



HIGH LEVEL REEFING

# OPUS® 300



INSTRUCTIONS

VIDEO INSTRUCTIONS  
AQUARIUM ASSEMBLY



VIDEO INSTRUCTIONS  
EQUIPMENT INSTALLATION



VIDEO INSTRUCTIONS  
STARTING THE TANK



VIDEO INSTRUCTIONS  
ADDING LIVE STOCK



## CONGRATULATIONS

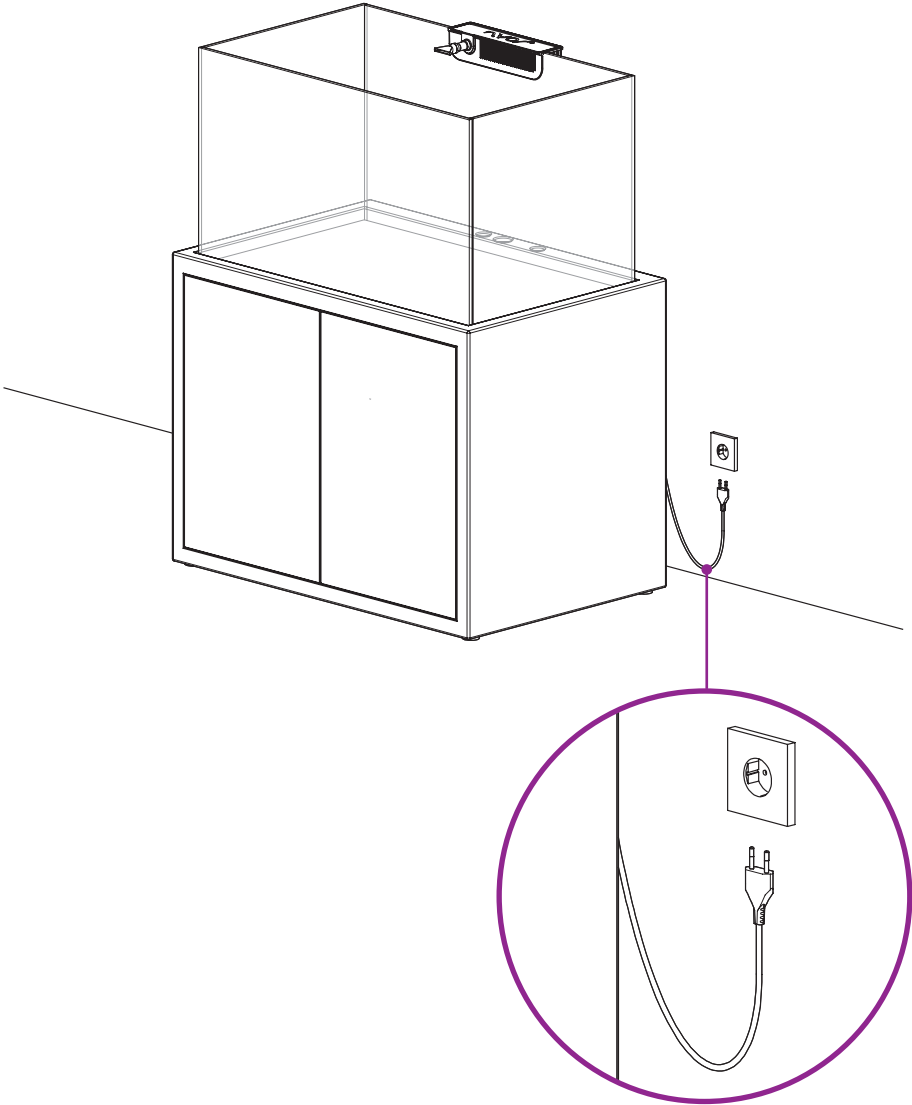
Congratulations on your new Nyos® OPUS® Aquarium.

Before putting the product into operation, please read the instructions carefully.

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SAFETY INSTRUCTIONS



(Fig. 1)

## SAFETY INSTRUCTIONS

- Read the instructions carefully and fully prior to putting the aquarium into operation and store it in a safe place.
- When using electrical equipment in or in close proximity to the aquarium, observe the instructions of the respective manufacturer.
- With all electrical equipment, the cable must form a drip loop so that no water is able to flow along the cable in the direction of the socket. The drip loop must be positioned above the respective water level (Fig. 1).
- This product is approved exclusively for use indoors and only for aquarium applications.
- Do not move the aquarium when filled, or attempt to lift it.
- Even when the aquarium is empty, never lift it by the overflow box.
- Before putting hands in the water, disconnect all electrical equipment from the power supply.
- This product is not intended for use by persons (including children) with limited physical, sensory or mental capabilities, unless they are supervised by a person responsible for their safety, or have received instruction from such a person on how to use the product. Children must be supervised to ensure they do not play with the product.

## ASSEMBLY

VIDEO INSTRUCTIONS FOR  
AQUARIUM ASSEMBLY



### ASSEMBLY INSTRUCTIONS:

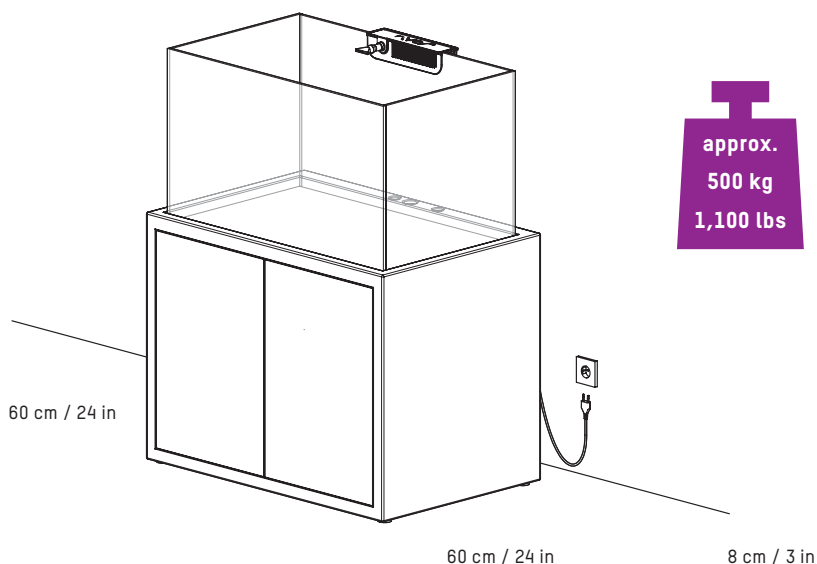
- At least 2 persons with sufficient physical strength are required for assembly
- Tools required: Phillips screwdriver, scissors for silicone cord
- Ready an underlay for intermediate placement of the aquarium (e.g. carpet, towel)
- Do not use blades to remove the protective film or open boxes, because these can scratch the aquarium, cabinet or doors

### STEP 1: SELECTION OF THE INSTALLATION SITE

- The floor on which the OPUS® 300 is installed must be level.
- The floor on which the OPUS® 300 is installed must be sufficiently load-bearing. The OPUS® 300 has a base surface of approx. 98x66 cm (38.6 x 26 in) and a weight of approx. 500kg (1,100 lbs) when filled. In case of doubt, consult a structural engineer in this regard.
- The aquarium should not be exposed to direct sunlight because this can result in undesirable algae forming.
- The room should exhibit a normal room temperature of approx. 20 – 24 °C (68-75°F).
- Do not install next to a radiator or an air conditioning system.

## ASSEMBLY

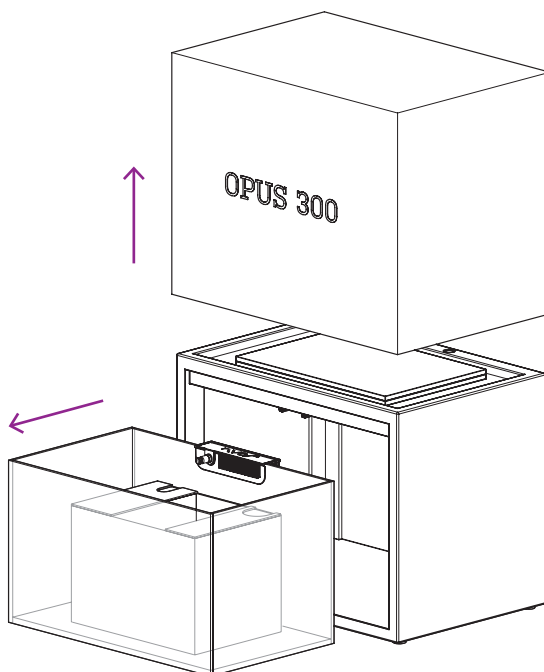
- Ensure sufficient and regular ventilation of the room.
- In order to guarantee sufficient space for cables and ventilation of the cabinet, the rear side of the OPUS® 300 should exhibit a distance of approx. 8 cm (3 in) from the wall.
- For reasons of accessibility, the OPUS® 300 should exhibit a distance of approx. 60 cm (24 in) from neighbouring walls or furniture on both the right and left side.
- Make sure the floor covering around the aquarium is appropriately waterproof.
- Do not place any objects that could corrode due to salt water, or that could be damaged by water, close to the aquarium.



## ASSEMBLY

### STEP 2: UNPACKING

- The box can be lifted off and removed in one piece.
- Now prepare the underlay for intermediate placement of the aquarium (e.g. carpet, sheet, hand towel).
- Carefully lift the aquarium out of the cabinet with the help of a second person. When doing so, make sure the aquarium remains straight and level when lifted out, to avoid damage to the cabinet. Set the aquarium down on the prepared underlay and remove the protective film from the aquarium.
- Remove the sump, refill tank, boxes and accessory parts from the aquarium.
- Remove the doors on the cabinet and set them aside initially.

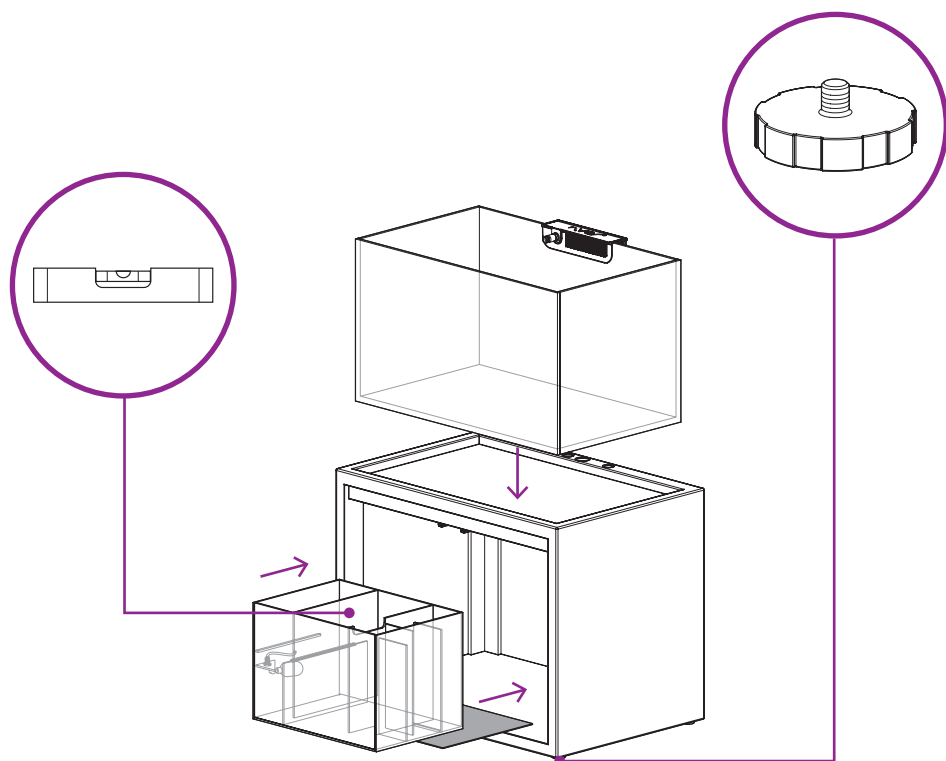




## ASSEMBLY

### STEP 3: POSITIONING THE CABINET, AQUARIUM AND SUMP

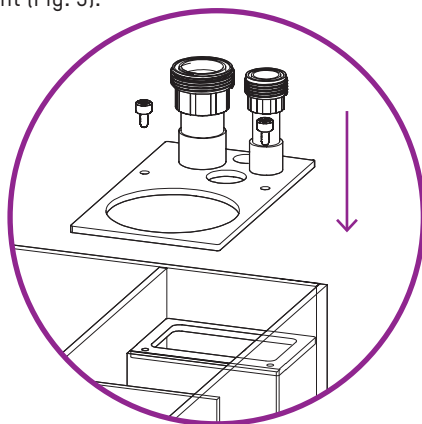
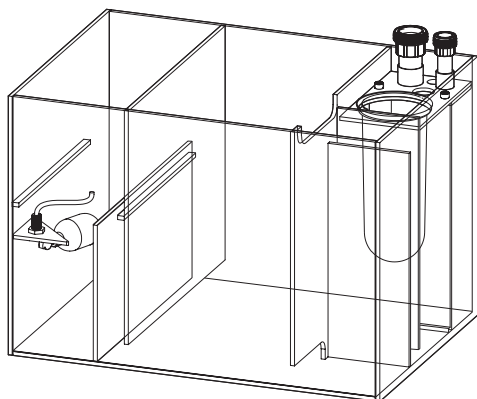
- Align the cabinet horizontally at the final installation site by unscrewing the feet.
- Carefully place the aquarium on the cabinet with the help of at least one further person. Align the aquarium centrally so that the gap between the cabinet and aquarium is evenly sized on all sides. No underlay is required between the aquarium and the cabinet.
- Unpack the sump and remove the cover panels from the sump. Position the sump and black foam underlay centrally in the cabinet. The Auto Top Off system (part no. 24) must be on the front left side here.



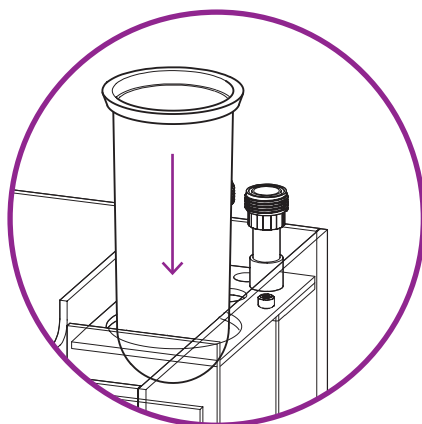
## ASSEMBLY

### STEP 4: PREPARING THE SUMP

- The transparent acrylic panel with the two PVC threaded connections is fastened at the rear right on the sump with the two transparent plastic screws (Fig. 2).
- Install the filter sock in the sump at the rear right (Fig. 3).



(Fig. 2)

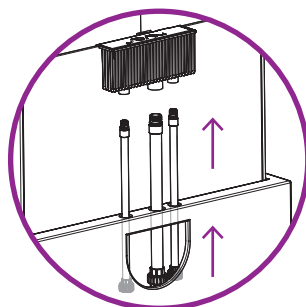
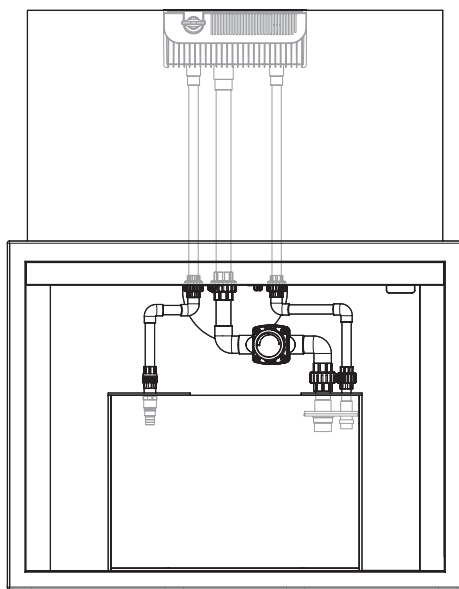


(Fig. 3)

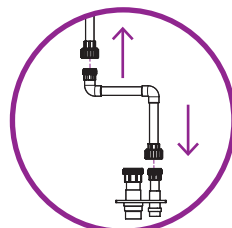
## ASSEMBLY

### STEP 5: INSTALLING THE PIPEWORK

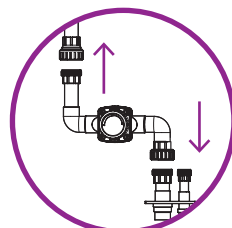
- Perform a general check before installing the pipes to ensure all O-rings are in the correct place.
- Start with the straight pipes (Fig. 4). Guide these in from below through the holes in the cabinet, and then screw tight in the overflow box (hand-tight, do not over-wind, tool is not required). The pipe with the largest diameter sits in the middle, the two narrower pipes are identical and are fitted adjacent on the left and right.
- Connect the angled PVC pipes for the return pump, overflow and emergency overflow with the threaded connections. The angled PVC pipe with the black valve is positioned in the centre (Fig. 5 – 7).



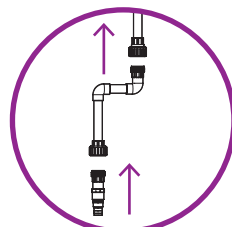
(Fig. 4)



(Fig. 5)



(Fig. 6)

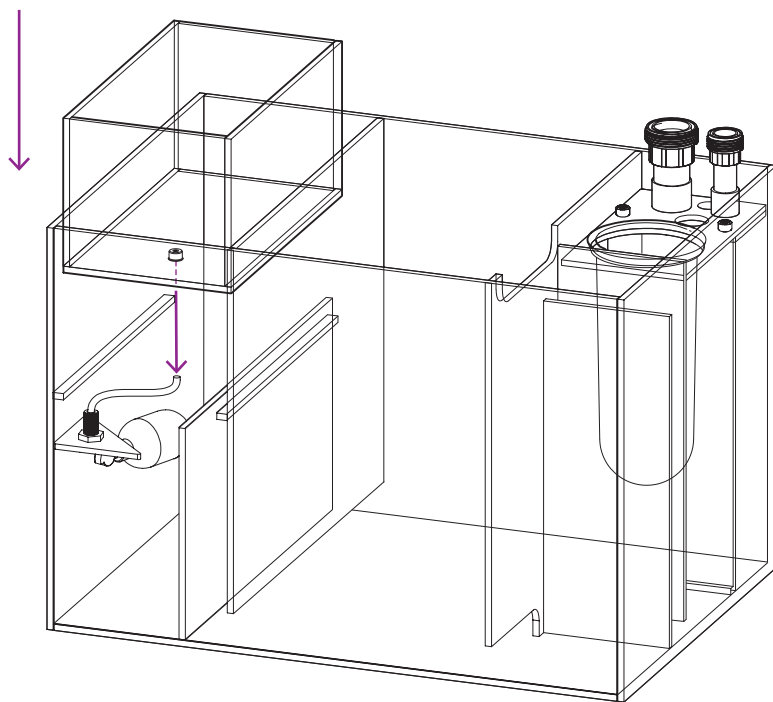


(Fig. 7)

## ASSEMBLY

### STEP 6: INSTALLING THE REFILL TANK

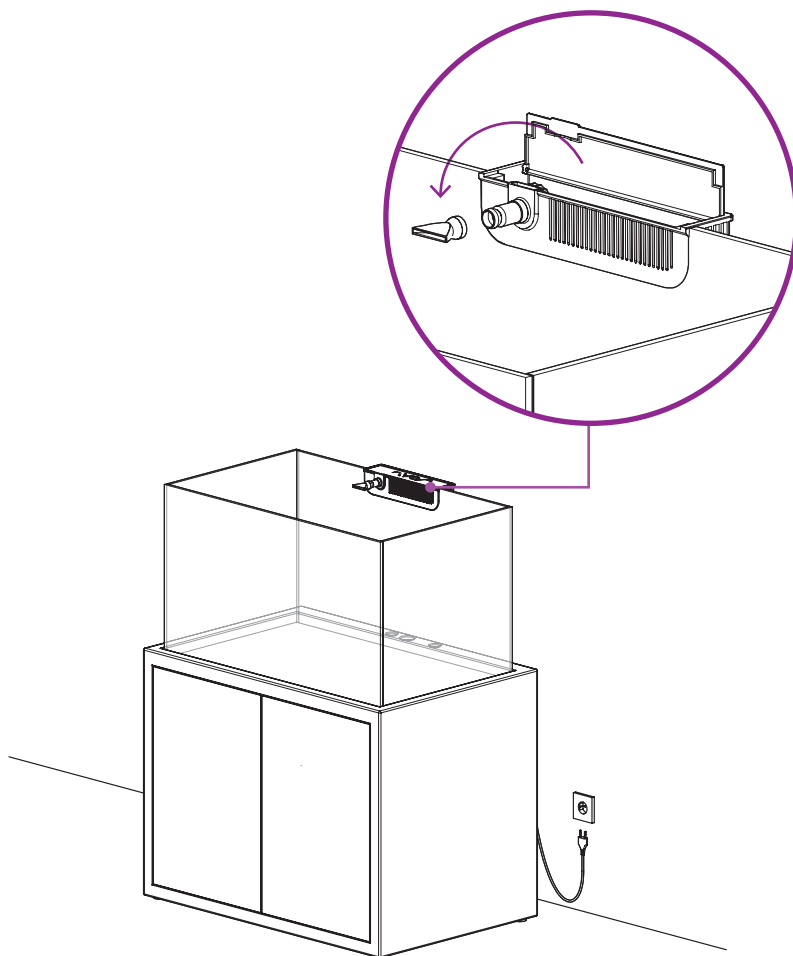
- The refill tank belongs in the left chamber of the sump (return chamber). We recommend that the Auto Top Off system be installed only after the aquarium has been filled with seawater (see page 22, step 4).
- The cover panels can now be laid on the left and right chamber of the sump.



## ASSEMBLY

### STEP 7: INSTALLING THE PUMP OUTLET

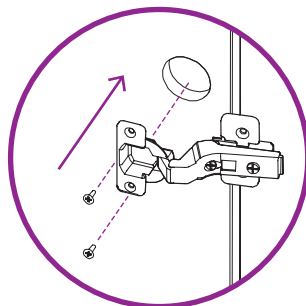
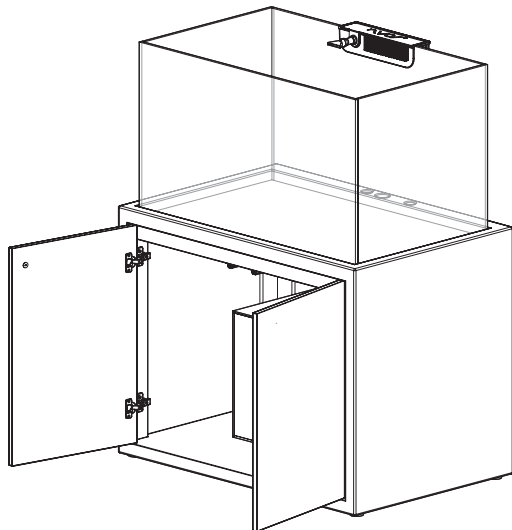
- An outlet port is located in the overflow box for the pump outlet. This can be simply fitted on the pump outlet in the aquarium.



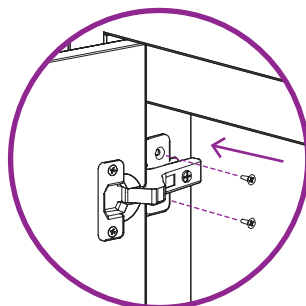
## ASSEMBLY

### STEP 8: FITTING THE DOORS

- First attach the hinges to the doors using the pre-drilled holes and the screws provided (part number 29) (Fig. 8).
- Now attach the doors with hinges to the cabinet using the pre-drilled holes and the screws provided (part number 29). A second person should hold the doors (Fig. 9).
- It is possible to align and straighten the doors using the screws on the hinges.



[Fig. 8]

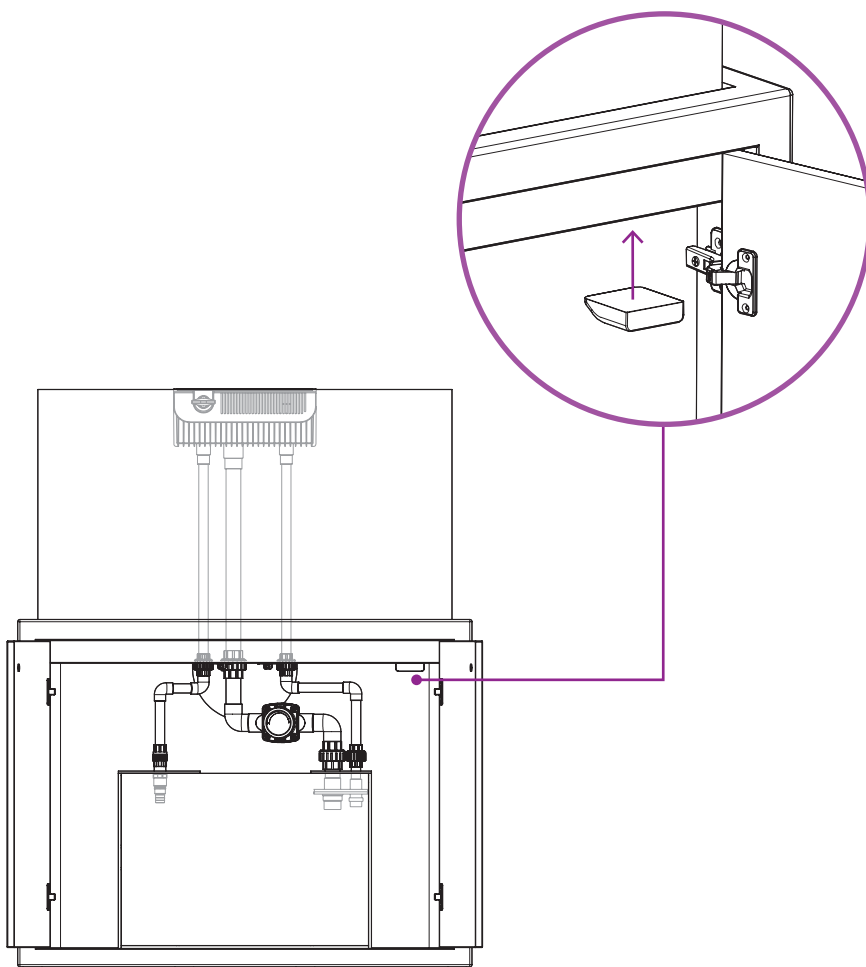


[Fig. 9]

## ASSEMBLY

### STEP 9: INSTALLING THE CABINET LIGHTING

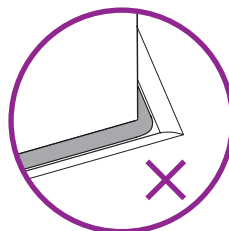
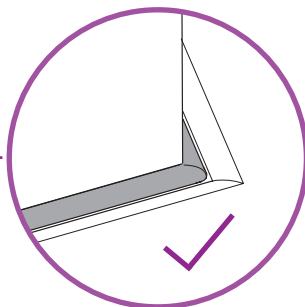
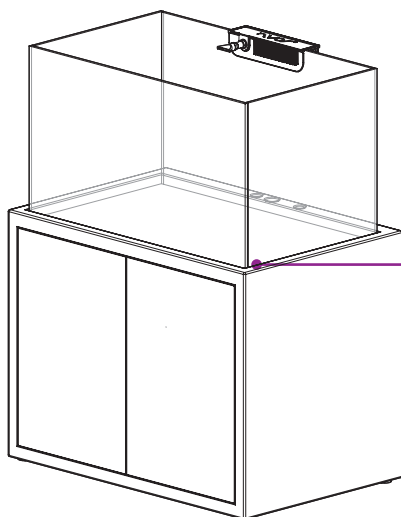
- The LED lighting can be fastened in the cabinet at the top right or top left (see sketch). Before fastening, check that it switches on when the door is opened and off when the door is closed.



## ASSEMBLY

### STEP 10: FITTING THE SILICONE CORD

- The silicone cord provided is evenly pressed into the gap between the aquarium and cabinet.
- Start on the rear side of the aquarium, roughly in the centre beneath the overflow box.
- Fit the silicone cord with a little excess material at the corners of the aquarium, so that the corners are completely filled.
- When the complete gap is filled all the way round, cut off the surplus silicone cord.





## FUNCTIONALITY AND EQUIPMENT REQUIRED

### PIPEWORK, VALVE AND OVERFLOW BOX:

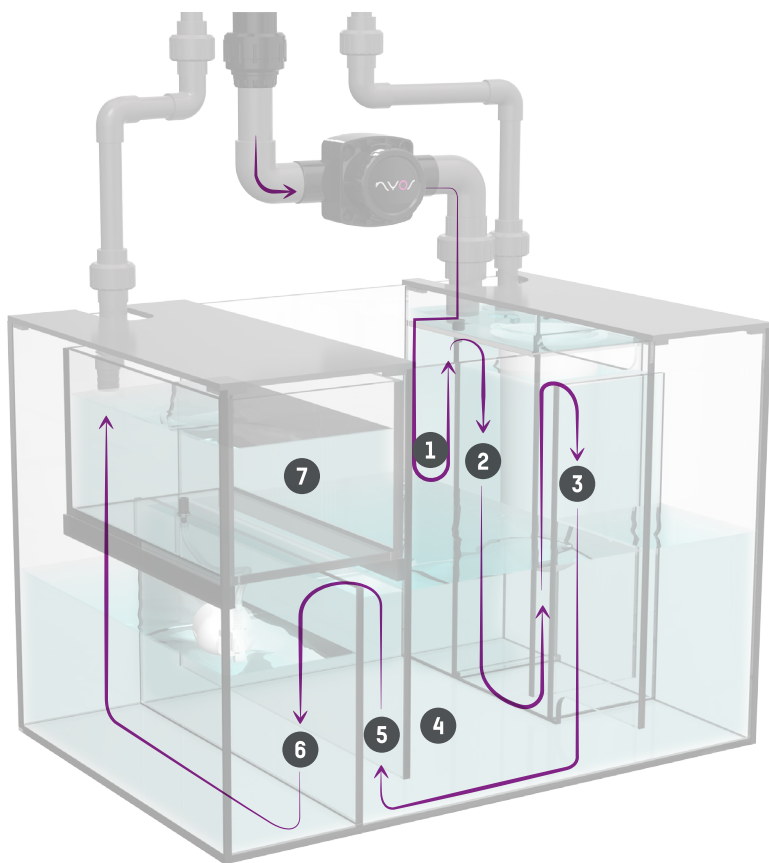
- The water from the display tank runs via the overflow box into the main outflow pipe and then into the rear right chamber of the sump.
- The second narrow outflow pipe in the overflow box is an emergency outflow and is only used if the main outflow pipe is blocked.
- The valve on the main outflow controls the water flow to the sump and ensures that the outflow noise is kept to a minimum.

### SUMP:

1. A bubble trap is located in the right rear chamber of the sump.
2. The water subsequently flows via a filter sock, which filters dirt particles out of the water.
3. At the front right in the sump is a reserve chamber, in which a media bag for active carbon, zeolite or similar can be placed for example.
4. The middle chamber is the skimmer chamber with a constant water level. It is also possible to install further filters here, such as a media reactor (Nyos® TORQ®) for example.
5. If necessary, it is also possible to install a filter sponge as an additional bubble trap in the narrow chamber between the skimmer chamber and return chamber.

## FUNCTIONALITY AND EQUIPMENT REQUIRED

6. In the chamber, far left, the water is fed back into the display tank via the return pump. Because the water level in the return chamber varies, compensation for the water lost through evaporation takes place via the Auto Top Off system.



## FUNCTIONALITY AND EQUIPMENT REQUIRED

### AUTO TOP OFF SYSTEM:

- Water that evaporates in all areas of the system can only be detected through a drop in the water level in the return chamber. The Auto Top Off system therefore only adds water to the return chamber.
- Because sea salt does not evaporate, only use fresh water (RODI Water) as compensation for water lost through evaporation.

### OVERVIEW OF FURTHER TECHNICAL COMPONENTS REQUIRED:

There are many options for successfully operating a reef aquarium. The following components are recommended on the basis of our experience:

Komponente	Empfehlung für OPUS® 300	Einsatzort
Skimmer	Nyos® QUANTUM® 120	Skimmer chamber of the sump
Return pump	Nyos® Viper 2.0 oder	Return chamber of the sump
	EcoTech Marine Vectra S	
Lighting	2 x Ecotech Marine XR 15W	Display tank
Flow	2 x Ecotech Marine Vortech MP10wQD	Display tank
Media reactor	Nyos® TORQ®	Skimmer chamber of the sump

### INFORMATION ON THE RETURN PUMP:

- The maximum pump capacity of the Nyos® OPUS® 300 return pump must not exceed 2,000 l/h (530 gph). If this is exceeded, the display tank could overflow!



## STARTING THE TANK

VIDEO INSTRUCTIONS FOR PUTTING  
INTO OPERATION



### STEP 1: REEF CONSTRUCTION AND SAND:

- We recommend to arrange the aqua scape whilst dry, before filling the aquarium with seawater. This is significantly easier than arranging the reef construction underwater.
- When the aqua scape is finished, the sand can be added.

### STEP 2: FILLING WITH SEAWATER

- Before filling for the first time, make sure all technical components (skimmer, return pump, etc.) are installed in compliance with the manufacturer's safety instructions.
- The Auto Top Off system is only required once the aquarium is in operation. We therefore recommend that the refill tank be initially removed.
- Check the correct installation of the pipework once more. First fully connect the valve by turning clockwise. Fill the overflow box with a little water to test the leak-tightness of the threaded connections on the overflow box.
- Fully open the valve before filling the main tank by turning it counterclockwise.
- Now start to fill the display tank with seawater.

## STARTING THE TANK

- Once the display tank is almost full, the water starts to flow into the sump via the overflow box. Monitor the water level in the sump. Once the water level in the return chamber is approx. 15cm (5,9 in), switch on the return pump.

### STEP 3: ADJUSTING THE VALVE

- It is now necessary to adjust the valve for the return: The valve closes in stages through rotation in a clockwise direction. This results in the water level in the overflow box and main tank rising. In order to reduce the water level again, the valve must be correspondingly turned counterclockwise so that the valve opens further.
- As soon as you begin to approach to the correct settings, the valve should only be turned slightly. It takes a few minutes for the water level to adjust to the respective valve settings.
- The valve is correctly set if no further outflow noise can be heard and the desired water level in the main tank has been reached. We recommend a water level of approx. 2,5-3 cm (0.9 – 1 in) below the top edge of the display tank. With this, no water (or very little water) should flow via the emergency outflow.
- Now switch on the skimmer. Note that the skimmer can overflow for a short while depending on the configuration (e.g. with fresh live rocks). Turn the skimmer down as far as possible and remove the pot if necessary. This effect will subside after a short time.

## STARTING THE TANK

### STEP 4: INSTALLING AND SETTING THE AUTO TOP OFF SYSTEM

- Only use the Auto Top Off system after filling the aquarium, i.e. once the water is at the correct level and the valve is correctly set.
- The water level in the return chamber can be set with the angle of the Auto Top Off system. The higher the white ball of the Auto Top Off system, the higher the water level. The position of the ball can be adjusted up or down through pressure. The water level should always lie above the intake of the return pump, so that the pump does not draw in air.
- Now connect the Auto Top Off system and the refill tank with the transparent hose provided, and set the refill tank on the two glass bars.
- Fill the refill tank with RODI water. The Auto Top Off system is now fully installed and automatically compensates for water lost through evaporation in the return chamber.
- You can now place the cover panel for the left chamber back on the sump.

### STEP 5: SIMULATION OF POWER FAILURE

- Disconnect all electrical equipment from the mains and test to ensure the sump does not overflow in the event of a power failure. There is no risk of this if the valve is correctly set.

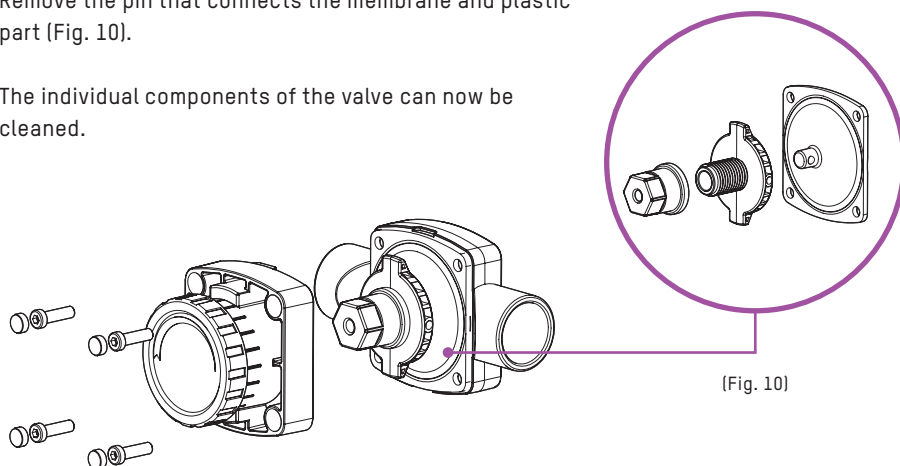
## MAINTENANCE AND CARE

### FILTER SOCK:

- The filter sock must be cleaned at regular intervals. Rinse out the filter sock under running water or wash it in the washing machine on a cold setting. We generally recommend keeping a number of filter socks in stock (Nyos® filter sock, article no. OPSP\_0647, part no 21).
- Note: If the filter sock is clogged, the water no longer flows through the filter sock but rather over it. The function of the sump remains intact.

### VALVE:

- The valve can be opened and cleaned if necessary.
- Remove the four rubber caps on the valve and open the four screws.
- Turn the valve adjusting screw clockwise and remove the membrane.
- Remove the pin that connects the membrane and plastic part (Fig. 10).
- The individual components of the valve can now be cleaned.



## MAINTENANCE AND CARE

### **AUTO TOP OFF SYSTEM:**

- The refill tank contains water for a number of days (depending on the ambient temperature, water temperature, etc.). Make sure there is always sufficient refill water (osmosis water) available, otherwise the return pump can run dry and the water exchange between the sump and display tank will be interrupted.

### **OVERFLOW BOX:**

- Clean the pump outlet and the filter comb on the overflow box at regular intervals to remove algae, deposits, etc.
- Check that no foreign bodies are present inside the out-flow and emergency outflow.
- Clean the pipes of encrustations, coralline algae, etc. at regular intervals.

### **CABINET:**

- Only clean the cabinet with water and a soft cloth. Do not use any aggressive cleaning products.
- Make sure no water runs beneath the cabinet. Wipe up water on the floor immediately.
- Make sure no water runs down the panes of the display tank. If water lands on the silicone cord, wipe this off immediately.



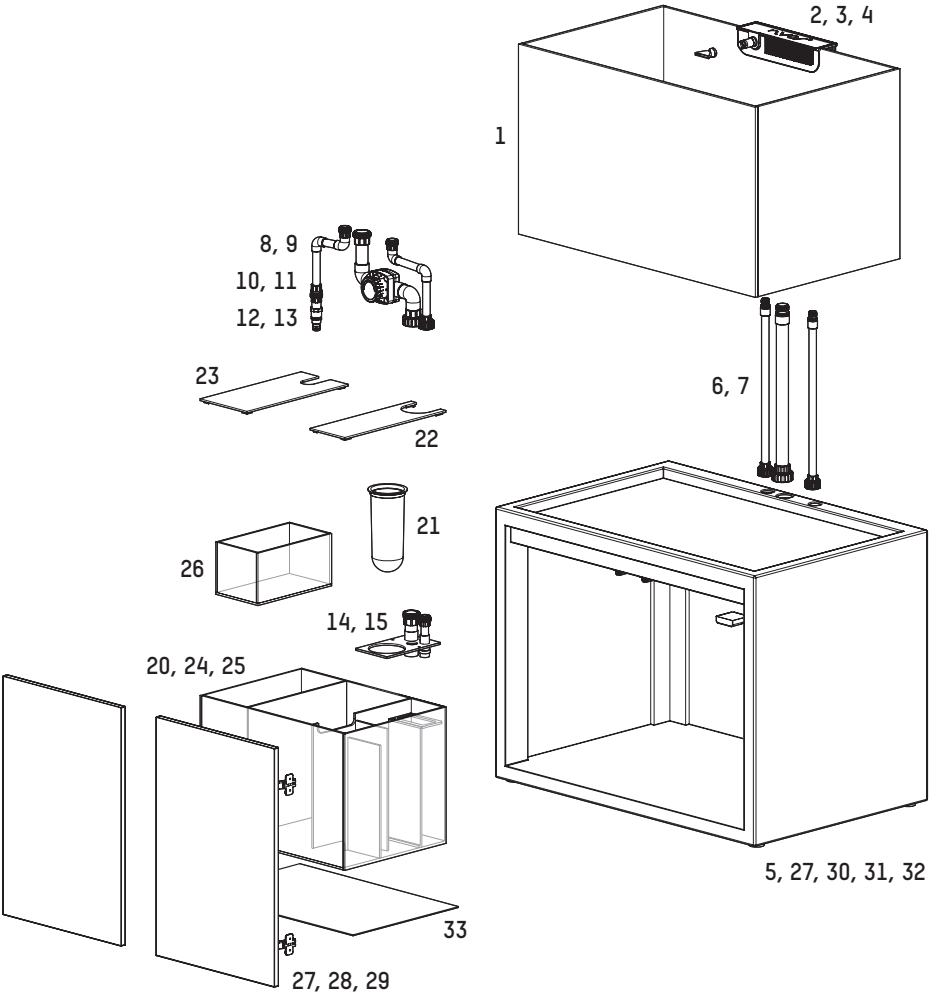
## MAINTENANCE AND CARE

- Make sure no water is present inside the cabinet, around the sump.

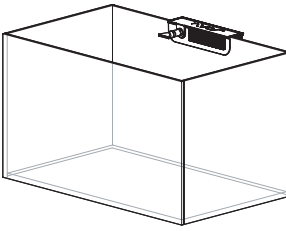
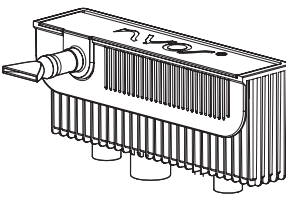

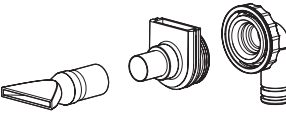
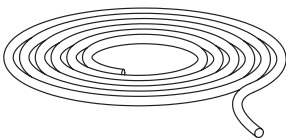
### **DISPLAY TANK:**

- When cleaning the panes of the display tank and sump with a scraper, make sure the blades do not damage the silicone seams.
- Do not use magnetic cleaners to clean the rear pane of the display tank because the paint on the outside of the rear pane may be damaged.



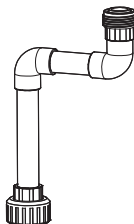
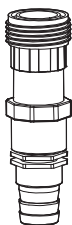
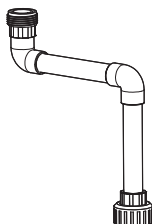
EXPLODED DRAWING



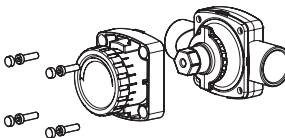
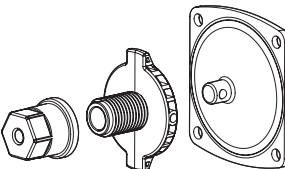
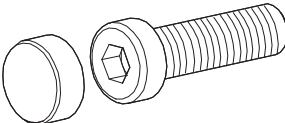
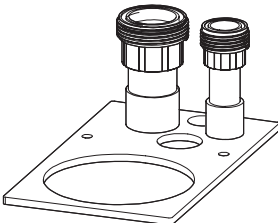
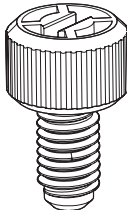
## PARTS LIST

Part no.	Part name	This part also includes part no.	Article no.	Illustration
1	Display tank including complete overflow box	2	0PSP_0432	
2	Complete overflow box (Body, cover, pump outlet)	3; 4	0PSP_0449	
3	Overflow box cover		0PSP_0456	
4	Pump outlet, consisting of three components		0PSP_0463	
5	Silicone cord		White: 0PSP_0470 Grey: 0PSP_0487	





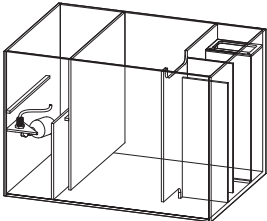
# PARTS LIST

Part no.	Part name	This part also includes part no.	Article no.	Illustration
6	Outflow/inflow pipe, straight 20 mm (including seal)	16	0PSP_0494	
7	Outflow pipe, straight 32 mm for main outflow (including seal)	17	0PSP_0500	
8	Inflow pipe, angled 20 mm for return pump (including seal)	19	0PSP_0517	
9	Pipe adapter 20 mm for return pump (complete two-part unit including seal)	19	0PSP_0524	
10	Outflow pipe for emergency outflow, angled 20 mm (including seal)	19	0PSP_0531	

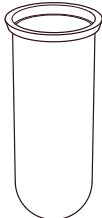
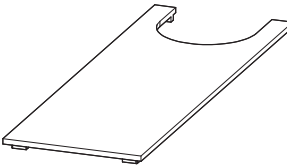
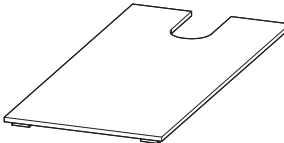
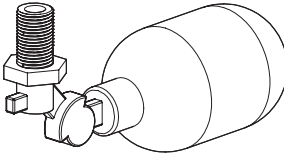
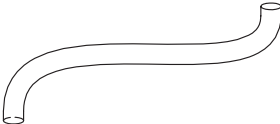
## PARTS LIST

Part no.	Part name	This part also includes part no.	Article no.	Illustration
11	Valve and outflow pipe for main outflow, angled 32 mm (including seal)	12; 13; 18	0PSP_0548	
12	Diaphragm for valve		0PSP_0555	
13	Screw kit and rubber caps for valve (4 units)		0PSP_0562	
14	Transparent acrylic glass with 2 x PVC pipe and thread (including seals)	18; 19	0PSP_0579	
15	2 x plastic screw for transparent acrylic glass		0PSP_0586	

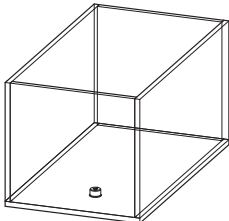
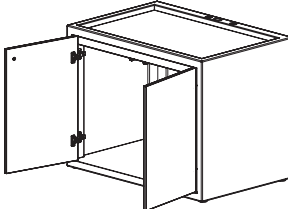
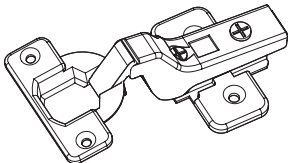
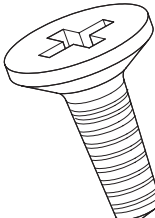
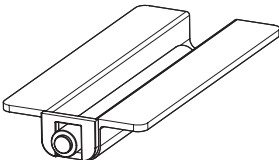
# PARTS LIST

Part no.	Part name	This part also includes part no.	Article no.	Illustration
16	Seal for outflow/ inflow pipe, straight 20 mm		0PSP_0593	
17	Seal for outflow pipe, straight 32 mm		0PSP_0609	
18	Seal for 32 mm threaded connection		0PSP_0616	
19	Seal for 20 mm threaded connection		0PSP_0623	
20	Sump	24,25	0PSP_0630	

## PARTS LIST

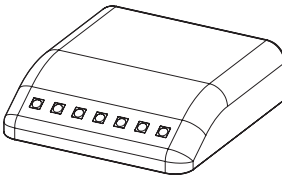
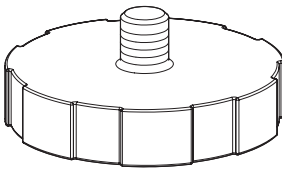

Part no.	Part name	This part also includes part no.	Article no.	Illustration
21	Filter sock		0PSP_0647	
22	Cover panel, sump right		0PSP_0654	
23	Cover panel, sump left		0PSP_0661	
24	Auto Top Off system (without hose)		0PSP_0678	
25	Hose for Auto Top Off system		0PSP_0685	

## PARTS LIST

Part no.	Part name	This part also includes part no.	Article no.	Illustration
26	Refill tank		0PSP_0692	
27	Cabinet including doors and hinges, push knobs	28; 29; 30	Weiß: 0PSP_0708  Grau: 0PSP_0715	
28	Hinges for cabinet doors (2 units)		0PSP_0722	
29	Screws for hinges (4 units)		0PSP_0739	
30	Push knobs for cabinet (2 units)		0PSP_0746	



## PARTS LIST

Part no.	Part name	This part also includes part no.	Article no.	Illustration
31	Lighting for cabinet		0PSP_0753	
32	Foot for cabinet (1 unit)		0PSP_0760	
33	Underlay for sump		0PSP_0777	

## NOTES

## NOTES

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