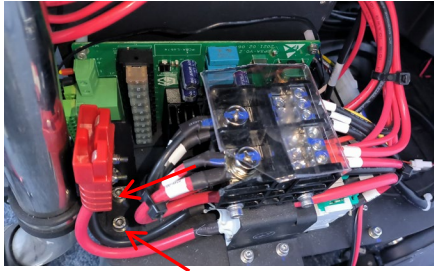
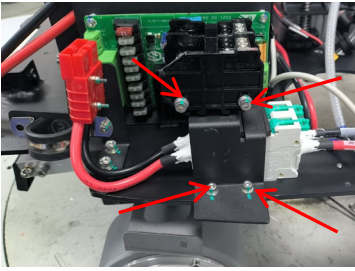
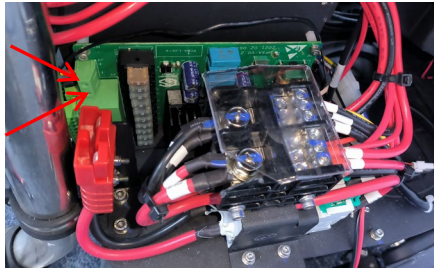
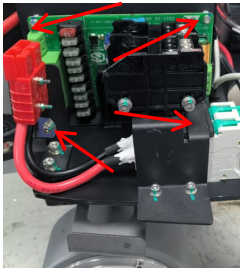
Installation is carried out in the reverse order of disassembly.

## DC-DC

Duration: 0.5h

Tools: Internal hexagon 、 Phillips screwdriver	Accessories
 	

## Disassembly



		<ol style="list-style-type: none"> <li>1. Disassemble the rear lower shell. Refer to rear lower shell-Disassembly.</li> <li>2. Remove two screws and remove the power plug.</li> <li>3. Remove the four screws from the circuit breaker and the wiring harness.</li> </ol>
		<ol style="list-style-type: none"> <li>4. Remove the two screws from the DC power board and remove the power harness.</li> <li>5. Remove the 4 screws fixing the DC-DC power board and remove the power board.</li> </ol>

## Installation

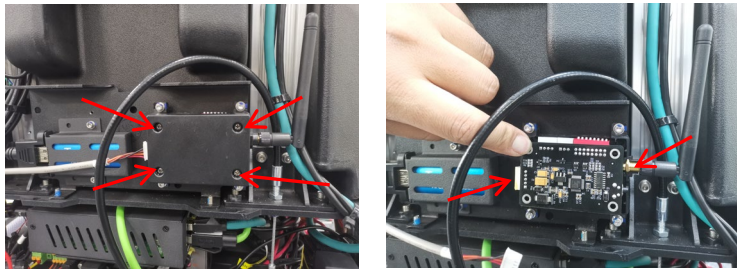
Installation is carried out in the reverse order of disassembly.

## Lora module

Duration: 0.5h

Tools: Internal hexagon 、 Phillips screwdriver	Accessories
 	

## Disassembly


	<ol style="list-style-type: none"> <li>1. Disassemble the rear lower shell. Refer to rear lower shell-Disassembly.</li> <li>2. Remove the 4 screws from the Lora module cover.</li> <li>3. Unplug the left wiring harness to remove the lora module.</li> <li>4. Rotate and remove the glue stick antenna on the right side.</li> </ol>
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## Installation

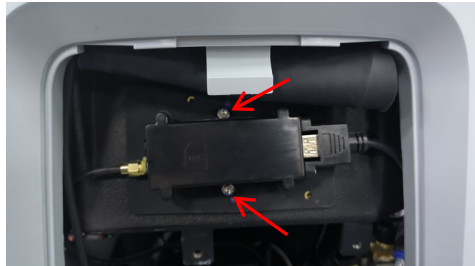

Installation is carried out in the reverse order of disassembly.

## 4G module

Duration: 0.5h

Tools: Internal hexagon、	Accessories
	

## Disassembly

	<ol style="list-style-type: none"> <li>1. Disassemble small front shell. Refer to small front shell Disassembly.</li> <li>2. Remove the two screws fixing the 4G module.</li> </ol>
	<ol style="list-style-type: none"> <li>3. Remove the two screws holding the USB cable harness.</li> <li>4. Rotate and remove the 4G module glue stick antenna.</li> </ol>

## Installation


Installation is carried out in the reverse order of disassembly.

## Encrypted dog

Duration: 0.5h

Tools: Internal hexagon、	Accessories
	

## Disassembly

	<ol style="list-style-type: none"> <li>1. Disassemble the rear lower shell. Refer to rear lower shell-Disassembly.</li> <li>2. Unplug the dongle from the host computer.</li> </ol>
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## Installation

Installation is carried out in the reverse order of disassembly.

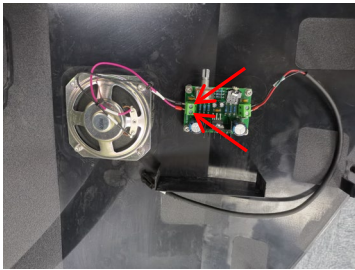
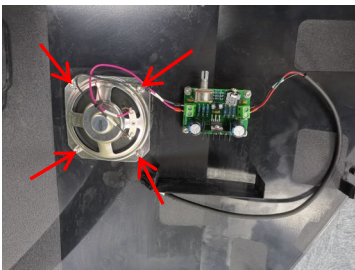
## Other electrical parts

### Trumpet

Duration: 0.5h

Tools: Internal hexagon 、 Slotted screwdriver	Accessories
 	

### Disassembly



		<ol style="list-style-type: none"> <li>1. Disassemble the rear lower shell. Refer to rear lower shell-Disassembly.</li> <li>2. Remove the speaker' s power harness.</li> <li>3. Remove the four screws fixing the speaker to remove the speaker.</li> </ol>
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### Installation

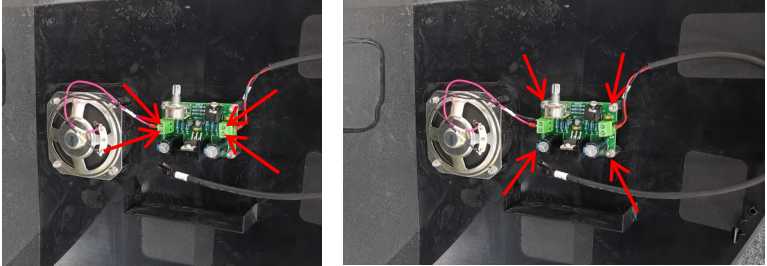
Installation is carried out in the reverse order of disassembly.

## Loudspeaker

Duration: 0.5h

Tools: Internal hexagon, Slotted screwdriver	Accessories
 	

## Disassembly


	<ol style="list-style-type: none"> <li>1. Disassemble the rear lower shell. Refer to rear lower shell-Disassembly.</li> <li>2. Remove the power harness from the speaker and amplifier board.</li> <li>3. Remove the four screws fixing the power amplifier board to remove the power amplifier board.</li> </ol>
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## Installation

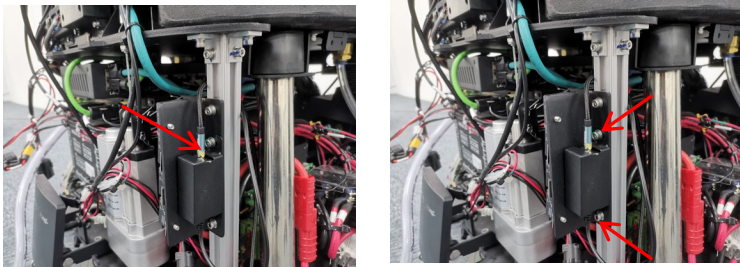
Installation is carried out in the reverse order of disassembly.

## Audio isolator

Duration: 0.5h

Tools: Internal hexagon,	Accessories
	

## Disassembly


	<ol style="list-style-type: none"> <li>1. Disassemble the rear lower shell. Refer to rear lower shell-Disassembly.</li> <li>2. Unplug the audio wiring harness.</li> </ol>
--	--

## Installation

Installation is carried out in the reverse order of disassembly.

## Fan

Duration: 0.5h

<p>Tools: Internal hexagon 、 Phillips screwdriver</p>	<p>Accessories</p>
	

## Disassembly


		<ol style="list-style-type: none"> <li>1. Disassemble the rear lower shell. Refer to rear lower shell - Disassembly.</li> <li>2. Remove the four screws fixing the fan to remove the fan.</li> </ol>
--	--	--

## Installation

Installation is carried out in the reverse order of disassembly.

## Fuse

Duration: 0.5h

Tools: Internal hexagon,	Accessories
	

## Disassembly



		<ol style="list-style-type: none"> <li>1. Disassemble the rear lower shell. Refer to rear lower shell-Disassembly.</li> <li>2. Find the circuit breaker in the lower right corner of the machine, and you can Refer to the DC power board.</li> <li>3. Use needle-nose pliers to remove the fuse.</li> </ol>
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## Installation


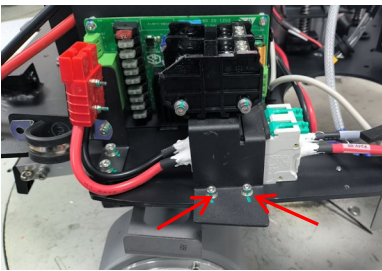
Installation is carried out in the reverse order of disassembly.

## Circuit breaker

Duration: 0.5h

Tools: Internal hexagon,	Accessories
	

## Disassembly


		<ol style="list-style-type: none"> <li>1. Disassemble the rear lower shell. Refer to rear lower shell-Disassembly.</li> <li>2. Find the circuit breaker in the lower right corner of the machine, and you can Refer to the DC power board.</li> <li>3. Remove the two screws to remove the circuit breaker.</li> </ol>
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## Installation

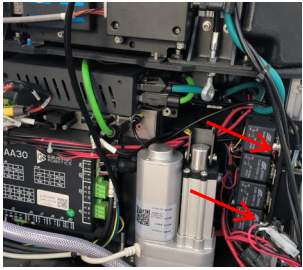
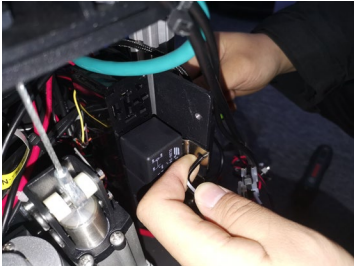
Installation is carried out in the reverse order of disassembly.

## Relay

Duration: 0.5h

Tools: Internal hexagon,	Accessories
	

## Disassembly

		<ol style="list-style-type: none"> <li>1. Disassemble the rear lower shell. Refer to rear lower shell-Disassembly.</li> <li>2. Find the relay module in the lower right corner of the machine.</li> <li>3. Remove the two fixing screws to pull out the relay.</li> </ol>
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## Installation



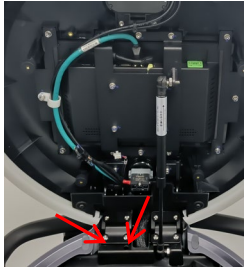

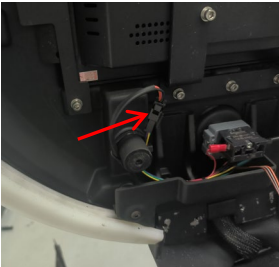
Installation is carried out in the reverse order of disassembly.

## LED light strip

Duration: 0.5h

Tools: Internal hexagon,	Accessories
	

## Disassembly

 	<ol style="list-style-type: none"> <li>1. Remove the 6 fixing screws of the water tank cover assembly and store the silicone pad behind the screws to prevent loss. (Note that there is a negative pressure sensor harness behind the water tank cover, do not pull it off).</li> <li>2. Unplug the negative pressure sensor harness.</li> </ol>
  	<ol style="list-style-type: none"> <li>3. Remove the wire trough.</li> <li>4. Peel off the rubber strip of the white light strip to Refer to the LED light strip.</li> <li>5. Unplug the LED power cord plug-in.</li> </ol>

## Installation

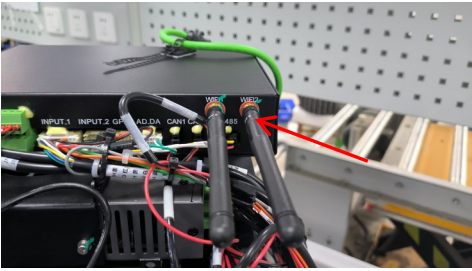
Installation is carried out in the reverse order of disassembly.

## WiFi antenna

Duration: 0.5h

Tools: Internal hexagon,	Accessories
	

## Disassembly

	<ol style="list-style-type: none"> <li>1. Disassemble the rear lower shell. Refer to rear lower shell-Disassembly.</li> <li>2. Find an empty WiFi antenna on the left side of the slave machine and select Turn to remove it.</li> </ol>
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## Installation

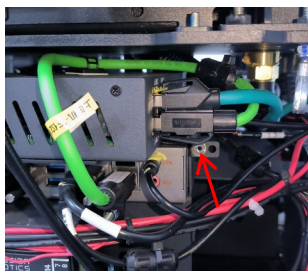

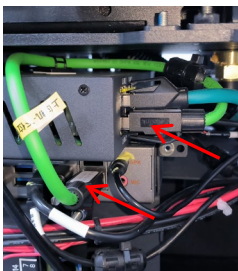
Installation is carried out in the reverse order of disassembly.

## Network cable between upper and lower computers

Duration: 0.5h

Tools: Internal hexagon,	Accessories
	

### Disassembly


			<ol style="list-style-type: none"> <li>1. Disassemble the rear lower shell. Refer to rear lower shell-Disassembly.</li> <li>2. Disassemble a fixing screw and pull out the slave machine a little distance.</li> <li>3. Open the reusable tie.</li> <li>4. Unplug both ends of the green network cable and remove the network cable.</li> </ol>
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### Installation

Installation is carried out in the reverse order of disassembly.

## Charging electrode pad

Duration: 0.5h

Tools: Internal hexagon、	Accessories
	

## Disassembly

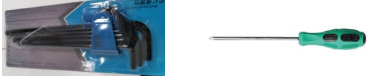
	<ol style="list-style-type: none"> <li>1. Disassemble the rear lower shell. Refer to rear lower shell-Disassembly.</li> <li>2. Remove the eight screws fixing the electrode pads and then remove the electrode pads.</li> </ol>
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## Installation

Installation is carried out in the reverse order of disassembly.

## Emergency button

Duration: 0.5h

<p>Tools: Internal hexagon 、 Phillips screwdriver</p>	<p>Accessories</p>
	

## Disassembly

 	<ol style="list-style-type: none"> <li>1. Remove the 6 fixing screws of the water tank cover assembly and store the silicone pad behind the screws to prevent loss. (Note that there is a negative pressure sensor harness behind the water tank cover, do not pull it off)</li> <li>2. Unplug the negative pressure sensor harness.</li> </ol>
 	<ol style="list-style-type: none"> <li>3. Remove two screws and take off the emergency stop button harness.</li> </ol>
	<ol style="list-style-type: none"> <li>4. Remove two screws and remove the emergency stop button.</li> </ol>


## Installation

Installation is carried out in the reverse order of disassembly.

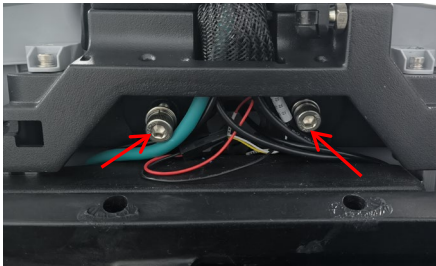




## key switch

Duration: 0.5h

Tools: Internal hexagon, Adjustable spanner	Accessories
	

## Disassembly

		<ol style="list-style-type: none"> <li>1. Remove the two fixing screws.</li> <li>2. Unplug the wiring harness behind the key switch.</li> <li>3. Remove the silicone pad.</li> </ol>
	<ol style="list-style-type: none"> <li>4. Use an adjustable spanner to loosen the nut fixing the key switch to remove the key switch.</li> </ol>	

## Installation

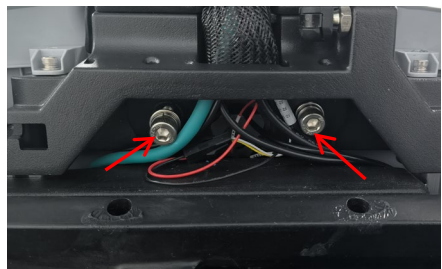



Installation is carried out in the reverse order of disassembly.

## Power handle

Duration: 0.5h

Tools: Internal hexagon、	Accessories
	

## Disassembly

		<ol style="list-style-type: none"> <li>1. Remove the two fixing screws.</li> <li>2. Unplug the wiring harness behind the key switch.</li> </ol>
		<ol style="list-style-type: none"> <li>3. Remove a screw on the right side of the handle and remove the handle cover.</li> <li>4. Remove one screw from the power-assist handle and remove the power-assist handle.</li> </ol>


## Installation

Installation is carried out in the reverse order of disassembly.





## Disinfect

### Backpack components

Duration: 0.5h

Tools: Internal hexagon,	Accessories
	

### Disassembly

		<ol style="list-style-type: none"> <li>1. Remove the fixing screw at the bottom of the disinfection backpack.</li> <li>2. Unplug the wiring harness connecting the left side of the disinfection backpack to the fuselage.</li> </ol>
		<ol style="list-style-type: none"> <li>3. Gently lift the disinfection backpack to the right and take out the disinfection backpack.</li> </ol>

### Installation

Installation is carried out in the reverse order of disassembly.