

i-mop® XL/XXL

Auto scrubber for hard floor surfaces

Service manual





Revision: 0.7 (6/2024)





FASTER:

Cleans 10 times faster than conventional wet mopping, backed-up by cleaning capacity of up to 1800 m^2 per hour.



CLEANER:

Powerful twin counter-rotating 350 RPM brushes for soil removal validated by ATP test data, reflecting up to 90% cleaner surfaces.



GREENER:

Makes every ounce of chemical and every drop of water count. Proven to reduce environmental impact by over 75%.



SAFER:

Floors that dry almost instantly reduce slip and fall hazards, validated by standardized slip test readings of 120 or less. The antibacterial tanks on the i-mop® reduces the odors coming from the recovery tank and protects operators who handle the tanks every day. Bacterial reduction in contact with the tank wall has been certified and tested at $\geq 99.99\%$ efficacy.



BETTER FOR EVERYONE:

Changes the experience of cleaning, and brings energy, pride and positive morale to the facility... not to mention a cleaner and healthier environment.



Purpose of the service manual

The purpose of the service manual is to provide the service engineers with information required to carry out both preventive as well as corrective maintenance. This manual can be used for the i-mop XL/XXL on all global markets.

The service manual contains instructions regarding:

- Personal operator safety
- Overview of the various i-mop XL/XXL versions and functionalities
- Troubleshooting overview
- Intended and non-intended use of the i-mop XL/XXL
- Maintenance instructions
- Storage conditions
- Disposal of the i-mop XL/XXL

These instructions must be considered to avoid risks that could lead to physical and/or material damage.

At the beginning of the description of a new service activity, a list of required tools and materials will be shown.

This service manual describes maintenance of the following versions of the i-mop XL/XXL:







Figure 2 I Mop XXL Pro

Target audience

This service manual is intended for service engineers of the i-mop XL/XXL and their supervisors, as well as partners and importers.

Servicing of the i-mop XL/XXL

The i-mop XL/XXL may only be serviced by a person who has correctly read and understood the instructions in this manual or is trained by an experienced service engineer who has read and understood the instructions in this manual.



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1. Introduction

1.1 Documentation required

The following documentation is needed for repair procedures:

- 1. Technical documentation for specific models (diagrams, exploded view and service manual).
- 2. User and maintenance manual



Figure 3

1.2 Tools and equipment required

For regular servicing of the i-mop XL-XXL, the following tools and equipment are required:

- 1. Screwdriver, torx and cross head;
- 2. Multimeter;
- 3. Heat gun;
- 4. Spanners;
- 5. Long nose plier;
- 6. Cutting pliers;
- 7. Soldering iron;
- 8. Torque wrench;
- 9. Allan keys (set).



1.3 Materials required

For regular servicing of the i-mop XL/XXL, the following materials might be required:

- 1. Grease solvent;
- 2. Grease;
- 3. Loctite 222;
- 4. Shrinkable tube.



2 Safety warnings

Observe all applicable standards relating to the repair of electrical appliances. Always disconnect the power plug from the mains before beginning repair work.

2.1 Symbols used

Symbol	Term	Explanation
<u>^</u>	WARNING	Indicates a hazardous situation which, if the safety instructions are not followed, can lead to injuries of the operator or bystanders and light or moderate damage to the product or the environment.
<u>^</u>	CAUTION	Indicates a hazardous situation which, if the safety instructions are not followed, can lead to light and / or moderate damage to the product or the environment.
0	ATTENTION	Indicates a liability situation, where the manufacturer or its partners and affiliates cannot be held accountable for damages caused by noncompliance.
	STRONG MAGNET	Indicates that the machine contains strong magnets. These can cause pacemakers to stop working or cause electronic data to be damaged, such as information stored on access passes.
C C	PACEMAKER	Indicates that operators and maintenance crew wearing pacemakers should keep a minimal distance of 6 in / 15 cm. In this specific case operators may not use the machine as a backpack.
	BATTERIES	Indicates a battery-operated machine, batteries must be charged according to the instructions in the separate class I battery charger user manual. Batteries must be disposed of according to your local laws and regulations.
	SLIPPERY SURFACE	Indicates that the machine can cause floors to become slippery. In the workplace, it is advised to place slippery surface signs in these areas.
	WEARING GLOVES	Indicates that when carrying out this task, ESD anti static gloves should be worn.



2.2 General instructions

- Before carrying out any maintenance/repair, remove the batteries as described in user manual.
- This machine should only be used by properly trained and authorized personnel.
- Do not operate this machine in environments where there are harmful, hazardous, flammable, and/or explosive powders, liquids or vapors.
- Keep sparks, flames and incandescent material, away from the batteries. When charging the batteries, perform the operation only in well ventilated areas and away from naked flames.
- Remove all jewelry when working with electrical components.



WARNINGS

- Before performing any maintenance/repair, carefully read all the instructions relevant to the maintenance/repair.
- Do not use the machine for purposes other than those listed in the user manual. Only use accessories recommended by the manufacturer.
- Always protect the machine from sun, rain, and other weather conditions, both when on and off, this is to avoid the risk of electrical shock. Store the machine indoors
- Do not use the machine as a means of transport.
- Do not leave the machine unattended without making sure that the machine itself cannot move independently.
- Do not use the machine in particularly dusty environments.
- Do not use the machine on ramps or inclinations greater than 6%.
- Do not knock shelves or scaffolding, especially if there is a danger of falling objects.
- Do not let any object penetrate the openings of the machine. Do not use the machine if the openings are blocked; keep the openings of the machine free of dust, lint, hair and any other foreign body that can reduce air flow.
- Do not remove or alter the plates affixed to the machine by the manufacturer.
- The usage temperature of the machine must be between 0°C and +40 °C.
- The storage temperature of the machine must be between 0°C and +40 °C.
- The humidity must be between 30% and 95%.
- Do not tamper with the protections in place for the machine, for any reason.
- Do not wash the machine with direct jets of water or pressure or with corrosive substances.



- Before working on the electrical components wear ESD gloves to avoid the electrostatic discharge (ESD), which may result in damage to components on the PCB.
- Before using the external battery charger appliance, make sure that the frequency and voltage as indicated on the machine's registration plate match the mains voltage.
- Do not charge the batteries if the power cord or plug are damaged.
- Do not smoke when charging the batteries.
- To reduce the risk of fire, electric shock, or injury, do not leave the machine connected to the mains when unattended. Disconnect the machine from the socket when not being used and before maintenance.
- Keep the power cord away from hot surfaces.
- Take the necessary measures to ensure that hair, jewelry and/or other loose parts cannot be caught by any moving parts of the machine.
- If replacing parts, ask a Dealer or Authorized Retailer for Original Spare Parts (OSP).
- When the machine is used correctly in accordance with the terms of use, the vibrations of the machine will not cause any dangerous situations. The level of the vibrations are well within the legal limits.
- When transferring the machine with temperatures below freezing point, be careful because the water in the tanks or hoses may freeze and seriously damage the machine.
- Only use the brushes supplied with the machine and those specified in User Manual.
 The use of other brushes can compromise your safety, and might damage the machine.
- When it is necessary to tilt or lift the machine for maintenance, remove the batteries first.
- When the machine reaches the end of the lifecycle, please return it to your retailer or to i-team global and procure a newer generation i-mop. I-mops XL/XXL older than 5 years will be refurbished into the newer generation. If not returned please take care of proper removal and disposal.
- These materials are subject to regulations which provide for the disposal at designated appropriate centers in the area.



3 Transport and storage



CAUTION

Always keep the body of the i-mop® XL plus in an upright position when filling the cleaning solution tank or inserting the batteries.

Before storage or transport, drain the machine and remove the batteries after each use.

3.1 Store position



CAUTION

Do not put the i-mop XL/XXL in store position while the drive support and the park support are active. First deactivate the drive support and the park support.

The store position is the upright vertical position for storage and maintenance tasks.

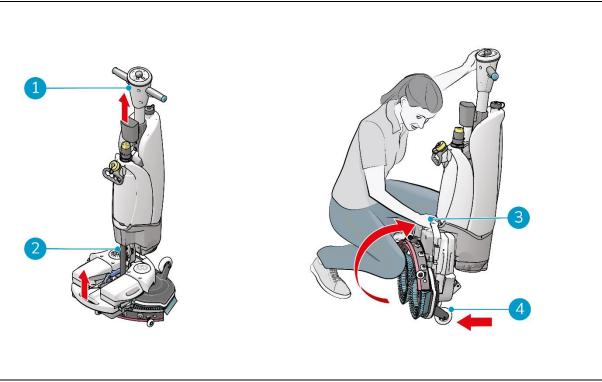


Figure 4

- 1. Make sure the vacuum hose (Figure 6, pos 2) is pushed back into the machine so it cannot get squeezed.
- 2. Crouch down and hold the handle (Figure 6, pos 1) with one hand while holding the scrub deck (Figure 6, pos 3) with your other hand.
- 3. Lift the scrub deck slowly until it stands upright on the front wheels (Figure 6, pos 4). Guide the body towards the scrub deck until it snaps into a resting position.



3.2 Transport outside

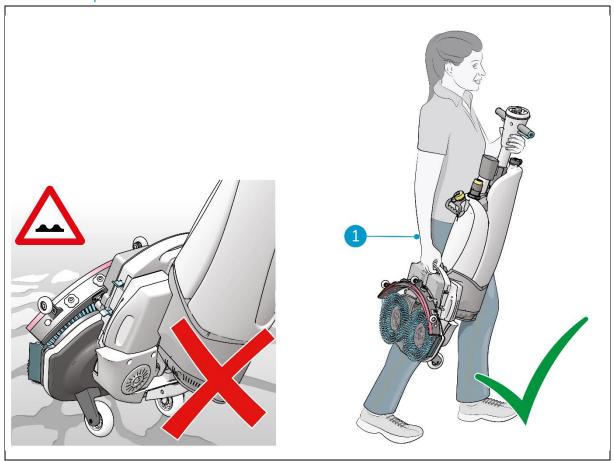


Figure 5

When outside:

- 4. Put the i-mop® XL plus in store position, see section 3.1.
- 5. Carry the i-mop XL/XXL with one hand while holding the handle (Figure 7, pos 1) with your other hand.



CAUTION

The transport wheels are not designed to roll over dirty surfaces, sand can cause the wheels to block. Lift the i-mop XL/XXL while moving from one building to another.



4 Technical specifications

4.1 I-mop versions

Tennant XL White

Model Part Number 1251236 (S/N 330000 -)

Tennant XXL White

Model Part Number 1251235 (S/N 630000 -)

Models contains: Battery safeguard, controll planel, splashguard, squeegee, floating ball system.

From 2022 versions included electronic angle switch, drive support, parking support, antibacterail recovery tank.

Tennant XL Teal

Model Part Number 1264254 (S/N 340000 -)

Tennant XXL White

Model Part Number 1251235 (S/N 630000 -)

Aditional updates are implemented:

I-Balance system, clean water tank, dirty watertank in teal color



XXL Version I-Mop

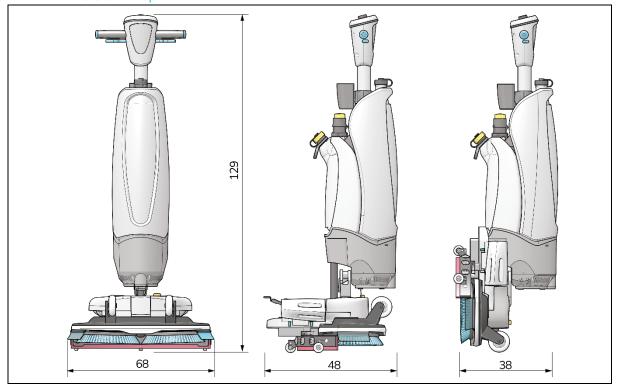


Figure 6

Product size:	129 x 68 x 48 cm (51" x 27" x 19")
Product size in store position:	120 x 68 x 38 cm (47" x 27" x 15")
Weight (including batteries):	24 kg (53 lbs)
Li-on battery:	DC (25.2V, 14Ah, 353Wh)
Battery capacity:	2 batteries
Operation time of batteries:	60 – 120 min
Brush pressure:	25 gr / cm² (0,36 psi)
Brush speed:	350 RPM
Detergent tank capacity:	5 L (1.32 US Gallon)
Recovery tank capacity:	8 L / 5 L (2.11 / 1.32 US Gallon)
	recommended max
Vibration:	Amplitude (mm): <0.4442 (<0.017")
	Velocity (m/s): <0.008 (0.0003")
	Acceleration (m/s ²): 0.943 (3.1 ft/s)
Noise level (1m):	64.9 Db
Theoretical performance:	Up to 2300 m² per hour (24,757 sq ft / hr)
Practical performance:	1200 - 1800 m² per hour
	(12,917 – 19,375 sq ft / hr)
Castor wheels:	YES
Power cut off at store position:	YES
Angle power cut off:	YES < 32°
Floating ball for recovery tank:	YES
Hour counter:	YES via i-link



XL version I-Mop

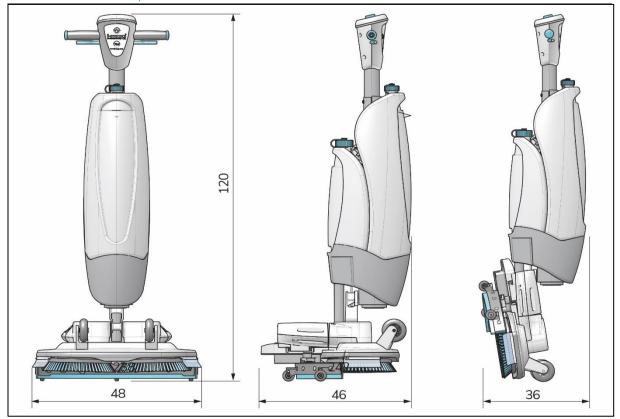


Figure 7

Product size:	120 x 48 x 46 cm 47.25" x 19" x 18"
Product size in park position:	120 x 48 x 36 cm 47.25" x 19" x 14"
Weight (including batteries):	22.5 kg 49.6 lbs
Li-on battery:	DC (25.2V, 9Ah, 222Wh)
Battery capacity:	2 batteries
Operation time of batteries:	60 min
Brush pressure:	31.5 gr / cm ² 0.45 psi
Brush speed:	350 RPM
Detergent tank capacity:	4 L 1.05 gallons
Recovery tank capacity:	6 L / 4 L recommended max 1.5 / 1.05 gal.
Vibration:	Amplitude (mm): <0.4442
	Velocity (m/s): <0.008
	Acceleration (m/s²): 0.943
Noise level (1m):	79.6 Db
Theoretical performance:	Up to 1800 m² per hour 19,375 sq. ft.
Practical performance:	1000 - 1300 m² per hour
	10,764 - 13,993 sq. ft.
Castor wheels:	YES
Power cut off at park position:	YES
Angle power cut off:	YES < 32°
Floating ball for recovery tank:	YES



4.2 Warranty

The i-mop® XL plus should be used as intended and described in this manual. Using the i-mop XL/XXL outside will void the warranty on the product. For Warranty see documentation on portal.



4.3 Description

The compact i-mop® XL/XXL consists of two main parts:

- The body that contains the motor, cleaning solution tank, recovery tanks, handle with triggers and control panel.
- The scrub deck that contains the brushes and squeegee.

The i-mop XL/XXL can be folded into a store position; this is recommended for storage.

The i-mop XL/XXL consists of:

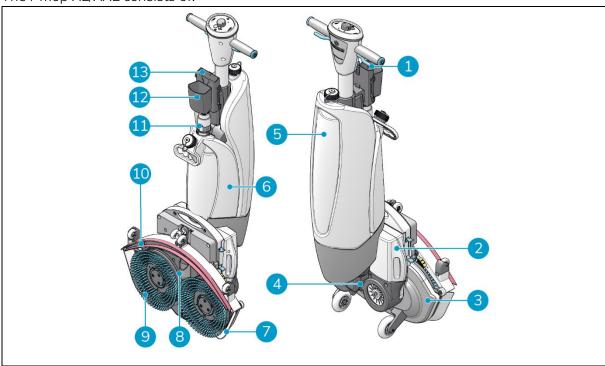


Figure 9

Legend

- 1. Trigger
- 2. Batteries
- 3. Scrub deck
- 4. I-balancer¹
- 5. Recovery tank

- 6. Solution tank
- 7. Splash guard²
- 8. Vacuum hose
- 9. Rotating brushes
- 10. Squeegee³

Remark, the items 11 - 12 and 13 are not implemented in the USA, Canadian, Mexico market. Implemented in Portugal market

¹ Not available on the V22 i-mop but is available on the V23 Pro and the Tennant version

² Different for the Tennant version

³ Different for V23 Pro and the Tennant version



4.4 Control panels of the various versions of the i-mop

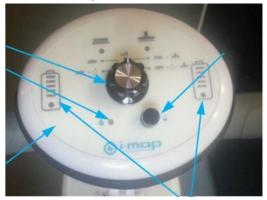


Figure 10 Model May 2014 – End of 2014



Figure 11 Model Jan 2015 – May 2015



Figure 12 Model May 2015



Figure 13 Model Jan 2016



Figure 14 Model V22



Figure 15 Model V22 Tennant

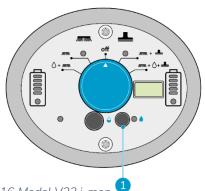


Figure 16 Model V22 i-mop



5 Troubleshooting

Problem	Cause	Solution
No power	No batteries	Insert batteries
	Empty batteries	Charge batteries
	Batteries incorrectly placed	Remove and reinstall batteries
Insufficient/no water flow	Wrong program	Check the operating mode on the control panel
	Eco mode on	Check the ECO mode light on the control panel
	Empty tank	Fill the tank
	Tank incorrectly placed	The tank valve must be clicked on the nipple to open the seal, replace the tank
	Filter blocked	Ensure the solution tank has no dirt particles and the filter is clean
	Blocked water pipe	Remove the water pipe from the unit and lear by clear water Screw the valve open and clean
	Valve blocked	the valve inside so the water can go through the valve
	Kinked valve water hose	Place valve water hose in one line
Insufficient suction	Squeegee opening blocked	Remove the pipe and clean the squeegee opening
	Tears in squeegee blades	Replace squeegee blades
	Lid of recovery tank not airtightly closed	Close the lid properly Replace the rubber seal of the lid
	Filter blocked clean water tank	Check the yellow filter and clean with clear water
	Vacuum hose blocked	Check and remove blockage
	Filter under clean water tank	Clean the metal small filter
	Vacuum pump not running	Request for service
Leakage	Tanks incorrectly placed	Check and reattach fluid tanks
	Tear in vacuum hose	Replace vacuum hose or request for service
Battery not charging	Battery is at end of life	Replace battery
Tilt angle sensor setting	Sensor is not installed at the right hight	Reset tilt sensor by push 5 seconds on water saving button





6 Scheduled maintenance

The scheduled maintenance plan, Figure 20 is detailed here below. The frequencies specified may be subject to change depending on particular working conditions, to be defined by the maintenance manager. The maintenance instructions, listed in the following scheduled maintenance plan, are described in following chapters describing maintenance/replacement procedures.

Operation	Daily operation or after using the i-mop	Monthly or after every 100 hrs of operation	Every 6 months or after every 400 hrs of operation
Squeegee cleaning	Х		
Clean disc brush	X		
Charge batteries	х		
Check floating ball	Х		
Clean transparent plastic deflector	х		
Clean squeegee wheels		Х	
Check/replace squeegee blades		Х	
Clean filter for the detergent solution (or washing water)		x	
Check tightening of screws and nuts			X (also after the first 8 hrs of operation)

Figure 17

	ATTENTION	Cleaning the i-mop XL/XXL should be done with a
0		damp cloth. Using a high pressure water jet for
		cleaning will void the warranty.



7 I mop XL/XXL top board replacement

Tool(s):	Remarks	
Allan key	M4	
Screw driver	Torx T20	
Material(s):	Remarks	
ESD anti static gloves		

ESD anti static gloves



WARNING

Electronic component can easily be damaged by Electro Static Discharge (ESD). To protect the electronic components always wear ESD anti static gloves when working on electronic components or mainboards.

7.1.1 Disassembly.

When the top board has a mail function, first control if the bleu nob is fastened and can not move. When the top PCB board with his 5 functions 2 left, 2 right and stop middle functions are not working change the top PCB board, We will explain stepby step how to change the top PCB board.

Loosen the 2 pcs bolts (Ejot delta PT 50x14). When assembling: Be aware that the top bolt is shorter than the bottom bolt, by the re assembly the short screw has to be assembled on the top. (See arrow on top in red.)

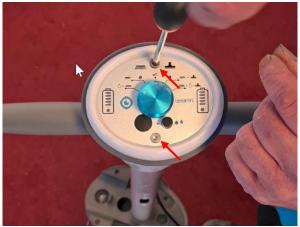


Figure 18

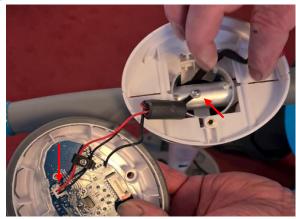
Remove the lid from the housing by hand, you now see the wires and the top PCB.



Figure 19



Loosen the screw connecting the earth cable. Loosen the connector to the handle-cable.



Loosen the bolt fixing the knob to the circuit board.



Remove the splined bushing from the shaft of the selector switch.



Loosen the 3 pcs EJOT T8 screws.

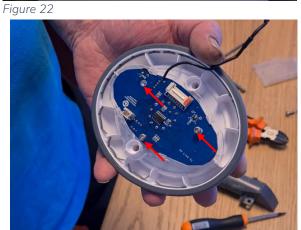


Figure 23

Remove the top board from the housing.

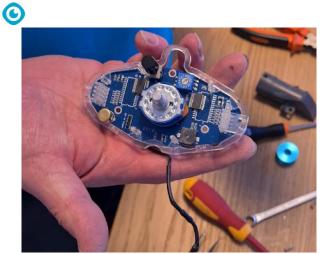


Figure 24

7.1.2 Assembly

After replacing the top board, the housing can be re-assembled. Follow the steps as indicated in Figure 21 till Figure 26 in reversed order.

Click <u>here</u> to return to the table of content.



8 I-mop XL/ XXL trigger and trigger switch replacement

Tool(s):	Remarks	
Screwdriver	Torx T20	
Long nose pliers		
Material(s):	Remarks	
None		

The trigger can brack as the trigger is not used in a proper way or the machine trigger came to a object on the side that coursed the trigger to break. On the moment you see a trigger is broken you cab change the trigger using the following steps.

8.1.1 Disassembly

Loosen the 2 pcs bolts (Ejot delta PT 50x14). The top one is a shorter bolt.

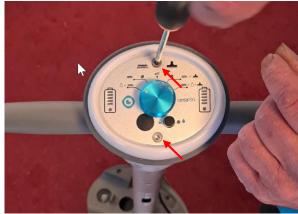


Figure 25

Remove the lid from the housing.



Figure 26

0

Loosen the screw connecting the earth cable. Loosen the connector to the handle-cable.

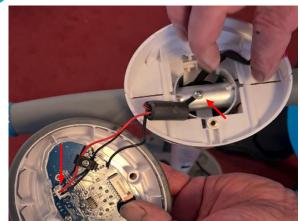


Figure 27

Loosen the bolt fixing the knob to the circuit board.



Figure 28

Remove the splined bushing from the shaft of the selector switch.



Figure 29

Remove the cover from the control panel. Disconnect the long UTP cable from the circuit board.



Figure 30



CAUTION

The clips on the sides of the plastic connector are delicate. If not handled with care they will break.

Loosen the 4 pcs screws (M4 cross head).

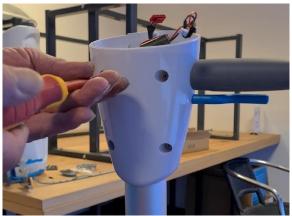


Figure 31

Remove the two housing halves.



Figure 32

Remove the trigger from the I-mop handle by pulling it from the left hand side.



Figure 33

When the trigger swith needs to be replaced, follow the step Figure 37. Otherwise continue with the step depicted in Figure 38.

Loosen the 2 pcs screws (EJOT T8 screws). Revove the trigger switch from the housing half and replace.

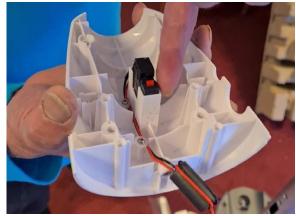


Figure 34

8.1.2 Assembly

Push the trigger from left to right back into the housing.



Figure 35

Fit the spring into the small slot in the housing cover.





Figure 36

Once the spring is in the right position, fit the other half of the housing.



Figure 37

For further assembly follow the steps as indicated in Figure 28 till Figure 36 in reversed order.

Click <u>here</u> to return to the table of content.



9 I-mop XL/XXL main UTP-cable replacement

Tool(s):	Remarks	
Screwdriver	Cross head	
Long nose pliers		
cutting pliers		
Material(s):	Remarks	
None		

9.1.1 Disassembly

Before starting the disassembly remove the clean water tank and the dirty water tank. By this you have free space to strt the disassembly. Start to loosen the 4 pcs screws (M4x12 cross head).



Figure 38

Slide the motor unit top up.



Figure 39

Loosen the swivel on the inside of the motor unit top. Disconnect the inlet channel Ø6 mm. By this you have free space.



Figure 40

te clip.

Unclip the blue cigar from the white clip. You now can disassemble the sigar electrical connection.



Figure 41

Cut the blue connector (cigar) from the long UTP cable.



Figure 42

Extract the rubber sleeve from the handle.



Figure 43

Take the deflector between thumb and index finger. Squeeze it and pull. The deflector will detach from the handle.



Figure 44



Loosen 2 pcs EJOT T8 screws of the deflector housing.



Figure 45

Loosen 2 pcs EJOT T8 screws of hose connection at the rear of the deflector housing.



Figure 46

Remove the hose connection. The connecting hole to the deflector will be exposed. In case of any dirt, remove this.



Figure 47

Loosen 4 pcs EJOT T8 screws. Pay attention to the cup holder.



Figure 48



Loosen the 2 pcs bolts (Ejot delta PT 50x14). The top one is a shorter bolt..



Figure 49

Remove the lid from the housing.



Figure 50

Loosen the screw connecting the earth cable. Loosen the connector to the handle-cable.



Figure 51

Loosen the bolt fixing the knob to the circuit board.



Figure 52

(9)

Remove the splined bushing from the shaft of the selector switch.



Figure 53

Remove the cover from the control panel. Disconnect the long UTP cable from the circuit board.

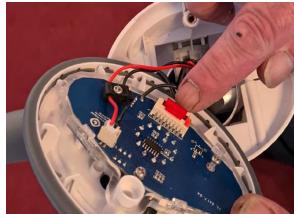


Figure 54



CAUTION

The clips on the sides of the plastic connector are delicate. If not handled with care they will break.

Loosen the 4 pcs screws (M4 cross head).

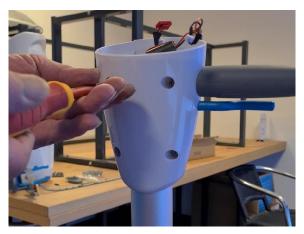


Figure 55



Remove the housing.



Figure 56

Pull the long UTP cable out the rubber stopper.



Figure 57

With a long metal rod, push the rubber down the handle.



Figure 58

...till the rubber reaches the hole of the deflector.



Figure 59



9.1.2 Assembly

Now the new long UTP cable can be installed. Push the end of the new long UTP cable through the rubber sleeve or socalled rubber seal, the troughput of the calble has to be at let 3 1 inch further than the end of the rubber seal.



Figure 60

Guide the end of the long UTP cable into the handle of the I-mop. Push the cable up.



Figure 61

Wiggle the end of the cable through the hole in the rubber. The best way you can see on the picture, make shore the cable is completed out of the alumium.



Figure 62

By this assembly it is not mensioned the sigar unit, for assemble see sigar unit.

<u>^</u>

CAUTION

The end of the long UTP cable is very delicate. When squeezed by a plier, the connectors inside will get damaged. Only use the plier at a minimum of 5 cm under the cable end.

0

Use the metal rod to push the rubber up the handle of the I-mop.



Figure 63



CAUTION

Assure that the rubber inside the handle closes off the hole. If the hole is not closed off completely, the vacuum created by the I-mop will be reduced. This affects the functioning of the I-mop.

Push the rubber down until the top of the rubber is flat with the bottom of the hole of the switch.



Figure 64



ATTENTION

Assure that the cable exits the front of the handle.

Remove the protective plastic cover from the end of the cable.



Figure 65

(9)

Remove the black tape and Insert one by one the 8 cable ends into the connector.



Figure 66



ATTENTION

Check on the removed connector the sequence of how the cables should be connected.

Once the wires have been connected, the housing can be re-installed.



Figure 67

Push the trigger from left to right back into the housing.



Figure 68

Fit the spring into the small nocks in the housing cover.



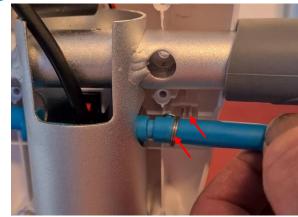


Figure 69

Once the spring is in the right position, fit the other half of the housing.



Figure 70



ATTENTION

Before connecting the two housing halfs with the 4 bolts, check if the trigger moves freely. When pushing the trigger, it should automatically return when released.

For the remaining part of the assembly, follow the steps as indicated in Figure 41 till Figure 62 in reversed order.

Click <u>here</u> to return to the table of content.



10 I-mop XL/XXL cleaning of the filter of the ball float

Tool(s):	Remarks
None	
Material(s):	Remarks
None	

For cleaning of the ball float shutoff, the dirty water tank needs to be removed from the imop.

10.1.1 Disassembly

Remove the ball float housing assembly from the tank.



Figure 71

Bend the rubber ring outwards and release the 4 nodges of the floating ball housing. Now the housing from the ball float shutoff assembly can be removed and cleaned.



Figure 72

Clean the cage under running water.

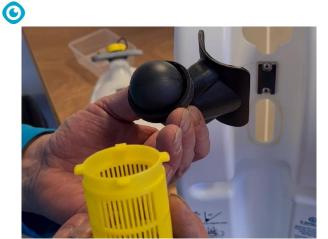


Figure 73

10.1.2 Assembly



ATTENTION

Before assembly, fill the recovery tank with approximately 1 l of water. Carefull shake the tank and dispose afterwards the water.

Assemble the unit and place back in the tank.



Figure 74



ATTENTION

Assure that the support frame and rubber housing sit flush on the tank, and seals it



11 I-mop XL/XXL cleaning of the filter of the clean water tank

Tool(s):	Remarks
Allan key	Small
Material(s):	Remarks
None	

11.1.1 Disassembly

Remove the clean water tank from the i-mop. With a small allan key, the filter can be removed from the housing.



Figure 75

After removal the filter including small housing can be cleaned by rinsing it under running water.



Figure 76

11.1.2 Assembly

After cleaning the clean water filter, it can be re-assembled. Follow the steps as indicated in Figure 78 till Figure 79 in reversed order.

Click <u>here</u> to return to the table of content.



12 I mop XL/XXL Cleaning the dirty tank deflector. Replacing the dirty tank deflector rubber sleeve

Tool(s):	Remarks	
Screwdriver	Torx T8	
Material(s):	Remarks	
None		

13 .1.1 Disassembly

Take the deflector between thumb and index finger. Squeeze it and pull. The deflector will detach from the handle.



Figure 77



ATTENTION

Sometimes dirt will collect in the orifice of the deflector.

Loosen 2 pcs EJOT T8 screws of the deflector housing.



Figure 78

Loosen 2 pcs EJOT T8 screws of hose connection at the rear of the deflector housing.



Figure 79

Remove the hose connection. The connecting hole to the deflector will be exposed. In case of any dirt, remove this.



Figure 80

Loosen 4 pcs EJOT T8 screws. Before starting on some models pay attention to the remove the USB box and thecup holder. Remark USB bix and Cup holder not implemented in USA, Canada and Mexico.



Figure 81

Remove the entire deflection holder.



Figure 82





ATTENTION

When needed, the rubber sleeve inside the deflection housing can be replaced.

13.1.2 Assembly

After replacing the rubber sleeve, the deflector housing can be re-assembled. Follow the steps as indicated in Figure 80 till Figure 85 in reversed order.

Click <u>here</u> to return to the table of content.



13 I-mop XL/XXL vacuum motor replacement

<u>^</u>

WARNING

Electronic component can easily be damaged by Electro Static Discharge (ESD). To protect the electronic components always wear ESD anti static gloves when working on electronic components or mainboards.

Tool(s):	Remarks
Screwdrivers	Ejot delta PT 50 and Cross head
Cutting pliers	
Long nose pliers	
Material(s):	Remarks
None	

13.1.1 Disassembly

Loosen the 4 pcs screws (M4x12 cross head) on top of the vacuum motor housing.



Remove the motor unit top.

Figure 83

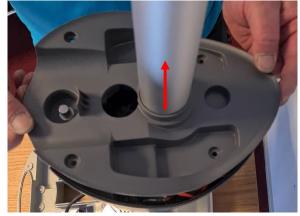


Figure 84

0

Unclip the blue cigar from the white clip.

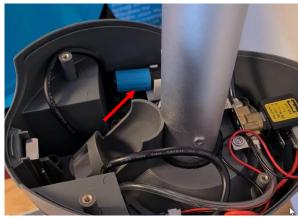


Figure 85

Loosen the 2 pcs screws (Ejot delta PT 50x14). Extract the assy magnetic valve.



Figure 86

Loosen the 8 pcs screws (Ejot delta PT 50x14).

Slide the motor unit top up.



Figure 87

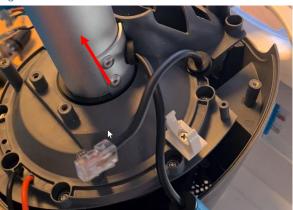


Figure 88

0

Loosen the swivel on the inside of the motor unit top. Disconnect the inlet channel Ø6 mm.



Figure 89

Loosen screw (parker 2.9X16) and extract the small connector print.

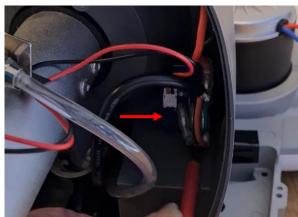


Figure 90

Extract the entire vacuum motor group from the housing.



Figure 91



ATTENTION

It is easier to now remove the 8 pcs screws (Ejot delta PT 50x14) from the motor unit cover.

(

Remove the 2 power cables from the vacuum motor group.



Figure 93

Now the vacuum motor group is completely separated from the housing and can be replaced.



Figure 94



13.1.2 Assembly

After replacing the vacuum motor group, the unit can be re-assembled.

WARNING



When reconnection the wires, observe the regular standards:

- A (+)-connection should be connected to the RED-wire.
- A (-) connection should be connected to the BLACK wire.

Assure that the rubber gasket at the bottom of the housing is fitted with the 2 notches facing down.



Figure 95

Use double side tape to fix the rubber to the motor unit cover.



Figure 96



ATTENTION

The notches in the rubber should be flash with the hole in the handle



Fit the vacuum motor rubber. Connect the vacuum motor group to the 2 power cables.



Figure 97

Place the motor unit group back into the housing. Make sure that the flat surface of the motor is facing the outside of the housing.

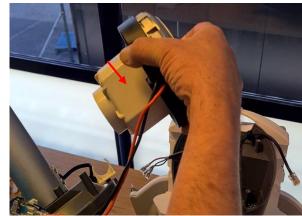


Figure 98

Replace the motor unit cover. Assure that the power cable and the hose are facing the right notches in the cover.

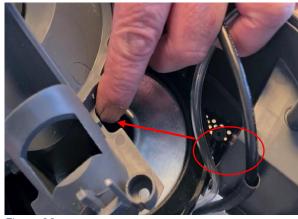


Figure 99

Assure that the long UTP cable faces the left notches in the cover.



Figure 100





ATTENTION

Before fixing the 8 pcs screws (Ejot delta PT 50x14) check if the power cable and the hose and the long UTP cable can move freely.

Click <u>here</u> to return to the table of content.



14 I-mop XL/XXL magnetic valve replacement

\bigwedge

WARNING

Electronic component can easily be damaged by Electro Static Discharge (ESD). To protect the electronic components always wear ESD anti static gloves when working on electronic components or mainboards.

Tool(s):	Remarks
Screwdrivers	Ejot delta PT 50 and Cross head
Cutting pliers	
Material(s):	Remarks
None	

14.1.1 **Disassembly and cleaning** Before starting remove the clean water tank and dirty water tank.

Loosen the 4 pcs screws (M4x12 cross head).



Figure 101

Slide the motor unit top up.



Figure 102

0

Loosen the swivel on the inside of the motor unit top. Disconnect the inlet channel Ø6 mm.



Figure 103

Loosen the 2 pcs screws (Ejot delta PT 50x14). Extract the assy magnetic valve.



Figure 104

Loosen screw (parker 2.9X16) and extract the connector print.



Figure 105



ATTENTION

Check if the channel can be moved freely up and down. If not it most likely is squeezed between the motor top unit and the housing. Replace the channel as described in chapter 16.

Unplug the magnetic valve connector from the connector print.

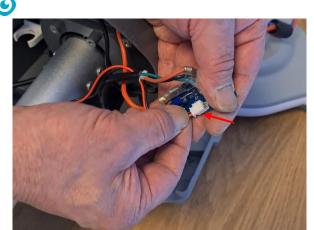


Figure 106

Loosen the second swivel. Disconnect the outlet channel Ø6 mm.



Figure 107

The valve is now completely separated from the housing.



Figure 108

(9)

Loosen the M8 nut on top of the solenoid and remove the solenoid.



Figure 109

Clean the core of the valve and the inside of the solenoid.

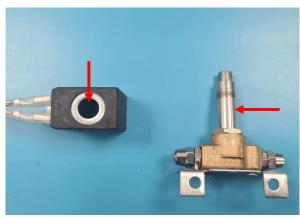


Figure 110

Loosen the plunger housing en remove the plunger.

Reassemble the valve.



Figure 111

0

Clean the seat of the plunger.

Blow inside the valve housing to remove any small particles.



Figure 112

Re-connect the valve with the magnetic valve connector with the connector print.

Test the valve. If it still doesn't work, replace it with a new one

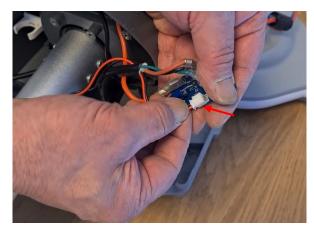


Figure 113

14.1.2 Assembly

After replacing the valve, the unit can be re-assembled. Follow the steps as indicated in Figure 104 till Figure 116 in reversed order.



ATTENTION

When fitting the 2 pcs channels Ø6 mm to the valve, assure that the direction of the waterflow is from connection 1 to connection 2.

Click <u>here</u> to return to the table of content.



15 I-mop XL/XXL short UTP cable replacement

<u>^</u>

WARNING

Electronic component can easily be damaged by Electro Static Discharge (ESD). To protect the electronic components always wear ESD anti static gloves when working on electronic components or mainboards.

Tool(s):	Remarks	
Screwdriver	Ejot delta PT 50	
Allan key	M5, M6	
Spanner	10/11, 15/17	
Cutting pliers		
Material(s):	Remarks	
ESD anti static gloves		
Heat shrinkable tube	For 3 mm wiring	
Loctite 222		

15.1.1 Disassembly

Disassemble the two brush motor cooling covers by removing the 2×2 screws (Ejot delta PT 50×14).



Figure 114

Remove the two brush motor cooling covers.



Figure 115

©

Loosen the 4 screws (Ejot delta PT 50x14) connecting the fixation plate of the drive/park support.



Figure 116

Remove the drive/park support. Push the drive support connection part in the upward direction, by this movement you can take the unit of the machine.



Figure 117

Loosen the 8 screws connecting the main lever with the main lever cover (Ejot delta PT 50x14).

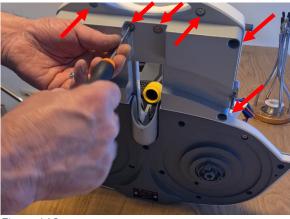


Figure 118

Separate the main lever and the main lever cover.



Figure 119





WARNING

Electronic component can easily be damaged by Electro Static Discharge (ESD). To protect the electronic components always wear ESD anti static gloves when working on electronic components or mainboards.

Disconnect the short UTP-cable from the mainboard.



Figure 120

Cut the tierap holding the short UTP cable.



Figure 121

Loosen the short UTP-cable and push it through the main lever cover.

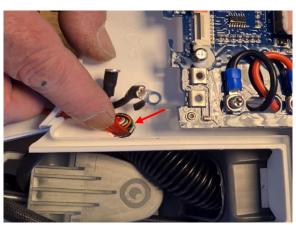


Figure 122

The cables and the small hose are now accessable.



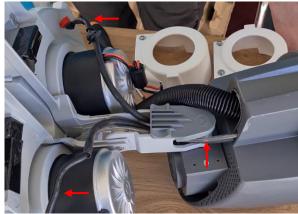


Figure 123

Place the handle of the I-mop in upright position. Loosen the 4 screws (M4x12 cross head) fixing the housing cover with the housing of the vacuum motor.



Figure 124

Slide the motor unit top up.



Figure 125

Loosen the swivel on the inside of the motor unit top. Disconnect the inlet channel $\emptyset 6$ mm.



Figure 126



Pull the cable that needs to be replaced up, out of the housing.



Figure 127

Remove the blue 'cigar' from the housing and disconnect. Remove the blue plastic ring inside the sleeve and pull out the connector.



Figure 128

The entire short UTP cable is removed and can be replaced.



Figure 129



ATTENTION

If available, replace the short UTP cable with its latest version.

15.1.2 Assembly

After replacing the short UTP cable, the unit can be re-assembled. Follow the steps as indicated in Figure 117 till Figure 131 in reversed order.

Click here to return to the table of content.

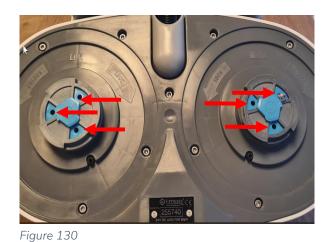


16 I-mop XL/XXL main solution feed hose channel replacement

Tool(s):	Remarks	
Screwdriver	Ejot delta PT 50	
cutting pliers		
Material(s):	Remarks	
None		

16.1.1 Disassembly

Loosen the 6 pcs screws (Ejot delta PT 50x14) and remove the two blue cover brush motor screw.



Remove the two counter sunk bolts (M5 \times 18.5) located at the center of each motor shaft.

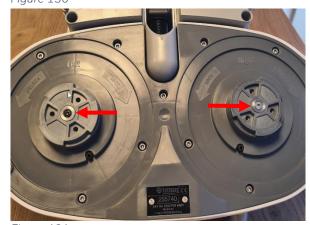


Figure 131



ATTENTION

The countersunk bolt at the left (black) has lefthanded screwthread. The countersunk bolt at the right (silver) has righthanded screwthread.

Remove the driving wheel bottom.



Figure 132

Loosen the 13pcs screws socket head cap (M5x10) and remove the brush unit bottom and splash guard.



Figure 133



ATTENTION

To prevent from loosening during operation, these 13 screws were fitted with Loctite.

Remove the brush unit bottom part.



Figure 134

Press the small blue ring at the T-connector and remove the Ø6 mm channel from the motor assembly.



Figure 135

Pull the tube out of the rubber support.



Figure 136

Place the handle of the I-mop in upright position. Loosen the 4 screws (M4x12 cross head) fixing the housing cover with the housing of the vacuum motor.

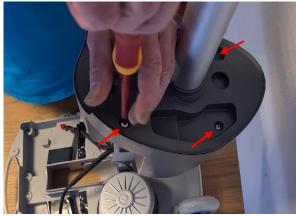


Figure 137

Open the motor unit top.



Figure 138

Disconnect the outlet channel $\emptyset 6$ mm from the magnetic valve. Pull the channel $\emptyset 6$ mm out of the housing.



Figure 139

16.1.2 Assembly

After replacing the channel Ø6 mm, the unit can be re-assembled. Follow the steps as indicated in Figure 133 till Figure 142 in reversed order.

WARNING



When reconnection the wires, observe the regular standards:

- A (+)-connection should be connected tot he RED-wire.
- A (-) connection should be connected tot the BLACK wire.

Click here to return to the table of content.

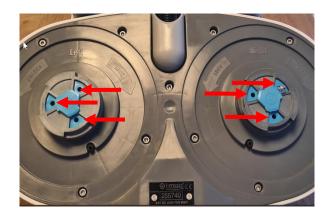


17I-mop XL/XXL Scrub head solution feed hose replacement

Tool(s):	Remarks
Screwdriver	Ejot delta PT 50
Spanner	10/11
cutting pliers	
Material(s):	Remarks
None	

17.1.1 Disassembly

Loosen the 6 pcs screws (Ejot delta PT 50x14) and remove the two blue cover brush motor screw.



Remove the two counter sunk bolts (M5 \times 18.5) located at the center of each motor shaft.



Figure 141



ATTENTION

The countersunk bolt at the left (black) has lefthanded screwthread. The countersunk bolt at the right (silver) has righthanded screwthread.

Remove the driving wheel bottom.





Figure 142

Loosen the 13pcs screws socket head cap (M5x10) and remove the brush unit bottom and splash guard.

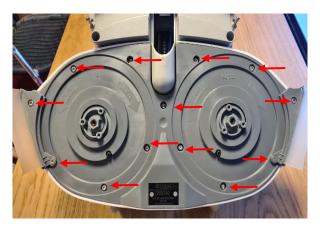


Figure 143



ATTENTION

To prevent from loosening during operation, these 13 screws were fitted with Loctite.

Remove the brush unit bottom part.



Figure 144

Cut the relevant tierap from the brush motor rubber and extract the Ø4 channel.

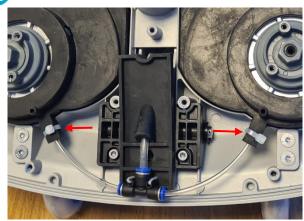


Figure 145

Press the small blue ring at the T-connector and remove the Ø4mm channel from the motor assembly.



Figure 146

17.1.2 Assembly

After replacing the channel Ø4 mm, the unit can be re-assembled. Follow the steps as indicated in Figure 143 till Figure 149 in reversed order.



ATTENTION

After a connecting the Ø 4 channel, test the connection by pulling the channel up. If connected well, the channel should remain connected.

WARNING



When reconnection the wires, observe the regular standards:

- A (+)-connection should be connected tot he RED-wire.
- A (-) connection should be connected tot the BLACK wire.

Click <u>here</u> to return to the table of content.



18I-mop XL/XXL internal Ø6 mm channel replacement

Tool(s):	Remarks
Screwdriver	Ejot delta PT 50
Spanner	10/11
Material(s):	Remarks
None	

18.1.1 Disassembly

Loosen the 4 pcs screws (M4x12 cross head).



Figure 147

Slide the motor unit top up.



Figure 148

0

Loosen the swivel on the inside of the motor unit top. Disconnect the inlet channel Ø6 mm.



Figure 149

Loosen the swivel of the internal channel $\emptyset 6$ mm. Extract the channel.



Figure 150

18.1.2 Assembly

After replacing the internal channel Ø6 mm, the unit can be re-assembled. Follow the steps as indicated in Figure 150 till Figure 153 in reversed order.

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19I-mop XL/XXL power cable replacement

\wedge

WARNING

Electronic component can easily be damaged by Electro Static Discharge (ESD). To protect the electronic components always wear ESD anti static gloves when working on electronic components or mainboards.

Tool(s):	Remarks
Screwdriver	Ejot delta PT 50, Cross head
Material(s):	Remarks
None	

19.1.1 Disassembly

Disassemble the two brush motor cooling covers by removing the 2×2 screws (Ejot delta PT 50×14).



Figure 151

Remove the two brush motor cooling covers.



Figure 152

(9)

Loosen the 4 screws (Ejot delta PT 50x14) connecting the fixation plate of the drive/park support.



Figure 153

Remove the drive/park support.



Figure 154

Loosen the 8 screws connecting the main lever with the main lever cover (Ejot delta PT 50x14).



Figure 155

Separate the main lever and the main lever cover.

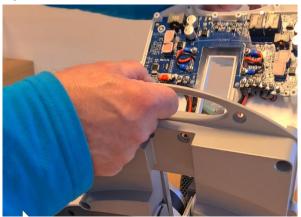


Figure 156





WARNING

Electronic component can easily be damaged by Electro Static Discharge (ESD). To protect the electronic components always wear ESD anti static gloves when working on electronic components or mainboards.

Loosen the 3 power cables for the vacuum pump and and push them through the main lever cover.

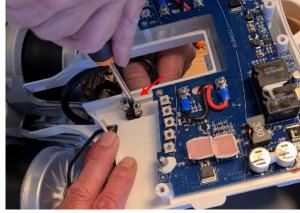


Figure 157

Loosen the 4 pcs screws (M4x12 cross head) of the vacuum housing.

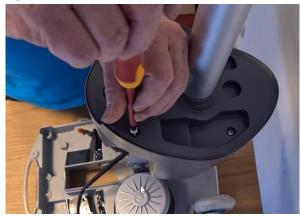


Figure 158

Open the motor unit top.



Figure 159

Loosen screw (parker 2.9X16) and extract the small connector print.



Figure 160

Unplug the power cable from the connector board.

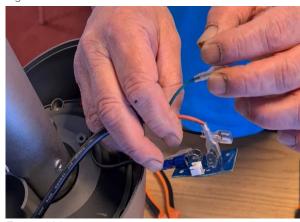


Figure 161



ATTENTION

Pay attention to where the three cables are connected on the connector board.

Pull the power cable from below out the housing.



Figure 162

The cable can now be replaced.



Figure 163

19.1.2 Assembly

After replacing the power cable, the unit can be re-assembled. Follow the steps as indicated in Figure 154 till Figure 163 in reversed order.



ATTENTION

If available, replace the power cable with its latest version.

WARNING



When reconnection the wires, observe the regular standards:

- A (+)-connection should be connected tot he RED-wire.
- A (-) connection should be connected tot the BLACK wire.

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20I-mop XL/XXL main lever replacement

WARNING

Electronic component can easily be damaged by Electro Static Discharge (ESD). To protect the electronic components always wear ESD anti static gloves when working on electronic components or mainboards.

Tool(s):	Remarks	
Screwdriver	Ejot delta PT 50	
Allan key	M5, M6	
cutting pliers		
Material(s):	Remarks	
Material(s): ESD anti static gloves	Remarks	
	Remarks For 3 mm wiring	

20.1.1 Disassembly

Disassemble the two brush motor cooling covers by removing the 2×2 screws (Ejot delta PT 50×14).



Figure 164

Remove the two brush motor cooling covers.



Figure 165



Now the brush motors are exposed.



Figure 166

Cut the heat shrinkable tubes from the wires using a pair of cutting pliers.



Figure 167

Unsolder the wires.



Figure 168

Loosen the 6 pcs screws (Ejot delta PT 50x14) and remove the two blue cover brush motor screw.

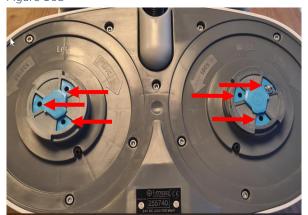


Figure 169

Remove the two counter sunk bolts (M5 \times 18.5) located at the center of each motor shaft.



Figure 170



ATTENTION

The countersunk bolt at the left (black) has lefthanded screwthread. The countersunk bolt at the right (silver) has righthanded screwthread.

Remove the driving wheel bottom.

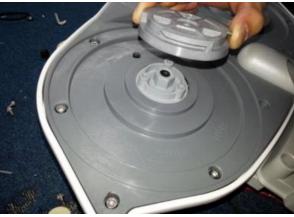


Figure 171

Loosen the 13pcs screws socket head cap (M5x10) and remove the brush unit bottom and splash guard.

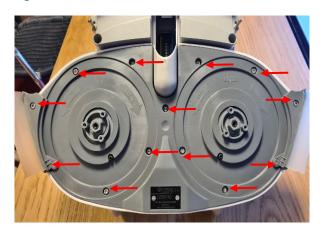


Figure 172



ATTENTION

To prevent from loosening during operation, these 13 screws were fitted with Loctite.



Remove the brush unit bottom part.



Figure 173

Remove the two brush motors from the main lever.



Figure 174

Press the small blue ring at the T-connector and remove the Ø6 mm channel from the motor assembly.

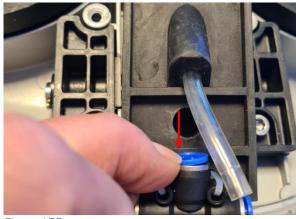


Figure 175

Pull the tube out of the rubber support.

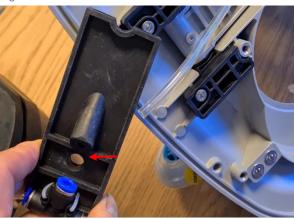


Figure 176

Loosen the 2 pcs bolts socket head cap (M5x10) of the 2 pcs main lever support brackets.



Figure 177

Loosen the bolt (M4 \times 12) fixing the shaft of the main lever.



Figure 178

Loosen the split pin fixing the shaft of the main lever.



Figure 179

And remove the main lever support bracket including the PE bushing.



Figure 180

Remove the shaft from the main cover.





Figure 181

Loosen the 8 screws connecting the main lever with the main lever cover (Ejot delta PT 50x14).



Figure 182

Loosen the 2 pcs bolts (M5 \times 16). The main lever can now be separated from the main lever cover.



Figure 183

20.1.2 Assembly

After replacing the main lever, the i-mop can be re-assembled. Follow the steps as indicated in Figure 167 till Figure 186 in reversed order.

WARNING



When reconnection the wires, observe the regular standards:

- A (+)-connection should be connected tot he RED-wire.
- A (-) connection should be connected tot the BLACK wire.



0	ATTENTION	To prevent from loosening during operation, dip the tip of the following bolts/screws in Loctite 222: -two counter sunk bolts in Figure 173, -all the screws indicated in Figure 175, -the two bolts in Figure 180, -and the bolt shown in Figure 181.
0	ATTENTION	Always replace the split pen as shown in Figure 182 with a new one.
0	ATTENTION	When re-assembling the shaft of the main lever as shown in Figure 182 and Figure 183 assure that the flat part of the shaft is facing upwards.

Click <u>here</u> to return to the table of content.



21I-mop XL/XXL main lever cover replacement

WARNING

Electronic component can easily be damaged by Electro Static Discharge (ESD). To protect the electronic components always wear ESD anti static gloves when working on electronic components or mainboards.

Tool(s):	Remarks	
Screwdriver	Ejot delta PT 50	
Allan key	M5, M6	
cutting pliers		
		
Material(s):	Remarks	
Material(s): ESD anti static gloves	Remarks	
• •	Remarks For 3 mm wiring	

21.1.1 Disassembly

Disassemble the two brush motor cooling covers by removing the 2×2 screws (Ejot delta PT 50×14).



Figure 184

Remove the two brush motor cooling covers.



Figure 185

0

Loosen the 4 screws (Ejot delta PT 50x14) connecting the fixation plate of the drive/park support.



Figure 186

Remove the drive/park support.



Figure 187

Loosen the 8 screws connecting the main lever with the main lever cover (Ejot delta PT 50x14).

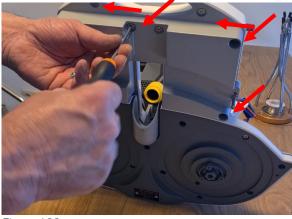


Figure 188

Separate the main lever and the main lever cover.

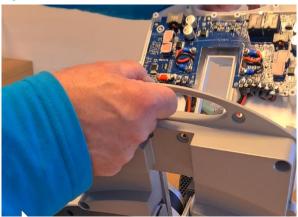


Figure 189





WARNING

Electronic component can easily be damaged by Electro Static Discharge (ESD). To protect the electronic components always wear ESD anti static gloves when working on electronic components or mainboards.

Loosen all the external connections to the mainboard.

.

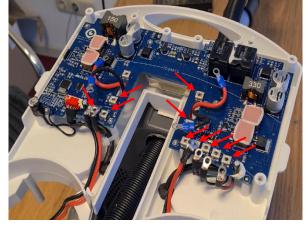


Figure 190

Cut the shrinkable tube with which the earthing cable is connected to the main lever cover.

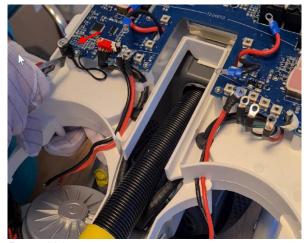


Figure 191

Disconnect the short UTP-cable from the mainboard.

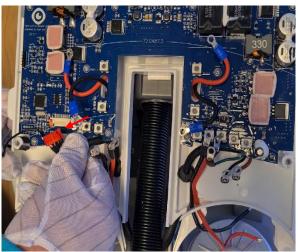


Figure 192

0

Loosen 10 pcs EJOT T8 screws. Disconnect the mainboard from the main lever cover.

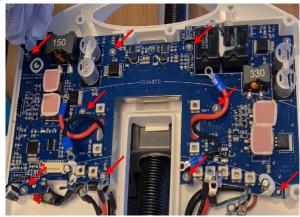


Figure 193

Cut the tierap holding the short UTP cable.



Figure 194

Loosen the short UTP-cable and push it through the main lever cover.

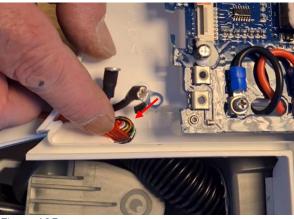


Figure 195

Loosen the 3 power cables for the vacuum pump and and push them through the main lever cover.



Figure 196

Remove mainboard from the main lever cover.



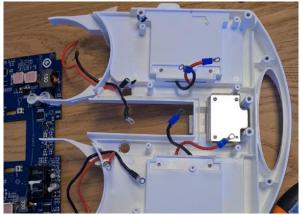


Figure 197

Cut the soldered parts of the 4 power cables for the 2 brush motors. Pull them gently out the main lever cover.

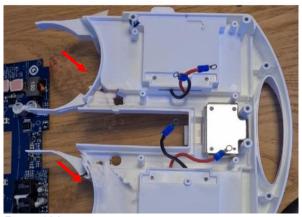


Figure 198



WARNING

The power cables of the brush motors should be removed gently from the main lever cover. If not done gently, the insulation of the cables can get damaged. These damaged spots can easily cause a shortcircuit.

Loosen the 2×2 pcs EJOT T8 screws. Remove the battery connectors from the main lever cover.

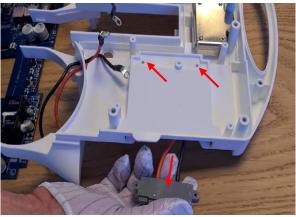


Figure 199

Loosen the 1x pcs EJOT T8 screw. Remove the small lid covering the connector for programming.



Figure 200

Loosen the 4 pcs EJOT T8 screws. Remove the magnet including magnet cover from the the main lever cover.

All components connected onto the main lever cover are removed. The main lever cover can now be replaced.

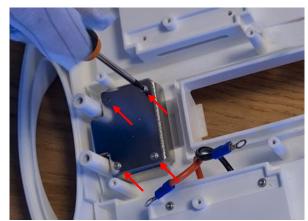


Figure 201

21.1.2 Assembly

After replacing the main lever cover, the i-mop can be re-assembled. Follow the steps as indicated in Figure 187 till Figure 204 in reversed order.

WARNING



When reconnection the wires, observe the regular standards:

- A (+)-connection should be connected tot he RED-wire.
- A (-) connection should be connected tot the BLACK wire.



ATTENTION

To prevent from loosening during operation, dip the tip of the following bolts/screws in Loctite 222:

- -two counter sunk bolts in Figure 173,
- -all the screws indicated in Figure 175,
- -the two bolts in Figure 180,
- -and the bolt shown in Figure 181.



ATTENTION

Always replace the split pen as shown in with a new one.



WARNING



The blue battery connector in Figure 202 should be mounted on the left hand side of the main lever cover. The grey power connector should be mounted on the right hand side. Mixing up these positions will result in short circuiting of the brush motors.

For assembly of the magnet, place the main lever cover back onto the body of the i-mop. The magnet will automatically position itself in the right way. By doing so, the two magnets will not repel eachother when the i-mop is in parking position.

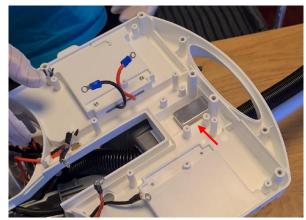


Figure 202

Click <u>here</u> to return to the table of content.



22I-mop XL/XXL mainboard assembly instructions

WARNING

Electronic component can easily be damaged by Electro Static Discharge (ESD). To protect the electronic components always wear ESD anti static gloves gloves when working on electronic components or mainboards.

Tool(s):	Remarks
Screwdriver	Ejot delta PT 50
Allan key	M5, M6
cutting pliers	
Material(s):	Remarks
ESD anti static gloves	
Heat shrinkable tube	For 3 mm wiring

22.1.1 Disassembly

Disassemble the two brush motor cooling covers by removing the 2×2 screws (Ejot delta PT 50×14).



Figure 203

Remove the two brush motor cooling covers.



Figure 204

(9)

Loosen the 4 screws (Ejot delta PT 50x14) connecting the fixation plate of the drive/park support.



Figure 205

Remove the drive/park support.



Figure 206

Loosen the 8 screws connecting the main lever with the main lever cover (Ejot delta PT 50x14).

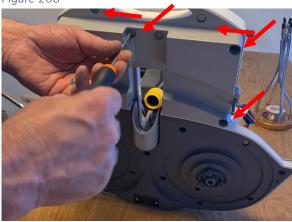


Figure 207

Separate the main lever and the main lever cover.

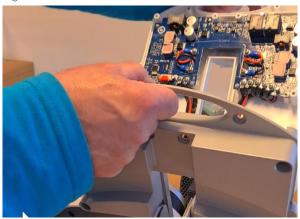


Figure 208





WARNING

Electronic component can easily be damaged by Electro Static Discharge (ESD). To protect the electronic components always wear ESD anti static gloves when working on electronic components or mainboards.

Loosen all the external connections tot the mainboard.

.

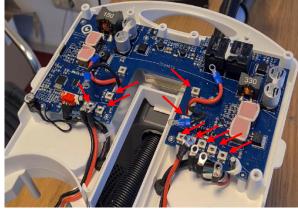


Figure 209

Cut the shrinkable tube with which the earthing cable is connected tot he main lever cover.

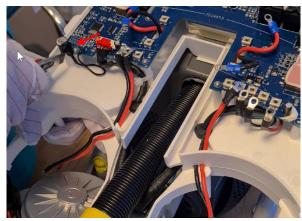


Figure 210

Disconnect the short UTP-cable from the mainboard.



Figure 211

Loosen 10 pcs EJOT T8 screws. Now the mainboard can be disconnected from the main lever cover..



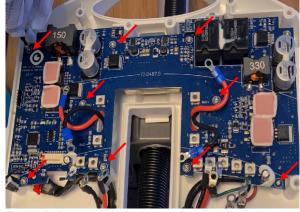


Figure 212

22.1.2 Assembly

After replacing the mainboard, the i-mop can be assembled. Follow the steps as indicated in Figure 206 till Figure 215 reversed order.



WARNING

When reconnection the wires, observe the regular standards:

- A (+)-connection should be connected tot he RED-wire.
- A (-) connection should be connected tot the BLACK wire.

Click <u>here</u> to return to the table of content.



23I-mop XL/XXL hinge replacement

Tool(s):	Remarks
Screwdriver	Ejot delta PT 50, Cross head, Flat
Spanner	10/11
Hammer	
Material(s):	Remarks
None	

23.1.1 Disassembly

Disassemble the two brush motor cooling covers by removing the 2×2 screws (Ejot delta PT 50×14).



Figure 213

Remove the two brush motor cooling covers.



Figure 214

Loosen the 4 pcs screws (M4x12 cross head) on top of the vacuum motor housing.



Figure 215

Remove the motor unit top.



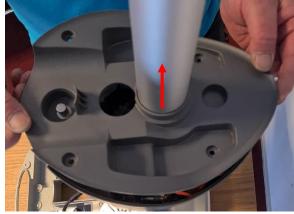


Figure 216

Slide the protection cover from the hinge.



Figure 217

Disconnect the outlet channel $\emptyset 6$ mm from the magnetic valve. Pull the channel $\emptyset 6$ mm out of the housing.



Figure 218

Loosen the 2 bolts (EJOT PT50) on both sides of the hinge.

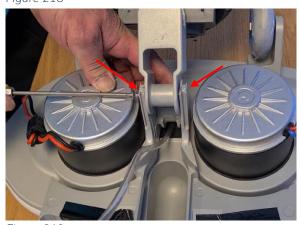


Figure 219

of the

Separate the handle and the deck of the i-mop.



Figure 220

Extract the metal bush from the hinge.



Figure 221

Extract the plastic bush from the hinge.



Figure 222

Loosen the bolt (EJOT PT50) on the other side of the hinge.



Figure 223

23.1.2 Assembly

A new hinge comes with 4 new bushings, a shaft, washer and protection cover.



Figure 224

After replacing the hinge, the unit can be re-assembled. Follow the steps as indicated in Figure 216 till Figure 226 in reversed order.

Click <u>here</u> to return to the table of content.



24I-mop XL/XXL brush motor replacement

Tool(s):	Remarks
Screwdriver	Ejot delta PT 50
Pulley lifter	Optional (see toolbox)
Allan key	M5, M6
Heat gun	
cutting pliers	
Material(s):	Remarks
Loctite 222	
Heat shrinkable tubes	For 3mm wires

24.1.1 Disassembly

Disassemble the two brush motor cooling covers by removing the 2×2 screws (Ejot delta PT 50×14).



Figure 225

Remove the two brush motor cooling covers.



Figure 226



Now the brush motors are exposed.

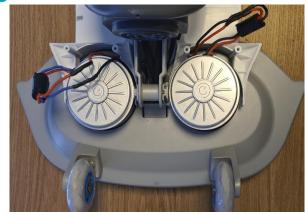


Figure 227

Cut the heat shrinkable tubes from the wires using a pair of cutting pliers.



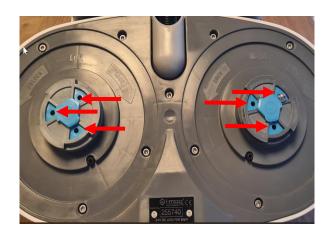
Figure 228

Unsolder the wires.



Figure 229

Loosen the 6 pcs screws (Ejot delta PT 50x14) and remove the two blue cover brush motor screw.





Remove the two counter sunk bolts (M5 \times 18.5) located at the center of each motor shaft.

Figure 230

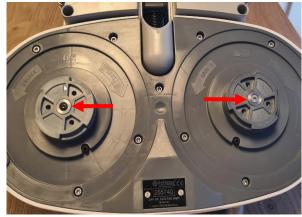


Figure 231



ATTENTION

The countersunk bolt at the left (black) has lefthanded screwthread. The countersunk bolt at the right (silver) has righthanded screwthread.

Remove the driving wheel bottom.



Figure 232

Loosen the 13pcs screws socket head cap (M5x10) and remove the brush unit bottom and splash guard.

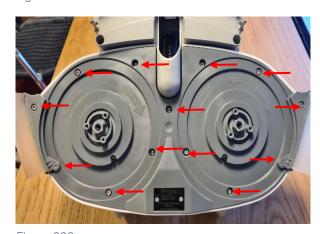


Figure 233



ATTENTION

To prevent from loosening during operation, these 13 screws were fitted with Loctite 222.



Remove the brush unit bottom part.



Figure 234

Remove the brush motor fixation rubbers.

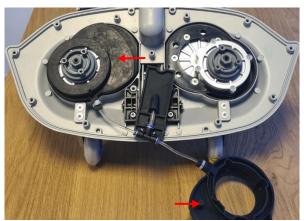


Figure 235

Remove the brush motor helical gears.



Figure 236

Remove the brush motor support rubber.





Figure 237

Remove the driving wheel top from the shaft of the brush motor helical gears.



Figure 238

If needed with an extractor / pulley lifter.



Figure 239

Loosen the 4 screws counter sunk (M6 \times 16) and remove the brush motor construction ring.



Figure 240



ATTENTION

Now the brush motor is separated from the i-mop and can be replaced.



24.1.2 Assembly

Put the brush motor construction on the new brush motor helical gears and secure it with 4 screws counter sunk (M6 \times 16) dipped in Loctite 222.



Figure 241

Put the driving wheel top on the shaft of the brush motor helical gears.



Figure 242

Put the brush motor support rubber in the upper side of the brush motor helical gears and push it tight onto the flange.



Figure 243

Put the brush motor fixation rubber in the lower side of the brush motor helical gears and block it together with the brush motor support rubber matching the pins and the holes of the two gaskets.





Figure 244

Place both motors in the housing.



Figure 245

Place the brush unit bottom part.



Figure 246

Fit the brush unit bottom part with the 13pc screws socket head cap (M 5×10). Because of heavy vibrations in the deck, the screws should be dipped in Loctite 222.

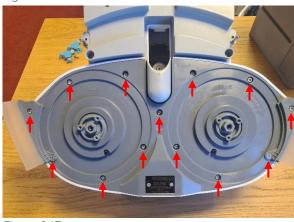


Figure 247

Put the two driving wheel bottoms on the driving wheels.

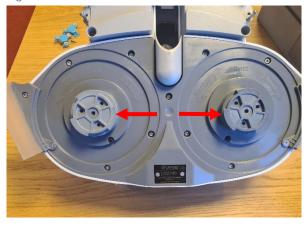




Figure 248



ATTENTION

Make sure the driving wheel with the LEFT indiction is mounted on the left. The driving wheel with the RIGHT indication is mounted on the right.

Fit each driving wheel bottom with a countersunk bolt (Ejot delta PT 50x14).

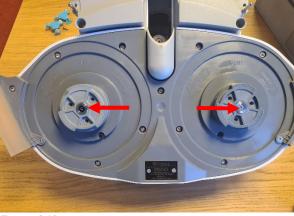


Figure 249



ATTENTION

The countersunk bolt at the left (black) has lefthanded screwthread. The countersunk bolt at the right (silver) has righthanded screwthread.

Place the two blue cover brush motor screw and fasten each cover with 3pcs screw (Ejot 50X14.



Figure 250

Put the left motor helical gears on the brush motor construction cover. Slide a heatshrinkable tube over one of the cable ends. Connect the wires by soldering them.







ATTENTION

Connect the red with the red wire and the black with the black wire for the left brush motor.

Put the right motor helical gears on the brush motor construction cover. Slide a heatshrinkable tube over one of the cable ends. Connect the wires by soldering them.



Figure 252



ATTENTION

Connect the red wire with the red wire and the black wire with the blue wire for the right brush motor.

Adjust the cables in the correct position. Fit the brush motor construction on the left hand side using 2 pcs screws (Ejot delta PT 50x14).

Now fit the brush motor cooling cover on the right hand side using 2 pcs screws (Ejot delta PT 50x14).



Figure 253

Click here to return to the table of content.



25I-mop XL/XXL wheel support replacement

Tool(s):	Remarks	
Screwdriver	Ejot delta PT 50	
Pulley lifter	Optional (see toolbox)	
Allan key	M5, M6	
Heat gun		
Material(s):	Remarks	
Loctite 222		
Heat shrinkable tubes	For 3mm wires	

25.1.1 Disassembly

Loosen the 6 pcs screws (Ejot delta PT 50x14) and remove the two blue cover brush motor screw.

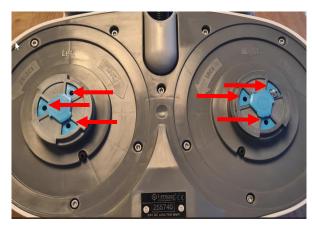


Figure 254

Remove the two counter sunk bolts (M5 \times 18.5) located at the center of each motor shaft.



Figure 255



ATTENTION

The countersunk bolt at the left (black) has lefthanded screwthread. The countersunk bolt at the right (silver) has righthanded screwthread.

Remove the driving wheel bottom.





Figure 256

Loosen the 13pcs screws socket head cap (M5x10) and remove the brush unit bottom and splash guard.

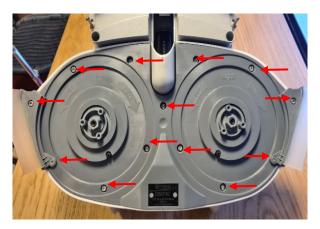


Figure 257



ATTENTION

To prevent from loosening during operation, these 13 screws were fitted with Loctite.

Remove the brush unit bottom part.

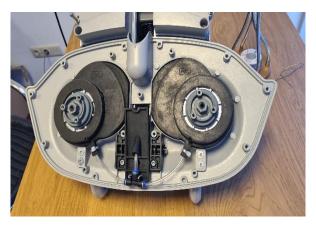


Figure 258

0

Loosen the 2 left (or right) pcs screws socket head cap (M5x10) of the relevant wheel support.



Figure 259

Remove the wheel support.



Figure 260

25.1.2 Assembly

After replacing the wheel support, the i-mop can be re-assembled. Follow the steps as indicated in Figure 257 till Figure 263 in reversed order.



ATTENTION

Dip the tip of the two counter sunk bolts (M5 \times 18.5) located at the center of each motor shaft in Loctite 222, see Figure 258.



27I mop XL/XXL squeegee blade replacement

Tool(s):	Remarks
None	
Material(s):	Remarks

The squeegee blades come in pairs and wear out over time. When you notice the floor is no longer being dried properly, replace the squeegee blades.

27.1.1 Detaching the squeegee

- 1. Put the i-mop® XL/XXL in store position, see section 3.1.
- 2. Hold the scrub deck firmly with one hand.
- 3. Pull on the left side of the squeegee to remove it (Figure 264, pos 1).
- 4. Pull on the right side of the squeegee to remove it (Figure 264, pos 2).

Remove the vacuum hose from the squeegee by twisting the hose.

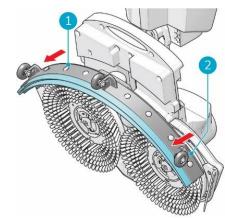


Figure 261

27.1.2 Flipping/replacing the squeegee blade

- 1. Unscrew the 8 plastic nuts on the back.
- 2. Take off the squeegee rear plate.
- 3. Once the plastic part is removed, you can easily take off the rear rubber blade.
- 4. Push the 8 screws through the front blade in order to remove the squeegee front plate.
- 5. Take off the rear rubber blade.
- 6. Inspect the front and rear rubber blades:
- The first time: flip the blades so the top of the blade is now facing the floor. Push the front plate screws through the holes.
- The second time: attach a new set of blades. Push the front plate screws through the holes.



CAUTION

The special squeegee blades that contain small arrow-like shapes cannot be switched. These need to be replaced every time.

- 7. Put back the plastic rear plate.
- 8. Screw the 8 plastic nuts on the back.



27.1.3 Attaching the squeegee

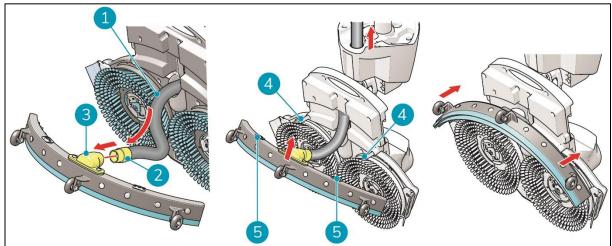


Figure 262

To attach the squeegee:

- 1. Take the vacuum hose (Figure 265, pos 1).
- 2. Insert the hose connector (Figure 265, pos 2) in the squeegee (Figure 265, pos 3).
- 3. Twist the hose connector 1/4 turn for a firm fit (Figure 265, pos 2).
- 4. Carefully pull the vacuum hose back into the machine.
- 5. Hold the scrub deck firmly with one hand.
- 6. Align the pins on the scrub deck (Figure 265, pos 4) with the holes on the squeegee (Figure 265, pos 5).
- 7. Push the left side of the squeegee in place.
- 8. Push the right side of the squeegee in place.



28 I-mop XL/XXL water save interval adjustment

Tool(s):	Remarks
Screwdriver	
Material(s):	Remarks

The amount of water used during cleaning can be adjusted. This program will be activated by pressing the interval switch.



Figure 263

Remove the rubber stopper on the control unit. Inside a small potentiometer can be found. Use a small screwdriver to adjust.

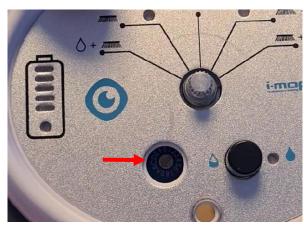


Figure 264

In the table the values (in s) of various positions are shown.

After having set the right value, plug the rubber stopper back into the hole of the control unit.



Position	Water (s)	Stop (s)
0	0.6	9.4
1	1.2	8.8
2	1.8	8.2
3	2.4	7.6
4	3.0	7.0
5	3.5	6.5
6	4.1	5.9
7	4.7	5.3
8	5.3	4.7
9	5.9	4.1
Α	6.5	3.5
В	7.0	3.0
С	7.6	2.4
D	8.2	1.8
Е	8.8	1.2
F	9.4	0.6

Figure 265



29 I-mop XL/XXL connector battery replacement

Tool(s):	Remarks
Screwdriver	Torx T8
Long nose plier	
Material(s):	Remarks
None	

29.1.1 Disassembly

Loosen the 4 pcs screws (Torx T8). Open the battery pack.



Figure 266

Disconnect the two wires from the battery and battery pack.

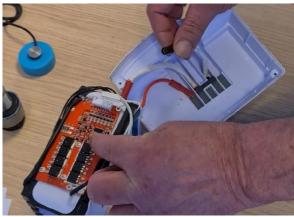


Figure 267

Loosen the 2 pcs screws (Torx T8).



Figure 268

0

Remove the plastic block from the inside of the cover.



Figure 269

The battery connector can now be removed from the cover.



Figure 270

29.1.2 Assembly

After replacing the battery connector, the battery pack can be re-assembled. Follow the steps as indicated in Figure 269 till Figure 273 in reversed order.



30 Changing the shut-off position of the handle angle

Tool(s):	Remarks	
None		
Material(s):	Remarks	
None		

By default, the machine switches off the brushes and vacuum motor as soon as the angle of the comes below 32 degrees.

For a smaller person this angle can be inconvenient. To change the angle of switching off, take the next steps.

Turn the selector knob to the most left position (water and brushes);

Place the control boom in the desired position;

Press and hold the water savings button for at least 5 s. The battery indicators will start flashing green.

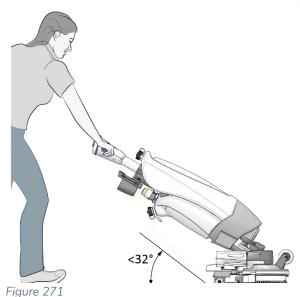




Figure 272



Figure 273

Release the water savings button when the following LED-lights start flashing:

- 2 Red LEDs (at the bottom of the batteries);
- 1 blue LED;
- 1 red LED.

The new switch-off position is now set.

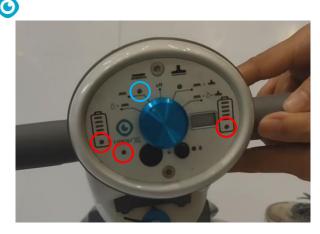


Figure 274



31 I-mop XL/XXL splash guard replacement

Tool(s):	Remarks	
None		
Material(s):	Remarks	
None		

31.1.1 Disassembly

The splash guards are fitted on either side of the brushes. Each splash guard is fitted with three clips.



Figure 275

To remove a splash guard, push it slightly down and press it clockwise (for the left splash guard counter clockwise).

The splash guard can now be replaced.

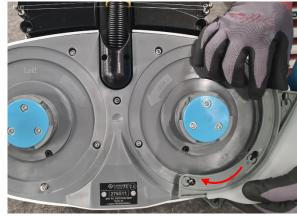


Figure 276

31.1.2 Assembly

After replacing splash guard, it can be replaced. Follow the step as indicated in Figure 279.



32 I-mop XL/XXL squeegee replacement

Tool(s):	Remarks
None	
	-
Material(s):	Remarks

32.1.1 Disassembly

- 1. Put the i-mop® XL/XXL in store position, see section 3.1.
- 2. Hold the scrub deck firmly with one hand.
- 3. Pull on the left side of the squeegee to remove it (Figure 280, pos. 1).
- 4. Pull on the right side of the squeegee to remove it (Figure 280, pos. 2).
- 5. Remove the vacuum hose from the squeegee by twisting the hose.

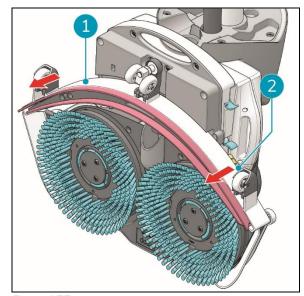


Figure 277

32.1.2 Flipping/replacing the squeegee blade

- 1. Gently pull down the squeegee blade unit from the scrub deck.
- 2. When the unit has been removed from the scrub deck, press simultaneously the two black knobs on the top of the squeegee-unit (Figure 281, pos. 1). The squeegee blades holder will detach from the squeegee blade unit. Now the squeegee blades are exposed.

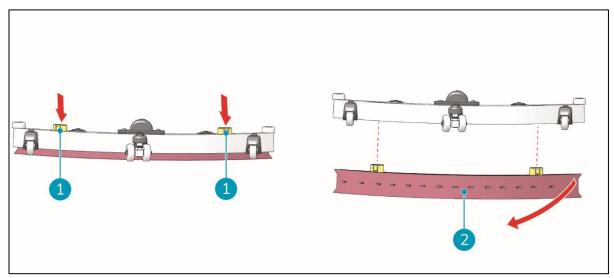


Figure 278



- 3. Pull the front and rear rubber squeegee blades from the metal nobs of the holder (Figure 281, pos. 2).
- 4. Inspect the front and rear rubber blades:
- The first time: flip the blades so the top of the blade is now facing the floor. Push the front plate screws through the holes.
- The second time: attach a new set of blades. Push the front plate screws through the holes.



CAUTION

The special squeegee blades that contain small arrow-like shapes cannot be switched. These need to be replaced every time.

5. Replace the rubber squeegee blade with a new one, (Figure 282, pos. 2). Fix it onto the holder by pressing it gently on the metal nobs of the holder, (Figure 282, pos. 1).

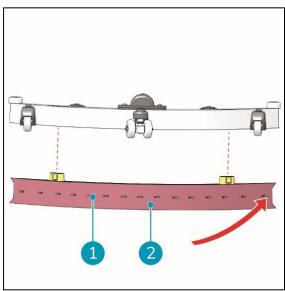


Figure 279

- 6. Carry out the previous step for the other squeegee blade.
- 7. Put the squeegee blade holder back into the squeegee blade unit.



ATTENTION

Align the nobs on the squeegee blades holder with the notches in the squeegee blade unit.



32.1.3 Assembly

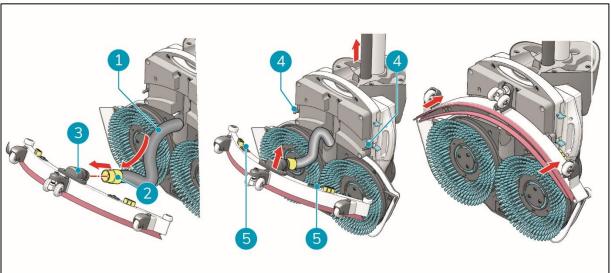


Figure 280

To attach the squeegee:

- 1. Take the vacuum hose (Figure 283, pos. 1).
- 2. Insert the hose connector (Figure 283, pos. 2) in the squeegee (Figure 283, pos. 3).
- 3. Twist the hose connector 1/4 turn counterclockwise for a firm fit (Figure 283, pos. 2).
- 4. Carefully pull the vacuum hose back into the machine.
- 5. Hold the scrub deck firmly with one hand.
- 6. Align the pins on the scrub deck (Figure 283, pos. 4) with the holes on the squeegee (Figure 283, pos. 5).
- 7. Push the left side of the squeegee in place.
- 8. Push the right side of the squeegee in place.



33Decommissioning and disposal



ATTENTION

It is the responsibility of the i-mop® XL/XXL owner to dispose of the product responsibly.

After decommissioning, the i-mop XL/XXL still contains valuable resources and needs to be disposed of according to your local laws and regulations regarding recycling of electrical equipment.



Before disposal please:

- 1. Flush the machine, see user manual.
- 2. Remove the batteries for separate disposal.

TIP:

Alternatively, keep the batteries for use in another piece of i-team equipment.

- 3. Remove all loose components like brushes, tanks and squeegee.
- 4. Dispose all items according to your local laws and regulations.



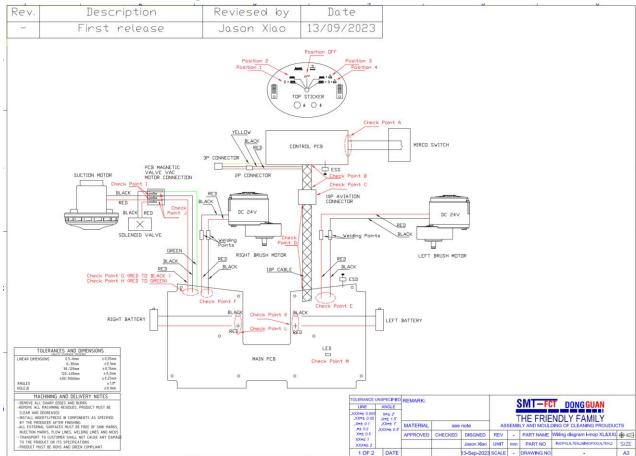
34 Parts lists

34.1 Parts i-mop XL

Parts i-mop XXL



34.1 Electrical wire diagram



34.2 Electrical trouble shooting tips

TROUBE SHOOTING TIPS

- Step 1, To check Main PCB if works
 - Turn the switch knob at Position 1, 2 3 or 4 and then just push in Right battery A. If LED (Check point M) is flashing , it means the main pcb and 10P CABLE connection is DK
 - B, if LED is alway light and no flashing, the top PCB or Check Point B or Check point B or Check point C have problem.

 C, if no LED light, it means The wire joint battery and main bard has problem or
 - main PCB damaged.
- Step 2. Turn Knob at Position 1, 2 3 or 4, and two batteries LED on the top sticker are green, but brush notor don't run when switch on, need to inspect Check point A if short when switch on because of damge micro switch or trigger bar issue
- Step 3, When just pushing the two batteries in , the battery voltage shold be measurable at Check Point K and L
- Step 4, Voltage Status at Position 1 with trigger bar switch on Battery Voltage points: Check point E,F,H and J Zero Voltage points: Check Point G and I
- Step 5, Voltage Status at Position 2 with trigger bar switch on Battery Voltage points: Check point E and F Zero Voltage points: Check Point G,H,I and J Step 6, Voltage Status at Position 3 with trigger bar switch on Positions Voltage Status at Position 3 with trigger bar switch on
- Battery Voltage points: Check point E,F,G and I
- Zero Voltage points: Check Point H and J
 Step 7, Voltage Status at Position 4 with trigger bar switch on
 Battery Voltage points: Check point E,F,G,H,I and J