



Schoeller Allibert

Operation Manual



ComboLife 285 / ComboLife 285BD


Foldable Intermediate Bulk Container

Table of Contents

1. INTRODUCTION	3
1.1 THE HANDLING MANUAL	3
2. VERSIONS OF COMBOLIFE 285	4
2.1 CL285 STANDARD	4
2.2 CL285BD	4
2.3 CL285BD WITH CUT SKID	4
3. PRODUCT INFORMATION	5
3.1 GENERAL PRODUCT INFORMATION	5
3.2 TECHNICAL SPECIFICATION	6
4. OPERATING THE COMBOLIFE 285	7
4.1 PREPARING FOR USE	7
4.2 FILLING THE CONTAINER	8
4.3 HANDLING AFTER FILLING	8
4.4 STACKING, STORAGE AND TRANSPORT OF FILLED CONTAINERS	10
4.5 DISCHARGING THE CONTAINER	11
4.6 RETURN OF EMPTY CONTAINERS	12
4.7 CLEANING	14
5. COMBOLIFE 285BD (BOTTOM DISCHARGE)	15
5.1 HOW TO REMOVE THE TAMPER EVIDENT CAP	16
6. MAINTENANCE AND REPAIR	17
6.1 SPARE PARTS	17
6.2 REPAIRING CONTAINERS	18
6.2.1 REPLACING LID	18
6.2.2 REPLACING LID HANDLES	18
6.2.3 REPLACING WALL 1 OR DROP-DOOR	19
6.2.4 REPLACING WALL 2	20
6.2.5 REPLACING LOCKING CLIPS OF WALL 1 OR WALL 2	21
6.2.6 REPLACING WALL 3	21
6.2.7 REPLACING WALL 4	21
6.2.8 REPLACING BASE	22
6.2.9 REPLACING SKID	22
7. CONVERTING CL285BD TO CL285	23

1. Introduction

1.1 The handling manual

- The manual describes how to operate the container to maintain optimal performance over the whole lifetime.
- All information concerning product security is marked with the following symbol 
- This manual is valid for all versions of ComboLife 285
- All dimensions are given in metric units unless otherwise stated



This information must unconditionally be considered to avoid malfunction and/or risk of damage /injury. The warranty of ComboLife 285 /285BD is only valid on condition it is used and maintained according to these instructions



Read the complete manual before using the product

The warranty refers to defects which originates from material or process.

The warranty is only valid if the product has been used, handled and maintained according to following instructions and on condition that the product has not been exposed to higher loading than those stated in the Technical Specification in this manual.

The buyer, renter or owner of the ComboLife 285 container is responsible to forward these instructions to all users in the handling chain. Damages occurred due to mistreatment are not covered by the warranty.

Schoeller Allibert reserves the right to change the contents of this manual without previous warning.

2. VERSIONS OF COMBOLIFE 285

2.1 Standard version CL285



article # 4420.020.502

2.2 Bottom discharge version CL285BD with drop-door



article # 4420.032.502

2.3 Bottom discharge version CL285BD with drop-door and skids only in one direction



article # 4420.038.502

3. Product Information

3.1 General Product description

The container design consists of three main component groups.

1. The skids are open on all four sides, allowing 4-way handling of the container. The skids are assembled to the base to form a rigid structure for safe handling in normal environment (-20°C to +45°C).
2. All four walls consist of two individually moulded parts, welded into one stiff unit for maximum strength and durability. The walls are smooth both inside and outside. Label areas appear distinctly. The walls are easily folded and unfolded.
3. The lid is provided with four handles with locking function.

ComboLife 285 is fully made of recyclable thermoplastic compounds. The product is optimised to provide necessary strength to the container, enabling it to withstand forces through the complete handling cycle over its lifetime.

The container is designed for easy and safe handling. Folding and unfolding time is low and can be operated by one single operator.

- The container is delivered in a folded position with the lid attached
- Two locking clips are built in on the top left/right edge of two walls to secure the position of the other walls in unfolded/(i.e. erected position).
- Stacking ridges are integrated on the top of the lid to keep the next container safely stacked
- The container has skids between the 9 feet to ensure stability of the product during handling / stacking.

3.2 Technical Specification

Article #			Projected Foot Area	1.33 [m ²]	14.3 [ft ²]
ComboLife 285		4420.020.502	Container Capacity	1400 [kg]	3086 [lbs]
ComboLife 285BD (Bottom Discharge)		4420.032.502	Tare Weight CL285	88.5 [kg]	195 [lbs]
ComboLife 285 BD with cut skid		4420.038.502	Tare Weight CL285BD	91 [kg]	201 [lbs]
Dimensions		[mm]	Tare Weight CL285BD w cut skid	89 [kg]	196 [lbs]
Outside Dimensions incl Lid			Max Load Stack		
Length	1155		Dynamic (1+1 max)	1500 [kg]	3307 [lbs]
Width	1155	45.5	Static CL285 (1+4 max)	6000 [kg]	13228 [lbs]
Height	1132	44.6	Static CL285BD (1+3 max)	4500 [kg]	9921 [lbs]
Collapsed height	467	18.4	Static CL285BD 3R (1+2 max)	3000 [kg]	6614 [lbs]
Outside Dimension excl Lid			Volume	Internal	280 [gal]
Length	1145	45.1	External	1.51 [m ³]	53.3 [ft ³]
Width	1145	45.1	Functional Temperature		
Height	1110	43.7	Max	+45 [°C]	113 [°F]
			Min	-20 [°C]	-4 [°F]
Inside Dimensions			Transportation	(collapsed containers)	
Length	1065	41.9		13.40 m Trailer	110 units
Width	1045	41.1		2x7 m	120 units
Height	940	37.0		12.5 m	100 units
Height Stacked			Sea Container	(collapsed containers)	
2 high	2247	88.5		20 ft	50 units
3 high	3379	133.0		40 ft	100 units
4 high	4511	177.6	Material	Polypropylene Food contact approved Fully recyclable	
5 high	5643	222.2			
Height Folded			General Design	Flat surfaces, corners rounded Dust tight inside label	
2 high	917	36.1		4 way access, easy cleaning, folding/unfolding time	
3 high	1384	54.5	General handling		
4 high	1851	72.9			
5 high	2318	91.3			
10 high	4517	177.8			

4. Operation of ComboLife 285

4.1 Preparing for use

The container is delivered in its folded position.



The lid is simply removed using the lid handles or gripping the opposite edges indicated by arrows in the picture above.

Begin the unfolding by erecting the walls number 4 and 3.

Continue with the walls number 2 and 1.

Note: In some versions wall number 1 is replaced by a second wall 2.

The four locking clips secure the walls in the erected position.



Move the container to the filling station by a forklift truck or a pallet lifter



Though the walls are secured by the locking clips, we advise not to move the container by pushing the walls.

4.2 Filling the container

Check properly that the container interior is clean to avoid malfunction of the liner. Check properly that the container connections between base and walls are in order that no gaps exist to enable the liner to be squeezed between base and walls.

Place and connect a selected liner into the container according to instructions given by the liner supplier.



Caution. Do not overfill the container to higher volume/weight than stated in the Technical description in this manual. This may cause malfunction of the locking system and failure due to overload.

Filling without any restrictions can be done at max. 60 °C temperature of the liquid.

Filling at a temperature >60 °C and ≤70 °C, below precautions are recommended

- The ComboLife shall be placed on a pallet with a size to fully support it.
- The ComboLife with pallet shall only be moved while the lid is assembled.
- The ComboLife shall not be moved from the pallet until the average temperature has decreased to a value below 60 °C.

The ComboLife shall never be filled at temperatures exceeding 80 °C. The following precautions must be taken at a filling temperature above 70 °C and up to 80 °C

- The ComboLife shall be placed on a pallet with a size to fully support it.
- The ComboLife shall be strapped at the top of the base and a second strap shall be positioned about 100 mm below the top of the walls.
- The ComboLife with pallet shall only be moved while the lid is assembled.
- The ComboLife shall not be moved from the pallet and unstrapped until the average temperature has decreased to a value below 60 °C.

The container is not allowed to be stacked or transported outside the factory before the average temperature of the liquid is below 45 °C.



At filling temperature above 60 °C, the user is liable to perform tests to proof that the container function is safe.

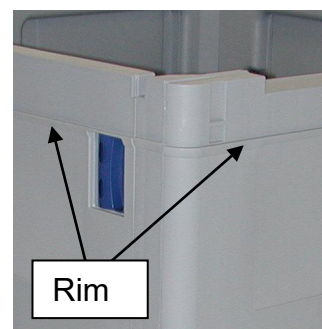
4.3 Handling after filling

Before putting the lid on, be sure to check that the handles are in “Open” position.



Assembling lid on container with handles in closed position can cause damages to the handles, lid and walls.

The lid is in position when the vertical edge of the lid touches the rim on the walls.



To lock the lid to the container: Press corner down, lift the handle and slide towards the corner of the container into “closed” position.



When pushed in closed position, check that the handles are folded all the way down to the surface of the lid as shown on second picture.



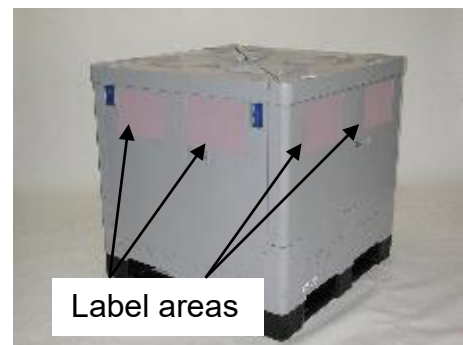
Each wall is provided with two label areas (highlighted area in the picture below).



The label areas are designed for good label adherence and to facilitate easy removing during cleaning.

Placing labels outside label area will make cleaning more difficult.

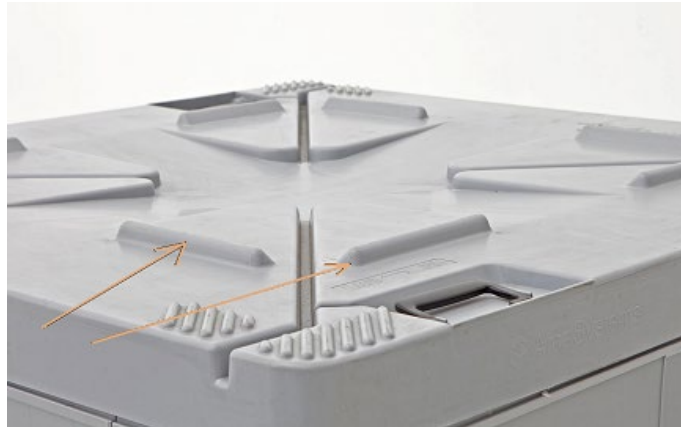
The use of wrong type of glue on labels will make cleaning more difficult.



4.4 Stacking, storage and transport of filled containers

The container can be accessed with a forklift truck from four ways.

When the filling procedure is finished, the containers can be stacked and stored or transported to the user. The lid has ridges to prevent stacked containers from sliding.



For stable and secure stacking, always position containers right on top of each other.

Stacking outside the stacking knobs i.e. outside the periphery of the container is not permitted.

It is not permitted to stack more than 5 containers high during storage of 4420.020.502, not more than 4 containers of 4420.032.502 and not more than 3 containers of 4420.038.502



It is not permitted to cross-stack containers.

It is not permitted to move the filled (nor empty) container/s by pushing or dragging the feet, base or other part of the container with a forklift or any other device.



The containers can be stacked two high during transport with ordinary forklift truck from filling station to storage.



National legislation regarding transport by air, railroad or sea regulates under which conditions goods may be transported. This refers to in which way goods transported should be loaded, secured, approved types of packaging for specific type of goods and any required training of vehicle operator (e.g. truck driver).

The product is designed to withstand impacts and vibration according to international standards for materials handling. Violent handling can cause malfunction or failure.



National and/or international legislation regarding transport must be followed.

Maximum load capacity of the vehicle must not be exceeded.

Containers must be secured properly.

The container is resistant to most weather conditions, however it shall not be exposed to extreme temperatures.



The container may not be exposed to temperatures above 45°C or below -20°C. This is valid both for filled and empty containers.

The user has to take actions to prevent contents from freezing, which may cause cracking of the container due to expansion of the liquid.

4.5 Discharging the container

Depending on its version, the container can be discharged using different methods. The CL285BD is discharged via the bottom outlet, by gravity or supported by a pump. To reduce the residue of the liquid, it is permitted to slightly tilt the container. A container without bottom discharge can be discharged from the top by using a pump. It can also be discharged through inversion.

4.6 Return of empty containers

Remove the empty disposable liner-bag from the container. Leaving the empty liner-bag in the container may sometimes cause problems to fold the walls (depending on type of liner-bag and level of residue).

The walls are folded according to the following procedure:

- ① Press both blue locking clips at the same time away from the corner (direction of arrow on the locking clip) and push the wall "1" or "2" forward.



Grip the wall handle and put the wall down onto the base.



- ② Repeat instruction step ① for the opposite wall ("1" or "2")



Note: In some versions wall number 1 is replaced by a second wall 2.

- ③ Fold wall "3" by gripping the wall handle on the outside, lifting the wall slightly upwards. Still holding the wall handle, put the wall down onto the previously folded walls.



- ④ Fold wall "4", as in the instruction for step ③.





It is not permitted to force the walls (1-2) outwards in order to fold the walls (3-4). This could lead to failure of both base and walls.

When the walls are folded, put the lid on. The lid must be positioned correctly. The sides having handles shall be along the hinges for wall 3 and 4 respectively. The locking handles can be in closed or open position, however they shall be folded down to avoid damages.

Note: The position of handles has no sense for a folded container. The lid will not be locked to the base. (This has been changed in design since 2009. Containers manufactured earlier must have handles in open position before the lid is put on).

The folded containers can be stacked 10 high in storage. For the return transport, 6 folded containers can be stacked.



Be sure to place lid onto the base in right orientation

The folded containers must be stacked properly with the lid on i.e. standing on top of each other inside the stacking ridges.

4.7 Cleaning

To facilitate easy cleaning, the container has been designed with a minimum of dirt pockets. The design is balanced to provide protection of the contents during transport and the cleanability after use. Cleaning can be done either manually by using high-pressure water or designated washing machines. For manual cleaning with high-pressure, depending on degree of contamination of the container, it could be considered to use hot water with an alkaline detergent.

Before cleaning:

- Lift off the lid. The lid is washed separately.

Use high-pressure (hot) water to clean the container.

How to clean:

1. Wash base and hinge areas while walls are folded
2. Raise walls "3" and "4" and wash corner locking area
3. Wash corner locking area on wall "1" or "2" and raise the wall
4. Repeat previous step on the remaining wall
5. Tip container on one side to wash skids and base bottom
6. Wash inside before container is tipped back on its skids
7. Put container back and wash outside
8. Use a window scraper to remove water droplets from walls and base. If necessary wipe dry with a cloth.
9. Put lid back on
10. Transport to filling station/storage

At two sides of the base, a barcode label is attached. The information provided on the label is the article number and a running manufacturing number. Avoid tough cleaning too close to the label in order not to remove it.



While cleaning around barcode label area, do not spray with high pressure nozzle closer than 30 cm at any angle towards the label as this might remove it

5. ComboLife 285BD (Bottom Discharge)

ComboLife is available in a bottom discharge version, ComboLife 285BD. The bottom discharge hole is located on the side of the base and skid unit.



Wall 1 has a drop-door to simplify the installation of a liner-bag. The door is opened by first lifting it in the recessed handles about 20 mm upwards and thereafter turn it outwards.



The remaining parts of the container are identical on both the standard and BD version except for the base. The BD version is operated in the same way as the standard container, which has no hole for bottom discharge.

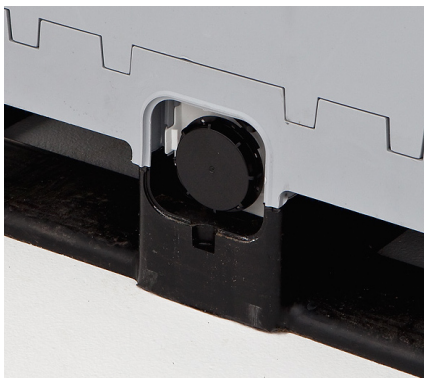
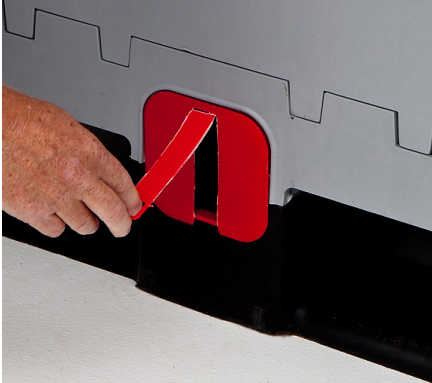
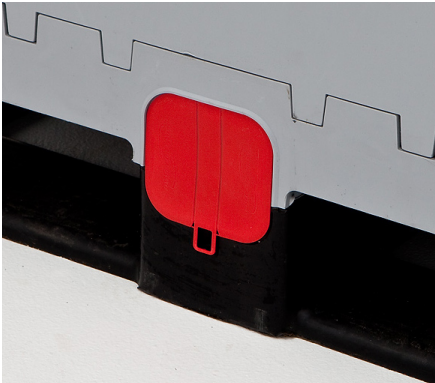
A tamper evident cap is assembled to cover the discharge hole, this to prevent non-authorized access to the discharge area. The disposable cap will be broken when it is removed before discharging.



It is only recommended to use original discharge fittings supplied by Schoeller Allibert. These fittings are designed for proper liner assembly into the container.

5.1 How to remove the Tamper Evident Cap

Grip cap eye and tear across to open Cap. Grip in opening and pull out.



6. Maintenance and Repair

To avoid reduced performance of the container, it should not be used for other purpose than it originally has been designed for. The container is designed to carry a fluid content in an inner receptacle.

Containers should be visually inspected before being refilled to detect any defects that could cause malfunction or failure. The filler is obliged to check that the container is fit for use.

6.1 Spare Parts

The container has been designed to allow maximum amount of parts to be replaced. Parts can easily be replaced by the user using conventional tools.

Item	Part description	Parts per CL285 / CL285BD	Parts per Packing	Article Number
1	Lid incl. handles	1	1	4425.820.502
2	Lock Handle set	4	10x2	4420.098.900
3	Wall 1 with Drop-door (CL285BD only)	1	1	4423.050.502
4	Drop-Door with hinges (CL285BD only)	1	1	4423.040.502
5	Hinges with pins for Drop-Door	2	10	4423.080.918
6	Wall, short side (2)	2	1	4423.010.502
7	Wall, long side (3)	1	1	4424.020.502
8	Wall, long side (4)	1	1	4424.010.502
9	Hinge axis 377 mm (wall 3 and 4)	4	10	4420.087.000
10	Hinge axis 535 mm (wall 1 and 2)	4	10	4420.088.000
11	Tower support plugs long	8	10	4420.093.000
12	Locking Clips	4	10	2323.650.632
13	Base incl. skid (CL285)	1	1	4421.011.502
14	Base incl. skid (CL285BD)	1	1	4421.031.502
15	Base incl. skid (CL285BD w. cut skid)	1	1	4421.032.502
16	Base Plug	8	40	4420.092.502
17	Skid (CL285)	1	5	4422.010.900
18	Skid (CL285BD)	1	5	4422.030.900
19	Skid (CL285BD w. cut skid)	1	5	4422.031.900
20	Foot Screw base/skid	18	20	4420.089.000

Note: All article numbers refer to one component, not for the package.

6.2 Repairing Containers

Exchanging parts of the container is easy and fast. Follow the step-by-step instructions below to replace any part of the container.

6.2.1 Replacing Lid

As standard, the lid is delivered with the handles assembled. Remove the damaged lid by raising and sliding the handles to “open” position and lift it off the container. Check that the handles of the new lid are in “open” position before placing it on the container. Put the lid on and secure the lid to the container by raising and sliding the handles into “closed” position.

6.2.2 Replacing Lid Handles

If only gripping part of handle is damaged, knock the stop-knob out of position by using a screw driver or similar and slide out the handle from the lid. If the cylindrical part of the handle is broken, be sure to remove all fractions of the broken handle (unfold container and check both lid, top edge of wall) and interior of container.

A new handle is assembled by inserting the handle in the holes of the lid, one side at the time. Please note that there are different handles for left side (marked “L”) and for right side (marked “R”) position.

Below pictures show the exchange of a “R” handle. The pictures would be mirrored for the exchange of a “L” handle. Have the small stop-knob ready for use.

Stop-knob



Insert the handle into the hole of the lid



Push the handle until it stops



Slide the handle backwards until it stops



Place the stop-knob to fit the handle



Push the handle to move the stop-knob to its final position



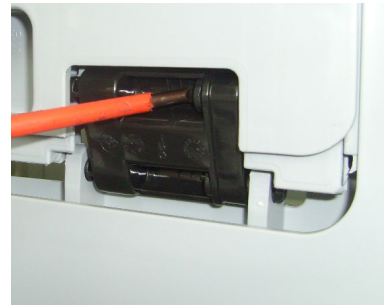
The exchange operation is now completed

6.2.3 Replacing Wall 1 or Drop-Door

The complete Wall 1 will be replaced in same way as Wall 2 (see section 6.2.4).

To replace the Drop-Door or any of the two hinges, follow the instruction below.

Lift the Drop-Door upwards (20 mm), insert a screwdriver and push the outer two plugs inwards to release the hinge. Repeat the operation for the second hinge.

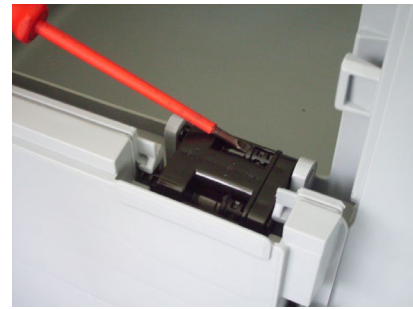


Fold the Drop-Door outwards and take out the hinges.



To install the Drop-Door it is highly recommended that Wall 1 has first been taken off and placed flat on a table.

Place the new Drop-Door in folded position and hinges as shown. Use a screwdriver to push in the outer two plugs to fix the hinge both in Drop-Door and Wall 1.



Assemble Wall 1 with attached Drop-Door to the Base.

6.2.4 Replacing Wall 2

The wall (marked “2” on the container interior), also recognized by the two blue locking clips located in the top left/right outside corner. Each wall is attached to the base via 2 hinge axes. To replace a wall, put it in folded position. The plugs (i.e. Base plug) covering the axis hole must be removed. A screwdriver is entered into the vertical slot between the base and the plug, bend the screwdriver outwards to unhook the plug. To remove the axis, use a plier (with long grips) to grip the axis. A second option is to use a long (20-30cm) cylindrical rod, insert it in the axis, bend slightly to create a grip and pull out. As the axis hole in the base is not circular, lift the wall slightly to decrease pressure on axis – this will make pulling out easier. Repeat above to remove the second axis of the wall. Remove the damaged wall and place the new in position. To re-assemble the axes, place the wall in folded position. Insert the axis and push through the hinges all the way until stop. Re-assemble the base plug covering the axis hole by pushing it towards the radii of the axis hole in the base. Then push to fix the hooks of the plug into the base.



6.2.5 Replacing Locking Clips of Wall 1 or Wall 2



Use a chisel or a similar tool to push as shown to get the old clip to pop out. The new clip is flexible and can be inserted without any tool. The flexible part is compressed to allow it to enter the pocket of the wall.

6.2.6 Replacing Wall 3

Wall 3 is the “low hinge” wall i.e. the hinge section is closer to the base compared with wall 4 (see number on inside of the wall). Follow the procedure described in section 6.2.4 to remove and assemble base plugs. A “Tower support plug” is found inside the base plug, covering the passage through the tower support. Drill a small hole ($\phi 2-3\text{mm}$, $\pm 5\text{ mm}$ deep) in the centre of the plug, mount a screw in the hole and grip with a pair of pliers to pull out (see picture). To remove the hinge axis - use a long (20-30cm) cylindrical rod, insert it in the axis, bend slightly to create a grip and pull out. Pulling out the axis can be assisted by turning the container upside down (the hinge axis will then be visible). Grip axis and push/slide towards the exit hole in the corner of the base. The wall is attached by two axes, repeat above on other side to remove second axis. Remove the damaged wall and place the new wall in folded position in the base. Insert the two axes. Remove the screws from the tower support plugs before putting them back into the axis hole. Re-assemble the base plug (according to description in section 6.2.4) to cover the access hole for the axis.



6.2.7 Replacing Wall 4

Wall 4 is the “high hinge” wall, this wall is the first to be unfolded and the last to be folded (see number on inside of the wall). To remove wall 4, disassemble base plug according to description in section 6.2.4. To remove the wall and assemble new, follow instructions in section 6.2.6 above.

6.2.8 Replacing Base

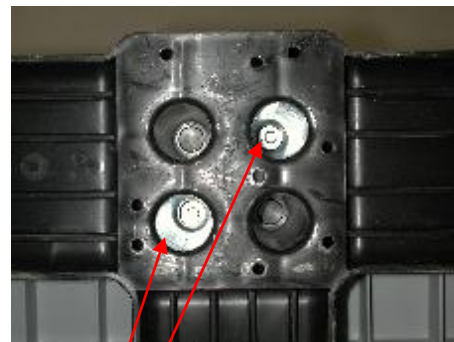
To disassemble the walls from the base, follow instructions in sections 6.2.4, 6.2.6 and 6.2.7. The new base is delivered incl. skids, tower supports and tower support plugs. To assemble the walls, put in folded position and enter the two-hinge axis on each wall. After inserting the axis in wall 3 and 4, put in the tower support plug and cover the axis hole with the base plug. There are no tower support plugs mounted in the axis hole for walls 1 and 2.



It is only the tower support plug for the axis hole that is assembled after the axis has been inserted, though there are two plugs in each tower support. The other non-visible plug is assembled when the tower support is put into the base. For the low hinge wall, there are 2 shorter plugs in the upper hole, this to allow a rib to pass.

6.2.9 Replacing Skid

The skids have integrated feet and are screwed to the base. Turn the container up side down to replace skids, use a box socket wrench (M10) to remove the 18 screws, two washers are used for each screw, hence in total 36 washers. Collect the screws and washers to use again. Position the new skid with one foot in each corner (skid can be rotated, all four corner feet fit in any corner) of the base. Check that the holes in the skid are right on top of the screw holes in the base. The edges of the skid and base will have contact when placed in right position.



Foot with screws

Make sure each screw has two washers before starting the assembly of the skid. There are four holes in each foot, only two of these are used for the screws (these holes are always in diagonal position). Enter the screws and tighten them.



All 18 screws must be tightened. Beware; tightening screws beyond natural stop will destroy the threads.

If the screws do not grip i.e. the screw can be turned without reaching the natural stop – the threads are damaged. In this case it is recommended to replace the base.

7. Converting CL285BD to CL285

It is easy to convert a CL285BD to a standard CL285.

- 1. The Wall 1 with Drop-Door can be exchanged to Wall 2 (see 6.2.4).
- 2. To close the Bottom Discharge hole, a BD plug is snap-fit assembled in the base inside. A black cover cap is snap-fitted from outside to the BD plug-

