Technical Manual



swingo455B





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1 Forward

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1 Foreword

1.1 Target

To serve our customers faster and more efficient it is important to achieve a general standard of technical know how with our partners in the market.

Therefore we developed a Technical Training concept which is based on e-spares. The concept consists of a Technical Manual and a Technical Training.

These two tools will be produced for each newly launched machine with a certain complexity. The Technical Manual will be available as PDF file and can be downloaded from e-spares. The Technical Training documentation will be distributed after having attended the technical training.

1.2 Technical Training

The Technical Training is addressed as reference book for the technical training sessions and will be distributed to the floor care responsible and/or to the technical training responsible after attending a training session provided by GTS (max. 2 persons per country).

The intension is, that after this session, a technical trainer is able to perform technical training for their local technical staff and in this way to transfer the knowledge to all service technicians.

The Technical Training is not intended as manual for the service technicians and will be distributed only to the training responsible of each country.

1.3 Technical Manual

The Technical Manual is addressed to the service technicians and should be translated and distributed after a technical training.

It contains a summary of procedures, hints and suggestions etc. which are helpful and

GTS Technical Manual

essential for the daily business. The Technical Manual can be downloaded from e-spares/documents.

1.4 Summary

We are convinced that the Technical Manual concept together with the Technical Training are powerful tools, which will help our service organisations to achieve a higher level of quality in repairs and customer satisfaction.

If you have any comments or questions do not hesitate to contact your country responsible.

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Sincerely yours

GTS Team

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2 Elementary

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2 Elementary

2.1 Health & Safety

Scrubber dryers may be powered by mains electricity or batteries. There are risks associated with both, which call for proper precautions, such as the provision of good ventilation and the elimination of risk of ignition.

All work, carried out on such machines, should only be performed by trained personnel in accordance with local regulations.

Before working on such a machine, isolate it from any electrical power source.

Always wear the required personal protective equipment (including gloves and goggles) that must be worn when potentially exposed to any hazardous material and when carrying out hazardous tasks.

Note that parts may be contaminated with chemical product. If possible flush hoses out with fresh water prior to carrying out any maintenance. For information on chemical products that are used in this machine, please carefully read the product label and Material Safety Data Sheet (MSDS).

Empty water tanks prior to carrying out any maintenance. Ensure contaminated water is emptied into an approved drain. Avoid pollution.

2.2 **ESD**

Static electricity is electricity at rest or the accumulation of electric charge, as opposed to an electric current which is the movement of electricity. The flow or movement of people and/or materials in and through the environment causes separation of electrons and therefore static electricity. A familiar example of static electricity is when a person walks across a carpeted floor. Static electricity/electrostatic charge is generated simply by the contact and separation of the soles of that individual's shoes from the carpeted floor.

Electrostatic Discharge (ESD) occurs when the electrostatic charge is transferred from a material that carries the charge to an electrostatic sensitive device. In the example above, this electrostatic discharge is the "shock" felt after walking across the carpeted floor and then touching a door knob. It is this electrostatic discharge, which comes in varying de-

grees, that can be most damaging to electronical devices.

Static electricity, is a natural phenomenon and consequently electrostatic discharge is the primary cause of countless problems affecting industry, business and personal life. These problems can be as simple as the shock resulting from walking across a carpet; as costly as the destruction of sensitive electronic components.

Almost any material can generate static electricity. The ability to store or unload the charge depends on the type of material.

Static discharge can damage devices, this can result in immediate product failure or in a latent failure. Latent failures can go undetected for a period of time, the results are product failure in the field.

Electrostatic fields are associated with charged objects.

The degree of severity of ESD events depends on the type of discharge which occurs. The three most common ESD charge transfers are:

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- · from an external object to the device.
- from a device to another object.
- resulting from electrostatic fields.



Please do not store electronics without ESD bags at any time.

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3 General

3 General

3.1 General information

3.1.1 Part reference

ACAUTION

Explicitly mentioned parts are defined by references corresponding to the e-spares spare parts list.

E.g. Tank axle (02/118) corresponds to the parts list on e-spares, sub assembly 2, position 118.

3.1.2 Consumable supplies

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If you have to remove cable ties then position the new ones at the original place.

If you have to remove self locking nuts, you should replace them by new ones.

3.1.3 Direction description

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On the "RH" always means on the right hand side of the machine in working direction (when you are standing behind the machine).

On the "LH" always means on the left hand side of the machine in working direction (when you are standing behind the machine).

3.1.4 Power source

Depending on the work it might be required to remove the power source (mains/batteries) from the machine.

The in here mentioned sequences (mechanical and electrical) are based on the assumption that the power source (mains/batteries) were removed from the machine before.

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3.2 Required material

3.2.1 Tools

- · A standard range of tools is required e.g.
 - · Fork spanners.
 - · Allen keys.
 - Torx keys.

3.2.2 Material

No special tools are required.

ACAUTION

The above listings are only a recommendation for the technical training.

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4 Technical data

4.1 Technical data

4.1.1 Machine range

SKU	Description	Version	Series
7518366	swingo 455 B		01
7518367	swingo 455 B	BMS EURO	01
7518368	swingo 455 B	BMS UK	01
7518369	swingo 455 B	BMS SEV	01
7518370	swingo 455 B	BMS DK	01
7518371	swingo 455 B	BMS NA	01
7518372	swingo 455 B	BMS CN	01

Table 1: Machine range

Remarks

SKU's for all TASKI swingo 455 types are the "naked machine". Tools and batteries have to be ordered separately.

4.2 Technical information

4.2.1 Machine profile

Pos.	Unit	Value
Theoretical performance	(m ² /h)	1290
Working width	(mm)	430
Squeegee width	(mm)	690
Solution tank	(1)	22
Recovery tank	(1)	25

Table 2: Machine profile

4.2.2 Technical data

Pos.	Unit	Value
Noise level (ECO mode)	(dB(A))	68 (63)
Vibration	(m/s2)	<0.5
Approvals		CE
Nominal consumption	(W)	900
Power suction motor	(W)	490
Voltage	(V)	24
Battery capacity maintenance-free	(Ah)/C5	50
Battery autonomy max. (nominal)	(h)	1.5
Charger		BMS
Splash water protection class		IPX3
Electrical protection class		1+11

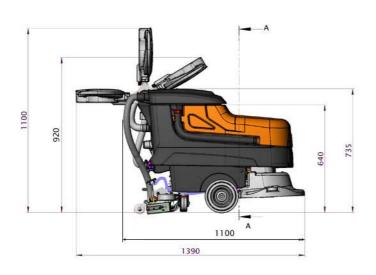
Table 3: Technical data

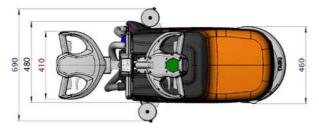
04.1 swingo 455B – technical data_V1.00.fm

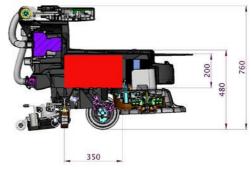
4.2.3 Dimensions and weights

Pos.	Unit	Value
Dimensions without squeegee	L/W/H (mm)	1100/480/920
Door pass through with (without squeegee)	(mm)	690 (489)
Battery compartment	L/W/H (mm)	350/319/200
Net weight (without batteries, empty tank)	(kg)	58
Weight, ready to use with 50 Ah batteries	(kg)	120
Weight, ready for shipping	(kg)	62
Max. floor pressure front	(N/mm2)	0.96
Max. floor pressure rear	(N/mm2)	0.22
Turning radius (between two walls)	(mm)	1050
Wheel diameter front	(mm)	200
Wheel diameter rear	(mm)	100

Table 4: Dimensions and weights







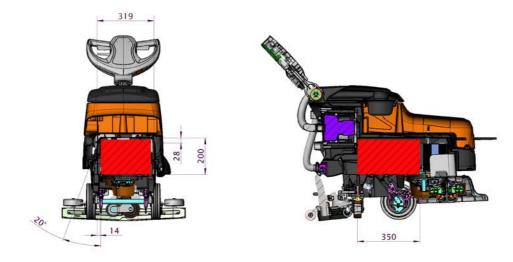
Picture 1: Dimensions

4.3 **Battery**

4.3.1 **Battery compartment**

Pos.	Unit	Value
Battery compartment	L/W/H (mm)	350/319/200

Table 5: Battery compartment



Picture 2: Battery compartment

Battery specifications 4.3.2

ACAUTION

Please use batteries from Exide/Sonnenschein, as this is our preferred partner.

BMS is only for dry (gel) batteries.

Dry batteries

Supplier	Wet/ Dry	Туре	Voltage	Ah	Length	Width	Height	Weight
Sonnenschein	D	GF 12 50 V	12	50 (C5)	278	175	190	20

Table 6: Dry batteries

4.4 Charger

Pos.	Unit	Value
Primary	(V)	230-240
Primary	(Hz)	50-60
Secondary	(V)	24
Secondary	(A)	9
Protection type		IP30
Approval		UL/CE
Cable length/BMS cable	(m)	3

Table 7: Charger

4.5 Brush system

Pos.	Unit	Value
Brush system	(mm)	430
Brush motor	(W)	750
Brush speed	(rpm)	130
Brush pressure	(kg)	32
Brush pressure min. – max.	(N/cm2)	0.22
Brush pressure min. – max.	(g/cm2)	22

Table 8: Brush system

4.6 Suction power

Pos.		Value
Vacuum motor	(W)	400
Max. air flow	(l/s)	24
Max. vacuum	(mbar)	93
Max. vacuum	(kPa)	9.3

Table 9: Suction power

4.7 Accessories & Additional parts

4.7.1 Accessories

SKU	Article
8504750	Scrubbing brush standard 430 mm
8504800	Scrubbing brush washed concrete 430 mm
8504780	Scrubbing brush abrasive 430 mm
7510829	Pad drive harpoon grip 430 mm

Table 10: Accessories

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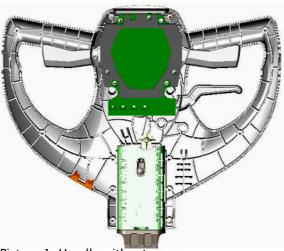


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5 Mechanical

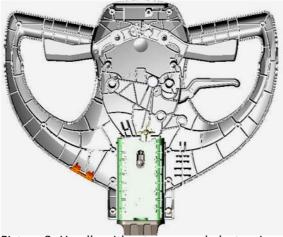
5.1 Handle

5.1.1 Removing of handle cover and electronics



Picture 1: Handle without cover

- Move handle to the front side so you can access the screws.
- Remove the screw (01/106) for the cover (01/105) for USB access.
- Remove the cover for USB access.
- Remove the 12 screws (01/107) and the 4 screws (01/117) into electronics of the handle cover.
- Remove the handle cover (01/108).



Picture 2: Handle without cover and electronics

- Remove the 3 fixation screws (01/104) for the electronics (01/109).
- Position the electronics down onto the articulation (01/144).

A CAUTION

Disconnect ribbon cable of dashboard before moving the electronics.

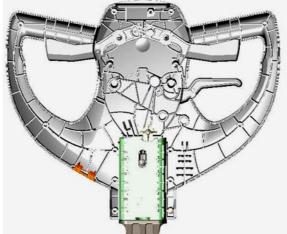
Lift the lever of the ribbon cable connector to release the ribbon cable.

Do not bend the ribbon cable.

05.10.11 handle – cover and electronic – 455B_V1.00.fm

5.1 Handle

5.1.2 Mounting of handle cover and electronics



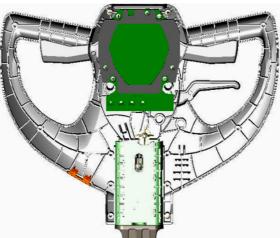
Picture 3: Handle without cover and electronics

- · Connect the ribbon cable to the electronics.
- Position the electronics.

ACAUTION

Ensure that the loop of the ribbon cable is positioned correctly and does not touch the switcher levers.

Mount the 3 fixation screws for the electronics.



Picture 4: Handle without cover

· Assemble the cover.

A CAUTION

Ensure that the levers, bowden cables and hose (01/121) are in the correct position.

05.10.11 handle - cover and electronic - 455B_V1.00.fm

- Tighten the handle cover with the 12 screws and 4 screws into electronics.
- · Position the cover for USB access.

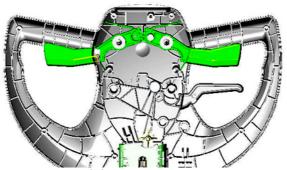
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Mount the fixation screw.

05.10.16 handle – switch lever – 455B_V1.00.fm

Handle 5.1

Removing of switch lever 5.1.3



Picture 5: Switch lever

- Remove handle cover according to chapter REMOVING OF HANDLE COVER AND ELECTRONICS.
- Remove screw (01/102) for left switch lever and screw (01/102)for right switch lever.
- Remove the switch levers (01/114).

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You can only remove both switch levers together.

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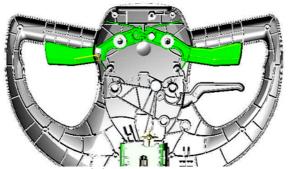
Remarks

Both levers are the same spare part.

05.10.16 handle - switch lever - 455B_V1.00.fm

5.1 Handle

5.1.4 Mounting of switch lever



Picture 6: Switch lever

Mount switch levers onto the handle.

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Ensure that the RH switch lever has the bolt with magnet (01/118) mounted.

Adjustment

Ensure that the gear teeth of the switch levers are correctly positioned. The switch levers have to be horizontally in one line.

Mount the screws for the left and right switch lever.

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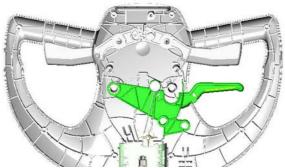
Ensure that the switch levers move easily. Do not tighten the fixation screws to hard.

 Complete assembling according to the chapter MOUNTING OF HANDLE COVER AND ELECTRONICS.

05.10.22 handle - handle adjustment lever - 455B_V1.00.fm

5.1 Handle

5.1.5 Removing of handle adjustment lever



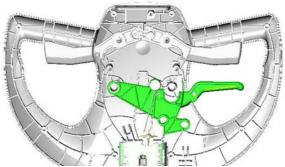
Picture 7: Handle adjustment lever

- Remove handle cover according to chapter REMOVING OF HANDLE COVER AND ELECTRONICS.
- Remove the eccentric shaft (01/136) together with the end bolt of the bowden cable (01/119).
- Remove the handle adjustment lever (01/116).

05.10.22 handle - handle adjustment lever - 455B_V1.00.fm

5.1 Handle

5.1.6 Mounting of handle adjustment lever



Picture 8: Handle adjustment lever

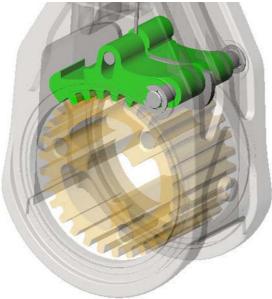
· Mount the handle adjustment lever onto handle.

- Mount the eccentric shaft together with the end bolt of the bowden cable.
- Complete assembling according to the chapter MOUNTING OF HANDLE COVER AND ELECTRONICS.

05.10.24 handle - toothrocker - 455B_V1.00.fm

5.1 Handle

Removing of toothrocker 5.1.7



Picture 9: Toothrocker

Remarks

For a easier access to the toothrocker, disconnect the bowden cable at the lever.

- Remove handle cover according to chapter REMOVING OF HANDLE COVER AND ELECTRONICS.
- Remove the eccentric shaft together with the end bolt of the bowden cable according to chapter REMOVING OF HANDLE ADJUSTMENT LEVER.
- Disconnect the two flexible hoses (02/106,132) from the tank cover (02/101).
- Remove the tank cover from the recovery tank.

- Remove the 6 screws (01/150) from the cover disc (01/149).
- Pull out the complete handle from the fresh water tank (02/117).



Picture 10: Sustaining disc

- Remove the cover (01/152) from the articulation (01/144).
- Remove the two sustaining discs (01/147) from the articulation.
- Remove the toothed wheel (01/151).
- Remove one of the retaining washer (01/137) from the axle.
- Remove the axle (01/142).

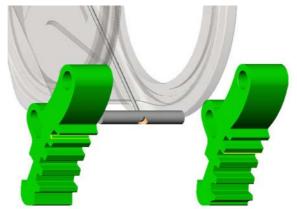


Picture 11: Articulation detail

Remarks

By pulling out the axle, the distance disc (01/140) will fall out by itself.

- Remove the two toothrockers (01/139,141) from the axle of the bowden cable (01/119).
- Remove the two springs (01/138).

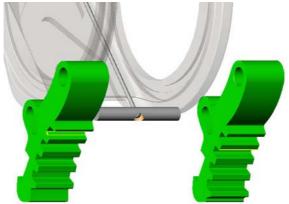


Picture 12: Toothrocker detail

05.10.24 handle - toothrocker - 455B_V1.00.fm

Handle 5.1

Mounting of toothrocker 5.1.8



Picture 13: Toothrocker detail

Mount the two toothrockers onto the axle of the bowden cable.

Remarks

The two toothrockers are different in shape. The mounting position doesn't matter.

Position the two springs on the toothrockers.

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Mount the axle.

Remarks

Make sure that the toothrockers and springs are correct in place.



Picture 14: Articulation detail

- Mount the retaining washer onto the axle
- Mount the distance disc between the two toothrockers on the axle.

Service

Lubricate the toothrockers with grease (07/131).

- Mount the eccentric shaft together with the end bolt of the bowden cable according to chapter MOUNTING OF HANDLE ADJUSTMENT LEVER.
- Position the toothed wheel into the articulation.
- Mount the two sustaining discs.
- Mount the cover onto the articulation.

Remarks

For an easier mounting, position the holes of the sustaining disc and toothed wheel in one line.



ACAUTION Make sure that the O-ring is correct positioned.



Picture 15: Sustaining disc

- · Mount the articulation onto the tank.
- Position the two cover discs.
- Mount the 6 screws.
- Mount the handle cover according to chapter MOUNTING OF HANDLE COVER AND ELECTRONICS.

Adjustment

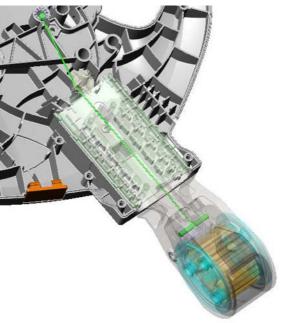
Tighten the 6 screws with 15 Nm.

- Mount the tank cover.
- · Connect the two flexible hose on to the tank cover.

05.10.29 handle - bowden cable - 455B_V1.00.fm

5.1 Handle

5.1.9 Removing of bowden cable



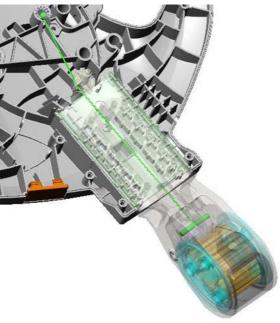
Picture 16: Bowden cable

- Remove handle cover according to chapter REMOVING OF HANDLE COVER AND ELECTRONICS.
- Remove the toothrockers according to chapter REMOVING OF TOOTHROCKER.
- Remove the castor (01/135) from the handle housing.
- Remove the eccentric shaft together with the end bolt of the bowden cable according to chapter REMOVING OF HANDLE ADJUSTMENT LEVER.
- Pull out the bowden cable (01/119) from the side of the articulation.

05.10.29 handle - bowden cable - 455B_V1.00.fm

5.1 Handle

5.1.10 Mounting of bowden cable



Picture 17: Bowden cable

- Mount the bowden cable from the side of the articulation.
- Mount the toothrockers according to chapter MOUNTING OF TOOTHROCKER.
- Mount the eccentric shaft together with the end bolt of the bowden cable according to chapter MOUNTING OF HANDLE ADJUSTMENT LEVER.



Picture 18: Bowden cable castor

Mount the castor on the handle housing.

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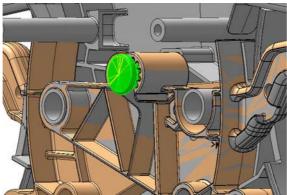
Make sure that the bowden cable is correct positioned in the castor.

 Mount the handle cover according to chapter MOUNTING OF HANDLE COVER AND ELECTRONICS.

05.10.32 handle - bowden cable adjustment - 455B_455E_V1.00.fm

5.1 Handle

5.1.11 Bowden cable adjustment

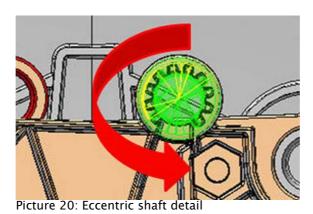


Picture 19: Eccentric shaft

Position the eccentric shaft (01/136) together with the end bolt of the bowden cable (01/119) on the lever (01/116).

Remarks

By turning the eccentric shaft counter clockwise you tension the bowden cable.



Adjustment

Make sure that the bowden cable is not tensioned too tight. Let the handle adjustment lever have enough play (+/-1 mm).

• When the needed tension position is reached, press in the eccentric shaft into the lever to lock it.

ACAUTION

Make sure that the articulation moves smoothly and that the toothrockers engage firmly into the tooth head wheel.

05.10.36 handle - articulation - 455B_V1.00.fm

5.1 Handle

5.1.12 Removing of articulation



Picture 21: Articulation

- Remove handle cover according to chapter REMOVING OF HANDLE COVER AND ELECTRONICS.
- Remove the toothrockers according to chapter REMOVING OF TOOTHROCKER.
- Remove the bowden cable according to chapter REMOVING OF BOWDEN CABLE.
- Remove the screw (01/107) from the handle housing.

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- Remove the articulation (01/144).
- Remove the guide bar (01/143).

A CAUTION

Removing of the guide bar might damage it. Make sure you have a spare one.

05.10.36 handle - articulation - 455B_V1.00.fm

Handle 5.1

5.1.13 Mounting of articulation



Picture 22: Articulation

- Mount the guide bar.
- Mount the articulation.
- Mount the screw from the handle housing.

- Mount the bowden cable according to chapter MOUNTING OF BOWDEN CABLE.
- Mount the toothrockers according to chapter MOUNTING OF TOOTHROCKER.
- Mount the handle cover according to chapter MOUNTING OF HANDLE COVER AND ELECTRONICS.

5.2 Tank group

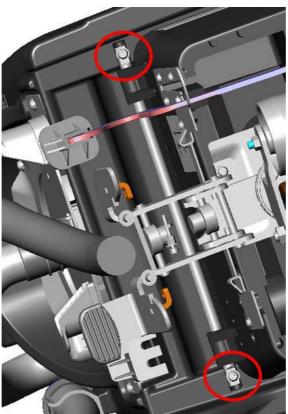
Removing of clear water tank 5.2.1



Picture 23: Clear water tank

- Disconnect the two flexible hoses (02/106,132) from the tank cover (02/101).
- Remove the tank cover and the recovery tank (02/105).
- Loosen the hose clamp (03/118) from the water regulation set (03/122).
- Remove the hose from the water regulation set.

- Remove the 5 screws (02/124) from the cover, vacuum unit (03/
- Unclip the cable cover (03/102) from the cover, vacuum unit.
- Remove the cover, vacuum unit together with the vacuum motor.
- Unlock the battery compartment by removing the two screws (02/122) from the tank brackets (02/123) on the LH and RH side.
- Tilt the clear water tank.



Picture 24: Clear water tank fixation

- Remove the screw (07/110) from the metal rope (07/127) on the side of the clear water tank (02/117).
- Remove the two screws (02/119) from the tank axle (02/118).
- Remove the clear water tank.
- According to what you need to change, remove the existing parts from the tank and place it onto the new one.

05.14.10 tank group - clear water tank - 455B_455E_V1.00.fm

5.2 Tank group

5.2.2 Mounting of clear water tank



Picture 25: Clear water tank

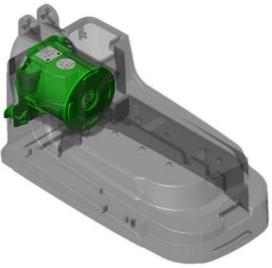
- Position the recovery tank on to the tank axle.
- Mount the two screws from the tank axle.
- Mount the screw from the metal rope on the side of the clear water tank.
- Close the clear water tank.
- · Mount the screws from the tank brackets.
- · Click in the cable cover.
- Mount the cover, vacuum unit together with the vacuum motor.
- Mount the 5 screws from the cover, vacuum unit.
- Mount the hose onto the water regulation set.

- Tighten the hose clamp.
- Position the recovery tank and tank cover.
- · Connect the two flexible hoses onto the tank cover.

05.16.10 vacuum unit, water outlet - vacuum motor - 455B_455E_V1.00.fm

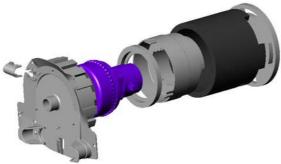
5.3 Vacuum unit, water outlet

5.3.1 Removing of vacuum motor



Picture 26: Vacuum unit

• Disconnect the two flexible hoses (02/106,132) from the tank cover (02/101).



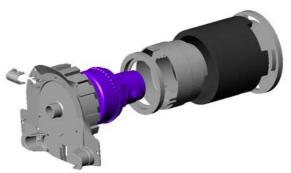
Picture 27: Vacuum unit detail

- Remove the 5 screws (02/124) from the cover, vacuum unit (03/103).
- Unclip the cable cover (03/102) from the cover, vacuum unit.
- Remove the 3 screws (03/101) from the cover, vacuum unit.
- Remove the cover of the vacuum unit.
- Pull out the vacuum unit from the clear water tank.
- Remove the insulation and sealing parts (03/104,106,107,108,109) of the vacuum motor.

05.16.10 vacuum unit, water outlet - vacuum motor - 4558_455E_V1.00.fm

5.3 Vacuum unit, water outlet

5.3.2 Mounting of vacuum motor



Picture 28: Vacuum unit detail

- Mount the insulation and sealing parts of the vacuum motor.
- Position the vacuum unit onto the cover and mount the 3 screws.
- Connect the cable on the connection bloc.
- · Click in the cable cover.
- Position the complete vacuum unit back in to the clear water tank.
- Mount the 5 screws from the cover, vacuum unit.

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Connect the two flexible hoses onto the tank cover.

Remarks

Thread in the cable through the sound damping insulation (03/108).

05.16.21 vacuum unit , water outlet – regulation set – 455B_455E_V1.00.fm

5.3 Vacuum unit, water outlet

Removing of water regulation set 5.3.3



Picture 29: Water regulation set

- Untighten the fresh water and draining hose clamp (03/118) and
- Remove fresh water draining hose (02/107) from the water regulation set (03/122).
- Remove fresh water hose (03/119) from water regulation set.

A CAUTION

Ensure that no water is in the fresh water system before you disconnect the hose.



Picture 30: Water regulation set detail

Remove water regulation set fixation screw (03/124).

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Remove water regulation set.

05.16.21 vacuum unit , water outlet – regulation set – 455B_455E_V1.00.fm

5.3 Vacuum unit, water outlet

Mounting of water regulation set 5.3.4



Picture 31: Water regulation set

Mount new water regulation set.

ACAUTION

The diameter of the water outlet on the tank shrinks as soon the outlet stub or water regulation set is removed.

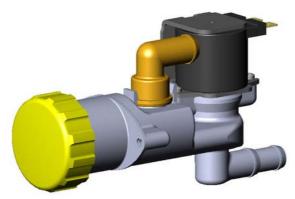
Replace the outlet stub immediately with the water regulation set.

- Position new water regulation set fixation screw.
- Connect fresh water hose to the water regulation set.
- Position clamp on fresh water draining hose.
- Position fresh water draining hose on the water regulation set.
- Tighten the fresh water draining hose clamp.

05.34.10 magnetic valve, eletrical parts – magnetic valve – 455B_V1.00.fm

5.4 Magnetic valve, electrical parts

5.4.1 Removing of filter 24V



Picture 32: Filter 24V

Remove filter set (09/102) of filter 24V.

ACAUTION

Ensure that no water is in the fresh water system before you disconnect the hoses.

- Remove the two fixation screws (09/103) from chassis (07/105).
- Thread out filter 24V (09/101) from the chassis.
- Loosen the two hose clamps (03/118) from the filter 24V.
- Disconnect the fresh water hose (03/119,120).

- · Disconnect the wires from coil.
- Remove complete filter 24V.

05.34.10 magnetic valve, eletrical parts - magnetic valve - 455B_V1.00.fm

5.4 Magnetic valve, electrical parts

5.4.2 Mounting of filter 24V



Picture 33: Filter 24V

- · Connect wires to coil.
- Connect fresh water hoses to the filter 24V.
- · Tighten the hose clamps.
- Thread the filter 24V into the chassis.
- · Position fixation screws an tighten them.

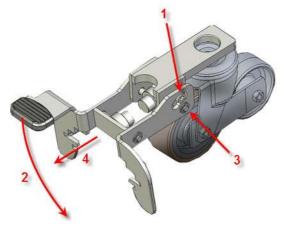
Edition: V1.10/2013

Position filter set on the filter 24V.

05.36.10 squeegee lowering mechanism – bracket spring – 455B_455E_755B eco_755E_755B power_855B power_V1.00.fm

Squeegee lowering mechanism 5.5

Removing of squeegee bracket spring 5.5.1



Picture 34: Squeegee lowering

- Remove the squeegee from the fixation.
- Remove the tool from the brush drive unit.
- Remove screws (455 & 755E:04/103, 755B:03/103) from sup-1 port (455 & 755E:04/101, 755B:03/101).
- 2 Put the bracket in working position (down).

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Remarks

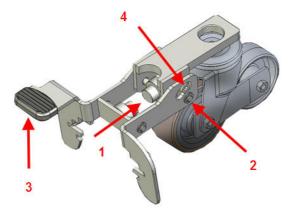
Lift up the rear of machine and incline it to the front to loosen the tension of the spring.

- Remove one retaining ring (455 & 755E:04/111, 755B:03/111) of rear axle (455 & 755E:04/110, 755B:03/110).
- Remove the rear axle.
- 4 Remove pressure spring (455 & 755E:04/106, 755B:03/106).

05.36.10 squeegee lowering mechanism – bracket spring – 455B_455E_755B eco_755E_755B power_855B power_V1.00.fm

5.5 Squeegee lowering mechanism

5.5.2 Mounting of squeegee bracket spring



Picture 35: Squeegee lowering back

- Assemble new pressure spring.
- · Assemble the rear axle.
- Position the retaining ring on the rear axle.

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ACAUTION

Ensure that the slide bearings are properly positioned.

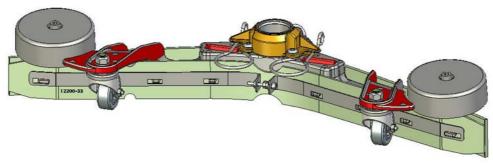
- Move the squeegee bracket to semi transport position.
- · Assemble the screws.

Service

Apply lubricant locking on the screws (455 & 755E:04/103, 755B:03/103).

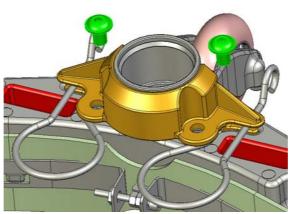
5.6 Squeegee

5.6.1 Removing of fixation spring



Picture 36: Squeegee

 Unscrew the 2 screws (455 & 755E:05/112, 755B:04/112) of the offset fixation (455 & 755E:05/113, 755B:04/113).



Picture 37: Offset fixation screws

- · Remove the offset and the spring.
- Remove the spring (455 & 755E:05/114, 755B:04/114) from the offset.



Picture 38: Offset fixation detail 1

05.40.10 squeegee – fixation spring – 4558_455E_7558 eco_755E_755B power_855B power_V1.00.fm

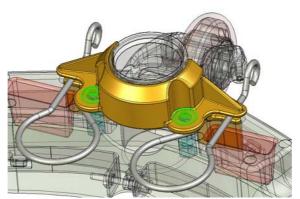
5.6 Squeegee

5.6.2 Mounting of fixation spring



Picture 39: Offset fixation detail 1

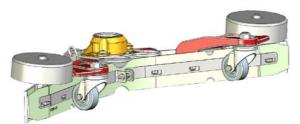
- · Assemble the new spring on the offset.
- · Assemble the offset and the spring on the squeegee.
- · Mount the screws of the offset.



Picture 40: Offset fixation detail

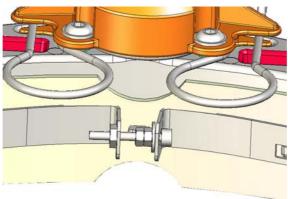
5.6 Squeegee

5.6.3 Removing of front blade old setup



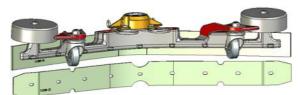
Picture 41: Front blade position

 Tighten fixation screw until the tightening strap can be removed (the pressure to the outer sides of the squeegee body will be reduced).



Picture 42: Front blade fixation

· Remove front blade.



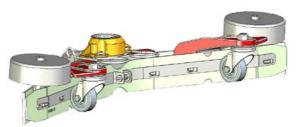
Picture 43: Remove front blade

35.40.15 squeegee – front blade old set up – 4558_455E_7558 eco_755E_755B power_855B power_V1.10.fm

5.6 Squeegee

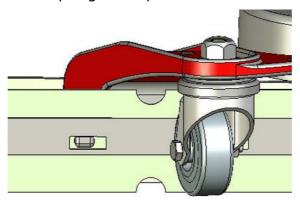
Mounting of front blade old setup 5.6.4

Position new front blade.



Picture 44: Front blade position

- Position tightening strap.
- Untighten fixation screw until the blade is properly fixed on the squeegee body.



Picture 45: Tightening strap position front

Remarks

Pay attention that the tightening strap is positioned in the centre.



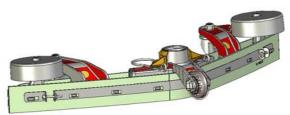
Ensure that the tightening strap is positioned correct (thin part to the bottom).

If you over tighten the tightening strap it can bulge.

05.40.20 squeegee - back blade old set up - 4558_455E_7558 eco_755E_755B power_855B power_V1.10.fm

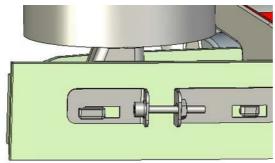
5.6 Squeegee

5.6.5 Removing of back blade old setup



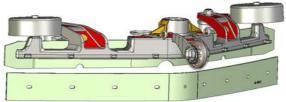
Picture 46: Back blade position

Untighten the fixation screws (455 & 755E:05/111, 755B:04/111) on both sides to release the pressure of the tightening strap and remove it.



Picture 47: Back blade fixation

· Remove back blade.



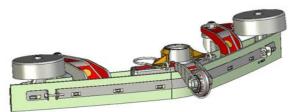
Picture 48: Remove back blade

05.40.20 squeegee – back blade old set up – 4558_455E_7558 eco_755E_7558 power_8558 power_V1.10.fm

5.6 Squeegee

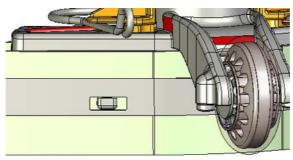
5.6.6 Mounting of back blade old setup

Position new back blade.



Picture 49: Back blade position

- Position tightening strap.
- Tighten fixation screws until the blade is properly fixed on the squeegee body.



Picture 50: Tightening strap position back

Remarks

Pay attention that the tightening strap is positioned in the centre.

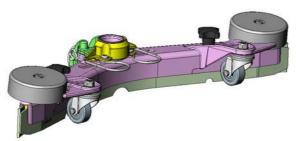


Ensure that the tightening strap is positioned correct (thin part to the bottom).

If you over tighten the tightening strap it can damage the squeegee body.

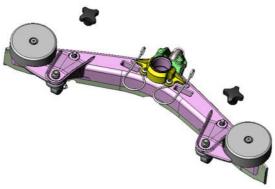
5.6 Squeegee

5.6.7 Removing of front blade new setup



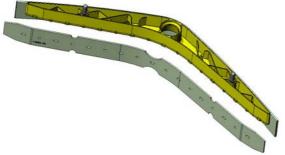
Picture 51: Squeegee new setup

- Remove the two star knobs (455 & 755E: 05/108, 755B & 855: 04/108).
- Press out the squeegee inlet (455 & 755E: 05/124, 755B & 855: 04/124).



Picture 52: Star knob

• Remove front blade (455 & 755E: 05/123, 755B & 855: 04/123) by tearing it off from the squeegee inlet.



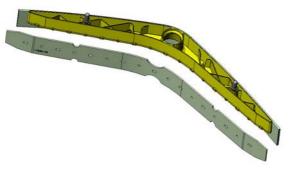
Picture 53: Front blade

05.40.26 squeegee - front blade new setup - 455B_455E_755B eco_755E_755B power_855B power_V1.00.fm

5.6 Squeegee

5.6.8 Mounting of front blade new setup

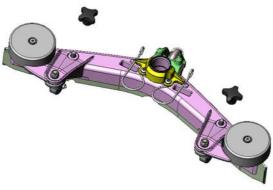
- · Position new front blade onto the pins of the squeegee inlet.
- Mount the squeegee inlet into the squeegee body.



Picture 54: Front blade

Mount the two star knobs and tighten them.

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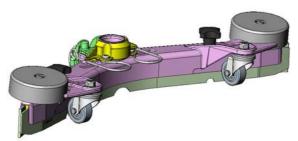
Picture 55: Star knob



Ensure that the blade is mounted correctly and the squeegee inlet fits into the squeegee body.

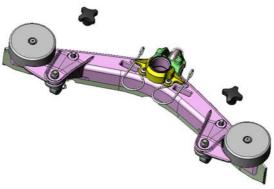
5.6 Squeegee

5.6.9 Removing of back blade new setup



Picture 56: Squeegee new setup

- Remove the two star knobs (455 & 755E: 05/108, 755B & 855: 04/108).
- Press out the squeegee inlet (455 & 755E: 05/124, 755B & 855: 04/124).



Picture 57: Star knob

 Remove back blade (455: 05/122, 755B: 04/122, 755E: 05/108, 855: 05/122) by tearing it off from the squeegee inlet.



Picture 58: Back blade

05.40.27 squeegee - back blade new set up - 455B_455E_755B eco_755E_755B power_855B power_V1.00.fm

5.6 Squeegee

5.6.10 Mounting of back blade new setup

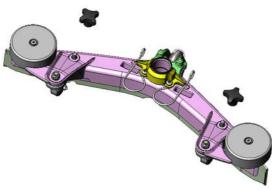
- · Position new back blade onto the pins of the squeegee inlet.
- Mount the squeegee inlet into the squeegee body.



Picture 59: Back blade

Mount the two star knobs and tighten them.

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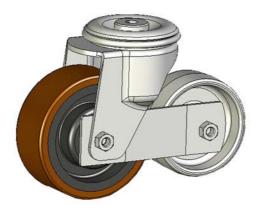
Picture 60: Star knob



Ensure that the blade is mounted correctly and the squeegee inlet fits into the squeegee body.

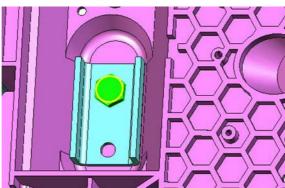
5.7 Lower part

5.7.1 Removing of castor wheel



Picture 61: Castor wheel

- Unlock battery compartment on the LH side by removing the screw (455:02/122, 755B:09/114, 755E:09/110) from the locking system.
- Lay the machine on the LH side.
- Unlock battery compartment on the RH side by removing the screw from the locking system.
- · Open the battery compartment.
- Untighten the fixation screw (455:07/103, 755B:05/104, 755E:06/117) with a 19 mm fork spanner.

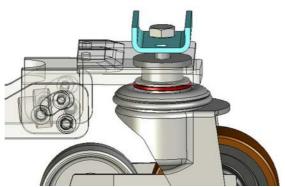


Picture 62: Castor wheel screw

Remove the complete castor wheel (455:07/124, 755B:05/115, 755E:06/125) and squeegee support.

5.7 Lower part

5.7.2 Mounting of castor wheel



Picture 63: Castor wheel detail

- Assemble castor wheel and squeegee support according to espares.
- Tighten the fixation screw with a 19 mm fork spanner.
- Lock battery compartment on the RH side with the screw of the locking system.
- · Lift up the machine.
- Lock battery compartment on the LH side with the screw of the locking system.

Adjustment

Tighten the screw with 70 Nm.

Service

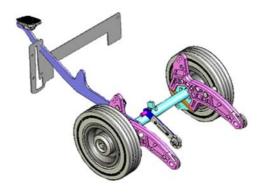
Apply gear/bearing lubricant (455:07/131, 755B:05/134, 755E:06/127) on the bush (455:07/123, 755B:05/114, 755E:06/124).

Apply adhesive locking (455:07/130, 755B:05/133, 755E:06/118) on screw (455:07/103, 755B:05/104, 755E:06/117).

05.64.10 tool lowering unit – foot lever – 455B_755B eco_V1.00.fm

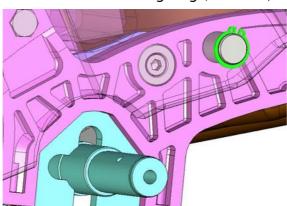
5.8 Tool lowering unit

5.8.1 Removing of foot lever



Picture 64: Tool lowering unit

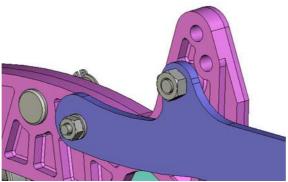
- Lay the machine to the LH side.
- Remove the pressure spring (455B:07/143, 755B:06/112)
- Unplug microswitch.
- Unscrew microswitch fixation screw (455B:06/117, 755B:07/117).
- Remove microswitch (455B:06/123, 755B:07/123).
- Remove wheel (455B:07/142, 755B:06/109) on RH side.
- Remove retaining ring (455B:06/107, 755B:07/107).



- Picture 65: Tool lowering pin detail
- Remove axle (455B:06/112, 755B:07/112) on RH side.
- Pull the cradle out so you can reach the counter screw (455B:06/127, 755B:07/127).
- Remove two nuts (455B:06/113, 755B:07/113) and (455B:06/126, 755B:07/126) and washer (455B:06/105, 755B:07/105).
- Remove the foot lever (455B:06/104, 755B:07/104).

5.8 Tool lowering unit

5.8.2 Mounting of foot lever

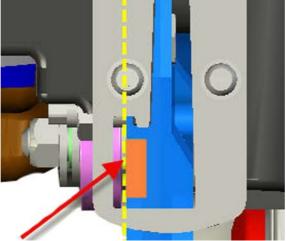


Picture 66: Tool lowering screws detail

- Build in new foot lever.
- · Position washer and nuts, then tighten them.
- · Position cradle and foot lever in the correct position.
- Assemble axle.
- · Assemble microswitch and adjust accordingly.

Adjustment

The foot lever switch has to apply when the foot lever passes the centre of the LH side of the stop plate squeegee (455B:06/102, 755B:07/102).



Picture 67: Tool lowering switching point

- Mount the wheel.
- · Connect microswitch.
- · Position pressure spring.

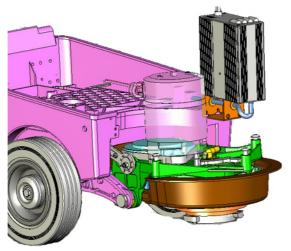
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· Lift up machine.

05.66.10 brush drive – brush drive unit – 455B_755B eco_755B power_855B power_V1.00.fm

5.9 **Brush drive**

Removing of brush drive unit 5.9.1



Picture 68: Brush drive removing

- Unscrew brush housing fixation screws (455B:08/137, 755B:08/
- Remove the brush housing from the brush drive unit.
- Disconnect the fresh water hose from the brush drive unit.
- Disconnect the brush motor wires from the connection block.
- Remove self locking nuts (455B:06/124, 755B:07/124) on the LH and RH side from the cradles.
- Remove self locking nut (455B:06/119, 755B:07/119) at eccentric disc (455B:06/120, 755B:07/120).



Picture 69: Brush drive removing detail

- Remove the eccentric disc.
- Remove the bolt (455B:06/111, 755B:07/111) and eccentric shaft (455B:06/110, 755B:07/110).

ACAUTION

Make sure that you hold the brush drive unit firmly.

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Pivot the complete brush drive unit out.

5.9 Brush drive

5.9.2 Mounting of brush drive unit



Picture 70: Brush drive mounting detail

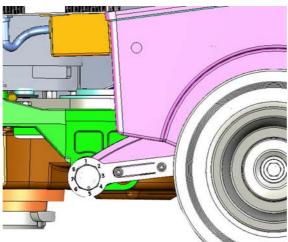
- · Position the brush drive unit on the cradles.
- · Position the bolt and the eccentric shaft.
- Position the eccentric disc.

Adjustment

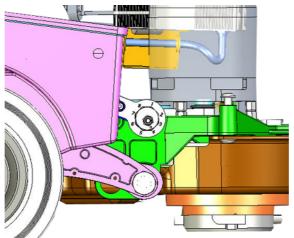
Default setting (refer to spare parts catalogue): Eccentric disc (455B:06/120, 755B:07/120): Position 4 Eccentric shaft (455B:06/110): Position 4 Eccentric shaft (755B:07/110): Position 5

Remarks

Based on data from the application department (Muenchwilen) the default setting is as mentioned. Changing this setting will not bring an improvement of the cleaning performance.



Picture 71: Brush drive setting LH



Picture 72: Brush drive setting RH

- Position a new self locking nut (M6) at the eccentric disc.
- Position two new self locking nuts (M8) at the bold and the eccentric shaft.
- Tighten all self locking nuts.

A CAUTION

Do not use the locking lever (455B:06/116, 755B:07/116) to tighten the eccentric shaft (455B:06/110, 755B:07/110).

Connect the brush motor to the connection block.

A CAUTION

Connect the wires of the brush motor and the cable strand matching the colours.

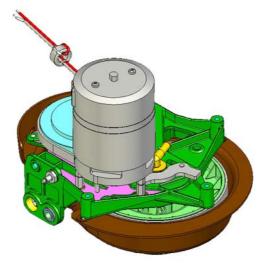
- Connect the fresh water hose to the brush drive unit.
- Position the brush housing on the brush drive unit.
- Position the brush housing screws and tight them.

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• Close and lock battery compartment and lock it with the screws of the looking system.

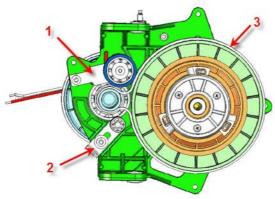
5.9 Brush drive

5.9.3 Removing of brush belt – New setup



Picture 73: Brush drive

- Remove brush drive unit according to chapter REMOVING OF BRUSH DRIVE UNIT.
- · Position brush drive unit upside down.
- Remove the three screws (08/137) of cover.
- Remove the cover (08/129).



Picture 74: Remove belt - New setup

- 1 Untighten belt tensioning roller (08/118) and remove it.
- 2 Remove the small tensioning roller (08/150).

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3 Remove the belt (08/123).

5.9 Brush drive

5.9.4 Mounting of brush belt – New setup



Picture 75: Mount belt - new setup

- Position new belt carefully.
- Mount the small tensioning roller and push it to the limit.
- Tighten the fixation screw of the small tensioning roller.
- Position the tensioning roller on the brush base plate.
- Position the fixation screw and tighten it only as much as required to move over the brush base plate nozzle.
- Move the tensioning roller with a 17 mm fork spanner over the nozzle on the brush base plate.

Remarks

If you can not get over the nozzle you can adjust the small tensioning roller slightly.

- Tighten the fixation screw of the tensioning roller completely.
- Position the cover on the brush drive unit.
- Position and tighten the fixation screws of cover.

ACAUTION

Ensure that the belt does not touch the cover.

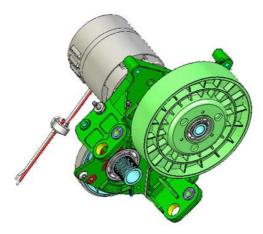
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 Complete assembling according to the chapter MOUNTING OF BRUSH DRIVE UNIT.

05.68.30 brush drive – pulley new setup – 455B_755B eco_755B power_855B power_V1.00.fm

5.9 Brush drive

5.9.5 Removing of pulley – New setup



Picture 76: Brush drive pulley

- Remove brush drive unit according to chapter REMOVING OF BRUSH DRIVE UNIT.
- Remove brush belt according to chapter REMOVING OF BRUSH BELT – NEW SETUP.
- Remove the three screws (08/136) of the coupling (08/135).
- Remove the coupling from brush drive pulley (08/127).
- Remove the catch (08/131).
- Remove the centre plug (08/134) and the sealing ring (08/130).
- Remove the retaining ring (08/141).
- Remove the pulley (08/127).

Remarks

If you have to remove the complete pulley and axle together then you can remove the three screws (08/125) with an Allan key by positioning the slot of the brush drive pulley (08/127) right over the screws.



Picture 77: Brush drive pulley detail screw

05.68.30 brush drive - pulley new setup - 455B_755B eco_755B power_855B power_V1.00.fm

5.9 Brush drive

5.9.6 Mounting of pulley – New setup



Picture 78: Brush pulley detail seal

Service

Apply lubricant (08/149) on the sealing ring (08/147).

- Mount the new pulley.
- · Position the retaining ring.



Picture 79: Brush drive pulley detail retaining ring

Service

Apply lubricant (08/149) on the sealing ring (08/130).

Position the sealing ring and the centre plug.

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- · Position the catch.
- Position the coupling.
- Fix the coupling with the three screws.

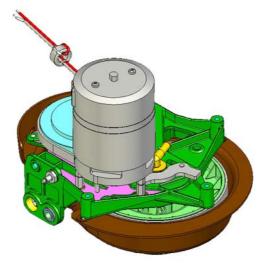
Service

Tighten the screws (8/136) with 2.3 Nm.

- Complete assembling according to the chapter MOUNTING OF BRUSH BELT – NEW SETUP.
- Complete assembling according to the chapter MOUNTING OF BRUSH DRIVE UNIT.

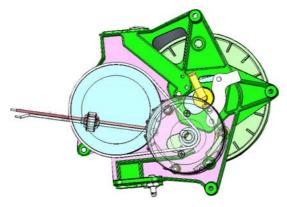
Brush drive 5.9

Removing of motor & motor belt 5.9.7



Picture 80: Brush drive

- Remove brush drive unit according to chapter REMOVING OF BRUSH DRIVE UNIT.
- Remove brush belt according to chapter REMOVING OF BRUSH BELT - NEW SETUP/OLD SETUP.
- Remove brush pulley according to chapter REMOVING OF PULLEY - NEW SETUP/OLD SETUP.
- Remove the two screws (09/134) and the one counter head screw (09/135).
- Remove the motor (09/131) and the motor belt (08/111).

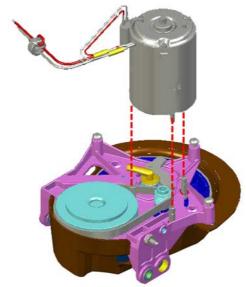


Picture 81: Brush motor belt

05.68.50 brush drive - motor & motor belt - 455B_755B eco_755B power_855B power_V1.00.fm

5.9 Brush drive

5.9.8 Mounting of motor & motor belt



Picture 82: Brush motor belt mount

Position the new motor/new belt.

ACAUTION

Take care that the belt is positioned correctly.

- Insert the counter head screw.
- Position the two other screws.

Service

Apply adhesive looking (09/138) on the screws (09/134).

- Tension the belt.
- Tighten all screws.
- Complete assembling according to the chapter MOUNTING OF PULLEY – NEW SETUP/OLD SETUP.
- Complete assembling according to the chapter MOUNTING OF BRUSH BELT – NEW SETUP/OLD SETUP.
- Complete assembling according to the chapter MOUNTING OF BRUSH DRIVE UNIT.

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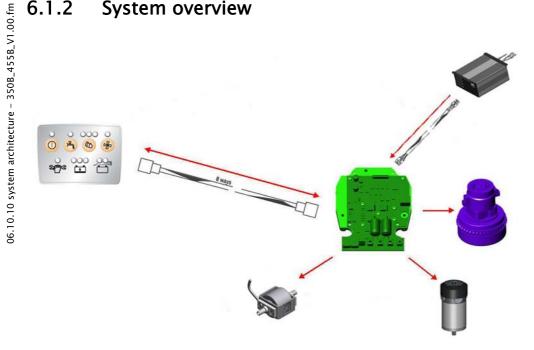
6 Electrical

System architect 6.1

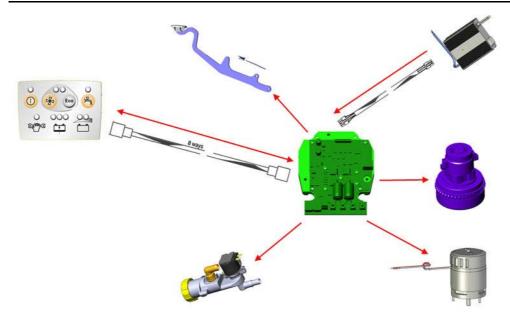
6.1.1 General

- The firmware is memorised only on the power electronics.
- The foil keyboard visualises the states of the machine. It also functions as a connection between the power electronics and the devices. (e.g. vacuum motor and pump).
- Applying the correct torque where required is essential for a safe operation of the machine.
- ESD can harm the electronic boards and therefore reduce the life time of the machine. Use always an ESD bag to protect them.

6.1.2 System overview



Picture 1: System overview 350B



Picture 2: System overview 455B

6.1.3 Start up/Self holding

The machine is switched ON by pressing the ON/OFF button for 3 seconds and feeds the power electronics with power. The power electronics get power and it enables the processor to start and go into the self holding. The power electronics stays on as long as:

- It is not switched OFF by the ON/OFF button.
- The switch-off timer does not reach 5 minutes.
- The charger is not connected to main.
- The battery plug is connected to jack housing (350B:05/108, 455B:02/135).

6.1.4 Emergency loop

The machine has a separate emergency loop, which contains following elements:

- · Charger (internal switch).
- Start up/Self holding.

6.2 Dashboard

6.2.1 Removing of dashboard



Picture 1: Dashboard

- Remove handle cover according to chapter REMOVING OF HANDLE COVER AND ELECTRONICS in the mechanical section.
- Remove the dashboard foil (01/111).

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Be cautious when removing the dashboard as you can damage the wires or the ribbon cables of the dashboard.

6.2 Dashboard

6.2.2 Mounting of dashboard



Picture 2: Dashboard

· Clean the surface where the dashboard will be placed.

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- · Position the new dashboard foil.
- Complete assembling according to the chapter REMOVING OF HANDLE COVER AND ELECTRONICS.

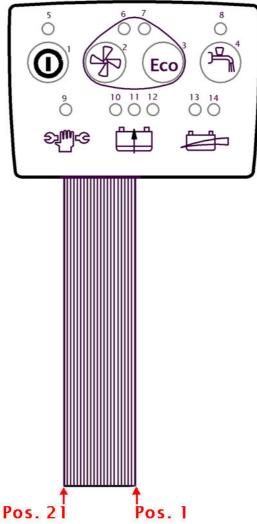


Ensure that the loop of the ribbon cable is positioned correctly and does not touch the switch levers.

06.14.31 dashboard - connections - 455B_V1.00.fm

6.2 Dashboard

6.2.3 Dashboard connections



Picture 3: Dashboard connection

Pos.	Plug	Description [plug]	Pin	Description [pin]
1		Main power	1	Main power LED (+3.3VDC)
2		Vacuum ON/OFF	2	Vacuum eco ON/OFF
3		Vacuum ON/OFF	3	Vacuum ON/OFF
4		Vacuum ON/OFF	4	Vacuum ON/OFF (LED green)
5			5	-
6		Vacuum ON/OFF	6	Vacuum eco ON/OFF (LED green)
7			7	-
8		Dosing ON/OFF	8	Dosing ON/OFF
9		Dosing ON/OFF	9	Dosing ON/OFF (LED green)
10		Status battery	10	Battery status (LED green)
11		Status battery	11	Battery status (LED green)**
12		Status battery	12	Battery status (LED red)**
13		Service	13	Service LED (red)
14		Machine ON/OFF	14	Machine ON/OFF (+24VDC)
15		Machine ON/OFF	15	Machine ON/OFF button
16		Machine Status	16	Machine ON/OFF LED (green)
17		Charger status	17	Charging LED (Yellow)
18		Charger status	18	Charged LED (green)
19		Charger status	19	Charge failed LED (red)
20		Charger	20	GND of charger

Table 1: Dashboard connector description

Technical Manual

GTS Technical Manual

Pos.	Plug	Description [plug]	Pin	Description [pin]
		** = 1 LED with two colours		** = LED (green and red)

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Table 1: Dashboard connector description

6-7

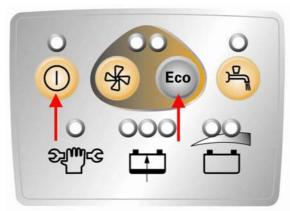
06.14.51 dashboard - reset service hour counter - 455B_V1.00.fm

6.2 Dashboard

6.2.4 Reset service hour counter

The swingo 455B has no dashboard service functionality. There is one exception: reset of the service hour counter.

To reset the service hour counter LED you have to perform the following steps:



Picture 4: Dashboard foil service LED reset

- Press the buttons ON/OFF and Eco together.
- The machine will switch ON.

ACAUTION

Ensure that you keep the buttons pressed.

Wait until the service LED has blinked twice.

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When service LED stays OFF the service hour counter is reset.

Remarks

You also can reset the service hour counter with the Service Tool online. Please refer to the Service Tool Manual for this and additional explanations.

06.18.11 electronics - 455B_V1.00.fm

6.3 Electronics

6.3.1 Removing of electronics



Picture 5: Electronics

- Remove handle cover according to chapter REMOVING OF HANDLE COVER AND ELECTRONICS in the mechanics section.
- Disconnect the wires to the electronics.

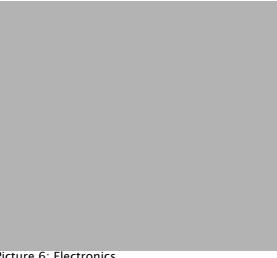
Edition: V1.10/2013

• Remove electronics (01/109).

06.18.11 electronics - 455B_V1.00.fm

Electronics 6.3

Mounting of electronics 6.3.2



Picture 6: Electronics

- Connect the wires to the electronics.
- Complete assembling according to the chapter MOUNTING OF HANDLE COVER AND ELECTRONICS.

ACAUTION

Tighten the connectors with the correct torque. Refer to adjustment or the spare parts list.

Adjustment

M5 screw: 5.0Nm --> +24VDC, brush and vacuum motor

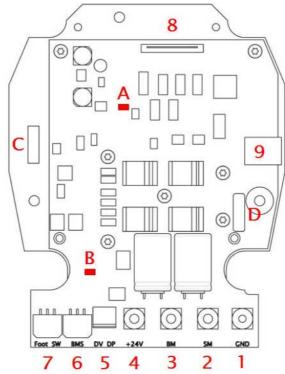
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M3 screw: 3.0Nm --> GND

06.18.21 electronics – connections – 455B_V1.00.fm

6.3 Electronics

6.3.3 Electronic connections



Picture 7: Electronic connections

Pos.	Plug	Description [plug]	Pin	Description [pin]
1	GND	GND	1	GND
2	SM	Vacuum motor	1	Vacuum motor
3	ВМ	Brush motor	1	Brush motor
4	+24	+24VDC	1	+24VDC
5	DV	Dosing valve	1	Filter +24VDC
5	DP	Dosing pump	1	Not used
6	1	Charger communication	1	Charge (yellow)
6	1	Charger communication	2	Charged (green)
6	1	Charger communication	3	Failure (red)
6	1	Charger communication	4	Immobiliser
6	1	Charger communication	5	Immobiliser
6	1	Charger communication	6	GND
7	Foot SW		1	
7	Foot SW		2	
7	Foot SW	Foot switch	3	Foot switch (455B)
7	Foot SW	Foot switch	4	Foot switch (455B)
7	Foot SW		5	
7	Foot SW		6	
8	Dashboard	Ribbon cable		Refer to chapter DASHBOARD CONNECTIONS
9	USB	Type B SMD (for Service Tool)		

Table 2: Electronic connector description

GTS Technical Manual

Pos.	Plug	Description [plug]	Pin	Description [pin]	
А		Hall sensor		Brush start	
В		Hall sensor		Wiping blade (350)	
С		Label software: - Firmware version - Boot version			
D		Label of electronics: - Name of machine - Hardware version - Production number - Production date			

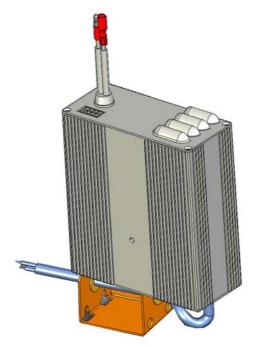
Edition: V1.10/2013

Table 2: Electronic connector description

6-13

6.4 Charger

6.4.1 Removing of charger



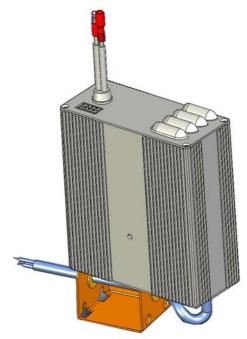
Picture 8: Charger

- Remove the screws (455B:02/122, 755B:09/114) for the battery compartment.
- Open the battery compartment.
- · Remove connector from the charger.
- Disconnect battery connection and thread out wires.

- Unscrew main cord from the connection bloc (455B:07/112, 755B:05/110) and thread out wires.
- Loosen the two screws (455B: 07/118, 755B:05/120) from the charger (455B:07/116, 755B:05/117).
- Remove charger.

6.4 Charger

6.4.2 Mounting of charger

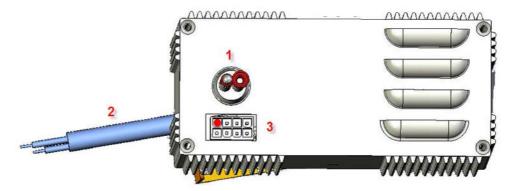


Picture 9: Charger

- Position charger and mount the screws.
- · Thread in main cord and connect it to the connection block.
- Thread in battery wires and connect accordingly to the colours.
- Connect the communication cable to the charger.
- · Close the battery compartment.
- Mount the screws for the battery compartment.

6.4 Charger

6.4.3 Charger connections



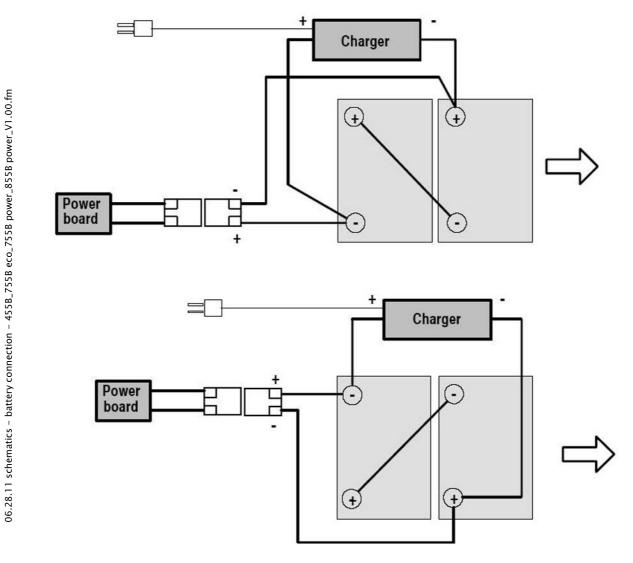
Picture 10: Charger connection

Pos.	Plug	Description [plug]	Pin	Description [pin]
1	B1	Battery charge (red)	1	Battery charge – Plus (+)
1	B1	Battery charge (black)	2	Battery charge - Minus (-)
2	S3	Power main cord	1	Phase
2	S3	Power main cord	2	Neutral
2	S3	Power main cord	3	GND
3	X7	Charger communication	1	Not connected
3	X7	Charger communication	2	Not connected
3	X7	Charger communication	3	Emergency loop IN
3	X7	Charger communication	4	Emergency loop OUT
3	X7	Charger communication	5	GND
3	X7	Charger communication	6	Information charge failed
3	X7	Charger communication	7	Information charge
3	X7	Charger communication	8	Information charged

Table 3: Charger connector description

6.5 Schematics

6.5.1 Battery connection

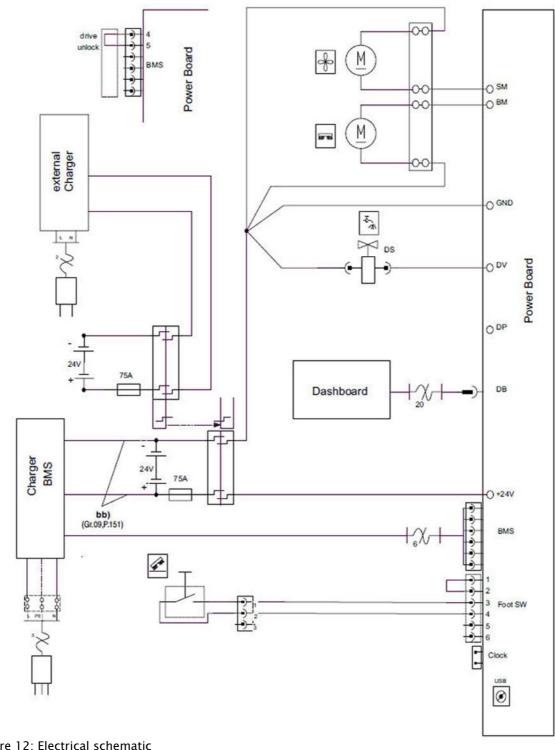


Picture 11: Battery connection

06.28.22 schematics – electrical schematics 455B_V1.00.fm

Schematics 6.5

Electrical schematics 6.5.2



Picture 12: Electrical schematic

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7 Additional information

7 Additional information

7.1 Available GTS Newsletter/Instructions

ACAUTION

To find the up to date available GTS Newsletters and instructions refer to e-spares.

Newsletter	Date of issue	Machine	Subassembly	Topic/Modification	Serial number
2012/04	07.02.2012	TASKI swingo 455, 755, 760, 855	Squeegee	Additional holes in the blades	Q2/12
2012/05	07.02.2012	TASKI swingo 450, 455, 750, 755, 760	Drive	Optional wheels avaliable for E and Eco models	Q2/12
2012/08	21.02.20120	TASKI swingo 455, 755, 760, 855	Brush drive	Belt comes off on battery driven machines	1075, 46322, 2075, 16322
2012/09	29.02.2012	TASKI swingo 455, 755, 760, 855	Chassis	Modified guide plate and stopper in swinging arm bracket	1000, 15557, 1075, 15557
2012/12	12.04.2012	TASKI swingo 455	Electronic	New firmware version 2.24/Eco Mode	2411
2012/14	07.05.2012	TASKI swingo 455, 755, 760, 855	Chassis	New foot lever	1000, 18369, -, 18369
2012/16	13.06.2012	TASKI swingo 350B, 455B	Electronic	Compatibility of electronics TASKI swingo 350B and 455B	-

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Table 1: Newsletters/Instructions

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Newsletter	Date of issue	Machine	Subassembly	Topic/Modification	Serial number
2012/22	22.08.2012	TASKI swingo 455B	Squeegee	New squeegee	3935
2012/30	17.12.2012	TASKI swingo 350, 455, 755, 760 855, 1255, 1260, 1650, 1850, XP, 4000, 5000	Service Tool	Service Tool Update Version 6.04	-
2013/01	13.02.2013	TASKI swingo 350B, 455B	Electronic	New Firmware Version 2.34	6068

Table 1: Newsletters/Instructions

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8 Revision

8 Revision

Date	Chapter	Content	Description	Revision
25.07.2012	All	All	New structure	1.00
25.07.2012	Additional in- formation	GTS Newsletter/Instruction	Added GTS Newsletter/Instruction	1.00
26.07.2013	Electrical	System architecture	Updated pictures	1.10
26.07.2013	Additional in- formation	GTS Newsletter/Instruction	Added GTS Newsletter/Instruction	1.10
26.07.2013	Mechanical	Squeegee	Added new squeegee setup	1.10

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Table 1: Revision

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10 Notes