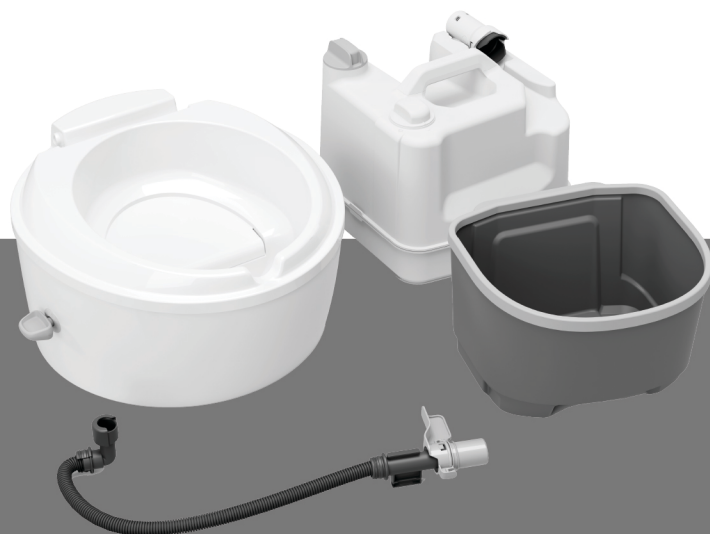


THETFORD



INSTALLATION MANUAL
SEPARATION TOILET -
CONVERSION KIT
SK220 series

EN

Original Installation Manual

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1. Disclaimer

Important information

1. This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety. Children should be supervised to ensure that they do not play with the appliance.
2. Glowing cigarettes and other burning materials must not be thrown into the toilet.
3. This product must only be supplied at safety extra low voltage (SELV) corresponding to the marking on the appliance.
4. If the supply cord is damaged, it must be replaced by a special cord or assembly available from the manufacturer or its service agent.

2. Introduction

General

This is the installation manual for the Thetford SK220. The manual is meant for qualified installers who will install the toilet system in a caravan or camper.

Read the information and instructions carefully and follow them strictly to install the toilet system safely and correctly.

Also read the warnings in the user manual before testing the toilet system after installation.

Our policy is one of continuous development and improvement. Specifications and illustrations may change subsequent to publication. This document is version 212060/0226-V01 of the installation manual.

Please visit www.thetford.com for the most recent version.

If the appliance is not installed in accordance with national and European regulations, rules and standards, this will void the warranty.

Symbols

The following symbols may be used in this manual:



Warning. Risk of serious injury and/or damage.



Caution. Risk of moderate injury and/or damage.



Attention. Important information.



Note. Additional information.



Video. Additional instruction video available.

3. Safety

General



Risk of serious injury through burning, explosion, clamping, electrocution, suffocation and poisoning or damage to the product.

- Do not modify this appliance, unless the modification is authorised and carried out by the manufacturer or their agent.

- If the appliance is not installed in accordance with national and European law, regulations, rules and standards, this will void the warranty and may lead to criminal prosecution.
- Wear the correct Personal Protective Equipment during the installation. Also follow the applicable safety regulations.
- Only qualified persons are allowed to install the appliance.



The toilet can withstand a maximum load of 120kg. Make sure you do not overload the toilet.

Installation



Risk of serious injury through burning, explosion, clamping, electrocution, suffocation and poisoning or damage to the product.

- To avoid a hazard due to instability of the appliance, it must be fixed in accordance with the instructions.
- Do not drill, cut or use excessive force on the toilet walls, except for screwing predefined positions. This may damage the appliance.
- When installing the appliance, ensure cables are not trapped or damaged.
- Route the cables away from the appliance and heat sources.
- Do not allow cables to hang loose into the compartment.
- Use only genuine and approved parts and materials.

4. Serviceability

The installer of Thetford products is responsible for correct installation according to the Thetford installation instructions to ensure the functionality and serviceability of the product.

In terms of serviceability, this means that a dealer or authorised Thetford service partner must be able to remove and re-install the Thetford product within the time that is allowed according to the Thetford time-list, using standard tools and equipment.

This is to claim any warranty during the warranty period after the purchase date.

In case of any queries on this subject, a Thetford local service representative can be contacted for additional support related to the installation of the product.

5. Designation codes, drawings and models

Each product has a specific identification code, the designation code. The designation code can be found on the data badge. See *Service & questions* for the location of the data badge. The different positions of the code stand for different variations of the toilet. In these instructions, the designation will be used as reference.

Please refer to the designation code explanation in the original Cassette Toilet installation manual.

6. Technical specifications

Table 1: Dimensions, weight and capacity

	S220-S (SK220)			S220-CS (SK220)		
Dimensions	H	W	D	H	W	D
mm	498.4	394	580.3	535	418.5	582.5
Empty weight	5.3 kg			6.2 kg		
Capacity urine tank	7.5 L					
Capacity solids bucket	7.1 L					

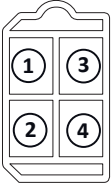
Electrical specifications



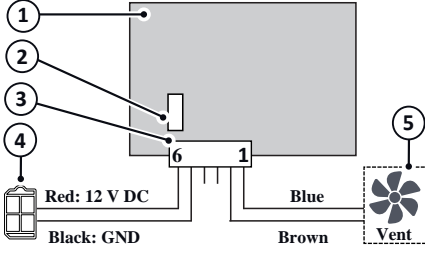
The 12V DC supply is only needed when installing the Ventilator Kit.

Power requirement	12V DC*
Fuse	1A on the VENT control panel PCB
DC power connectors	Toilet: TYCO/AMP 180901 or equivalent Supply cable counterpart: TYCO/AMP 180190

Layout of the DC power connectors

	<ol style="list-style-type: none"> 1. + 12 V DC (Red) 2. GND (Black) 3. not used (Purple) 4. not used (Grey)
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Wiring diagram

	<ol style="list-style-type: none"> 1. S220 Vent Control PCB 2. Fuse, 1 A 3. 6-pole connector on PCB 4. Power supply plug 5. Optional Ventilator kit <p>6-Pole connector layout</p> <ol style="list-style-type: none"> 1. Ventilator 0 to 12 V DC (Blue) 2. Ventilator ground (Brown) 3. not used 4. not used 5. GND (Black) 6. + 12 V DC (Red)
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7. Before installation

About the SK220 Separation Toilet - Kit

This kit is designed to convert an existing installation of a C223-S or C223-CS into the functionality of a S220-S or S220-CS separation toilet.



The C220 series is fixed on the bottom with 4 screws. The C223-S is attached to the rear wall with 3 screws. The C223-CS uses a bracket to hook it to the rear wall. If the situation and installation allow it, then the conversion might be done easier if the toilet can be temporarily uninstalled and put on a bench.

Content of the box

For the separation toilet-kit, check the content of the box:

- SK220 Separation Toilet - Kit
- User manual
- Installation manual

Gather the required tools:

- Stanley knife
- Philips screwdriver no.2



If something is missing from the box, please contact your dealer.



SK220 instruction video

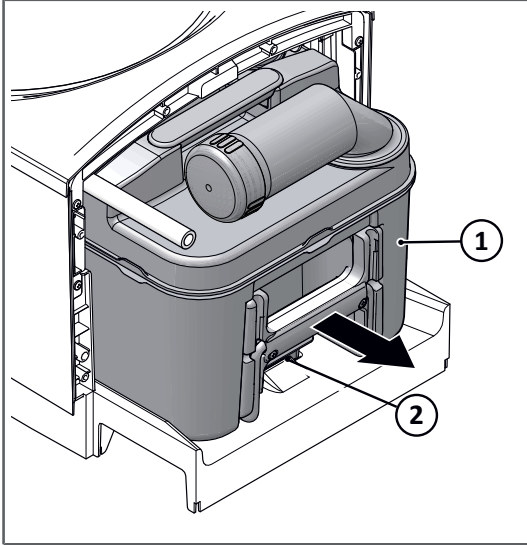


Removal of toilet components



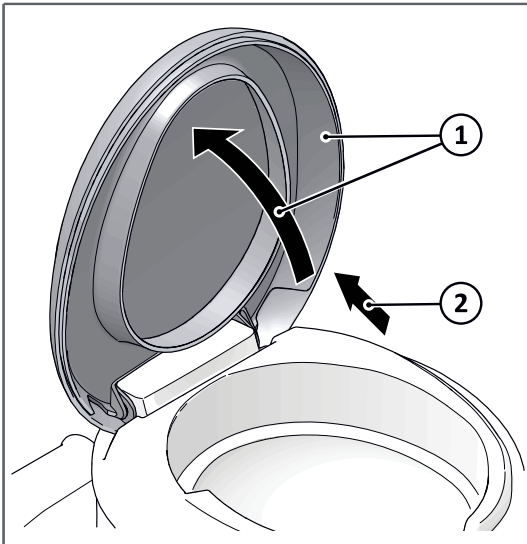
Disconnect and empty the water supply of the RV to avoid any spillage and potential damage.

Waste holding tank



- From the back of the toilet, lift the tank lock clip (2) and carefully slide out the existing waste holding tank (1)

Seat and cover

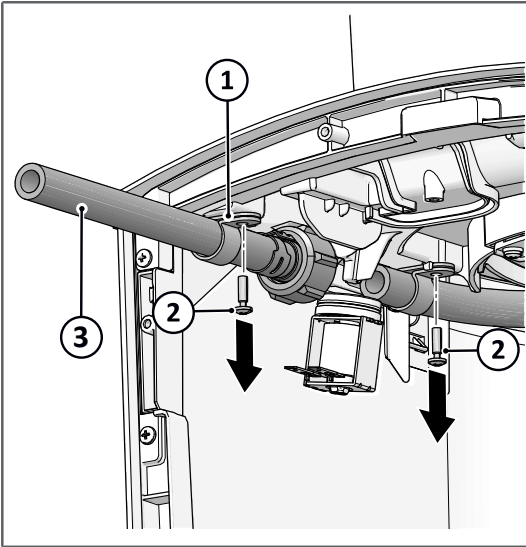


- Open the seat and cover (1)
- Pull one side of the seat and cover outward and then simultaneously pull it upward (2)



Use of a slotted screwdriver can ease unhooking the hinge. Be careful not to damage anything.

Water hose assembly

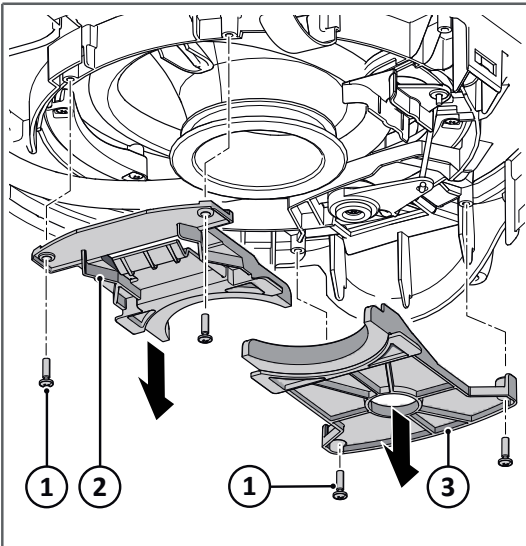


- Disconnect the two wire leads from the electric valve
- Remove the two screws (2), holding the two fastener clips (1) for the hose-assembly
- Detach the water supply hose by loosen the nut
- Close the water supply of the vehicle by plugging the hose (3) with the plug and the clamp



Risk of water spillage. Use a cloth or towel to avoid any potential spilling and damage.

Front and back bowl retainer brackets

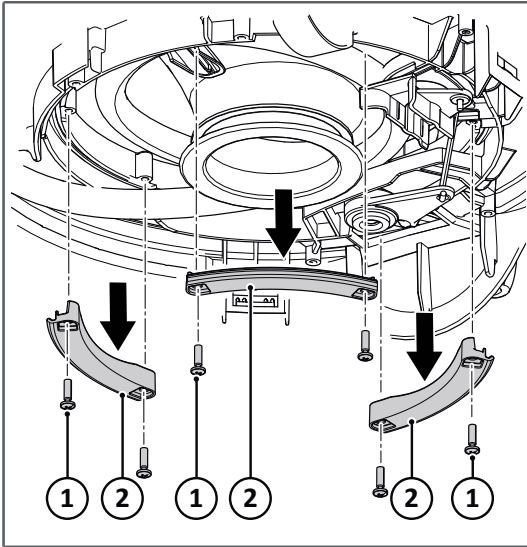


- Remove the 4 screws (1) that hold the retainer brackets (2)(3) and take the retainer brackets out



These will not be used after the conversion.

Toilet bowl retainer guides

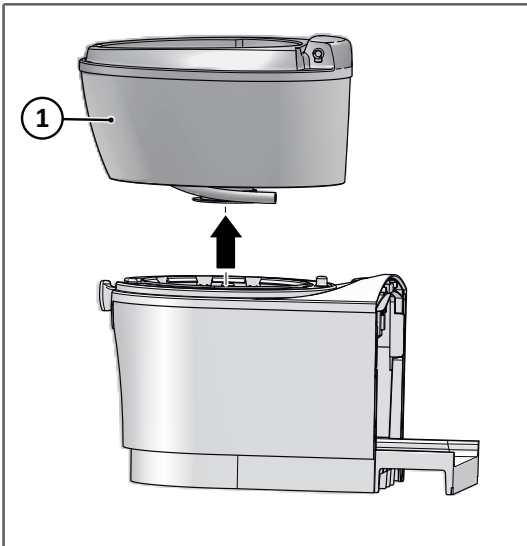


- Remove the 3 half-moon shaped retainer guides (2) by unscrewing the 2 screws each (1) and take them out



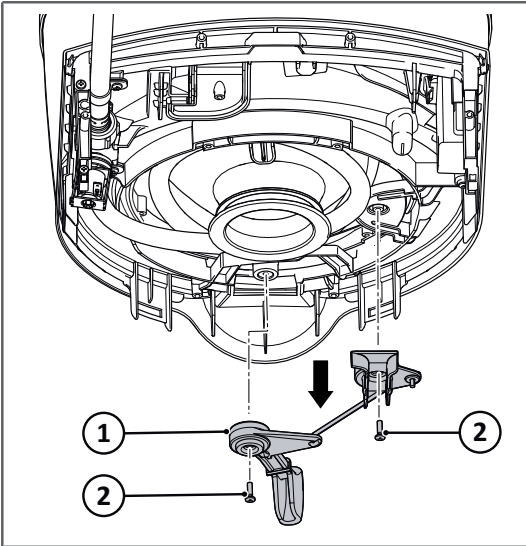
Preserve these parts, they are needed later.

Toilet bowl



- Lift the bowl- and hose assembly (1) carefully from the base

Waste tank blade-control assembly



- Take out the 2 screws (2) and remove the waste-tank blade control mechanism (1)



This can be done either from the bottom, or via access from the top of the toilet base.



In case there is a shower installation present, it is advised to leave the handle part in place.

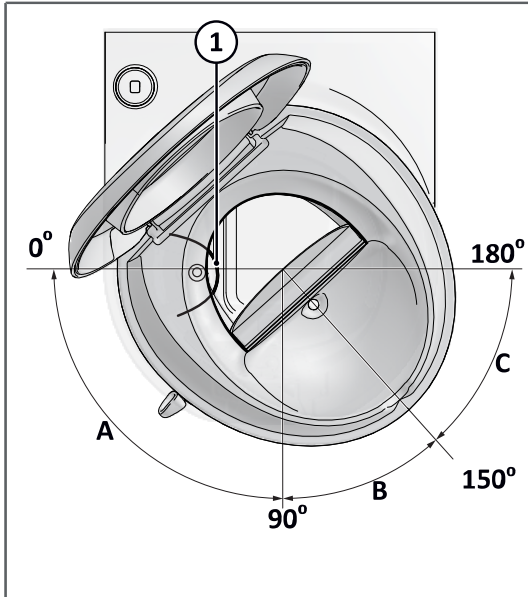
8. Installation



Read the applicable instructions in chapter *Safety* first.

Place Separation Toilet Kit components

Cutting decision

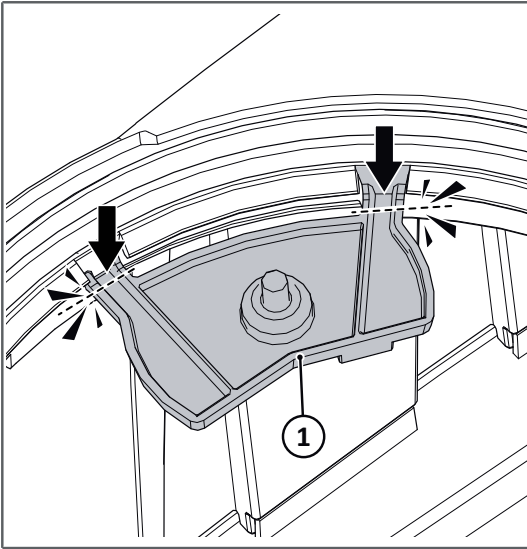


To determine whether cutting the saddle support (1) is necessary, check if the saddle support is visible under the solids-valve.

In the picture the bowl is turned to 150°.

1. If the bowl is turned counter clockwise and positioned between 0° and 90° (segment A), no cut is necessary
2. If the bowl is turned counter clockwise and positioned between 90° and 150° (segment B), cutting can be considered
3. If the bowl is turned counter clockwise and positioned between 150° and 180° (segment C), cutting is necessary

Cutting

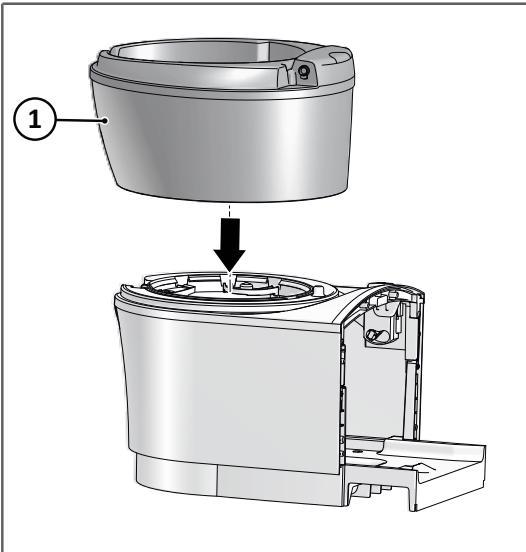


- Cutting must be done at the dashed lines indicated by the arrows



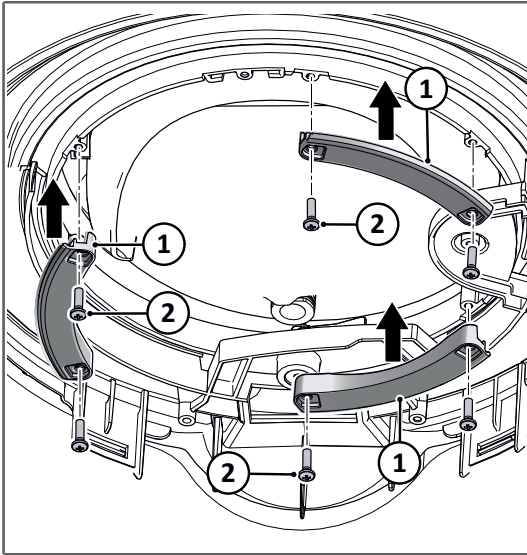
If the saddle is cut, the toilet cannot be converted back to the cassette toilet functionality.

New bowl



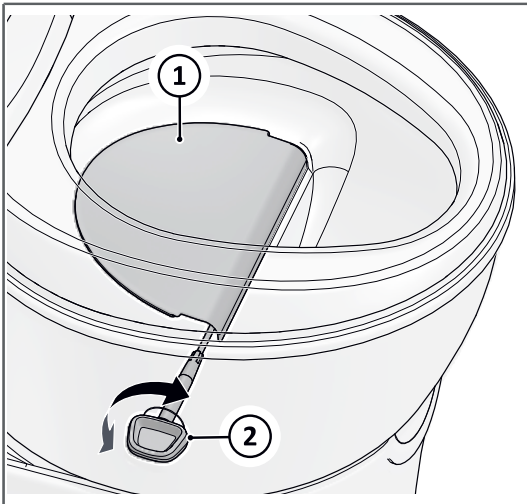
- Take the bowl from the SK220 Separation Toilet Kit and place it on top of the base

Toilet bowl retainer guides



- Refit the 3 retainer brackets and tighten the screws

Solids valve control

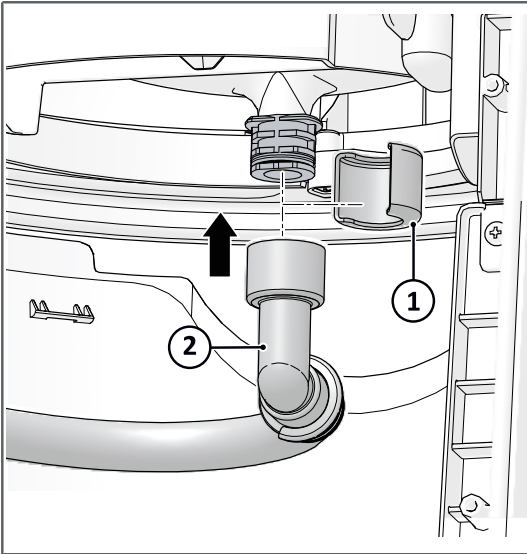


- Insert the solid valve (1) the bowl
- Ensure the valve is in the closed position
- Slide the solid valve control handle (2) into the designated hole, without applying excessive force.
- Find the full insertion position by rotating the valve handle a few degrees to the left or right



The solid valve control handle can be placed on either side of the bowl. The left hole is covered by a removable cap.

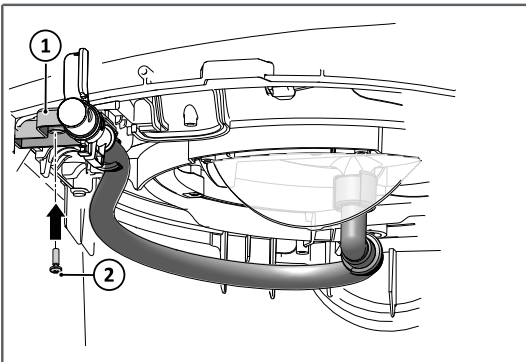
Hose assembly



Connect the urine hose assembly to the bowl.

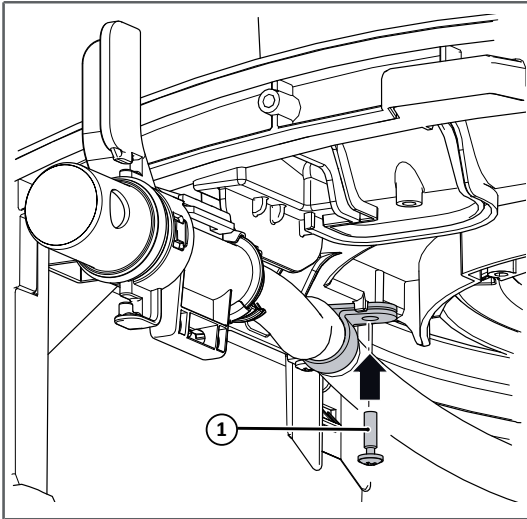
- Remove the mounting clip (1) from the urine hose assembly
- Slide the hose (2) over the bowl connection
- Replace the mount-clip (1) to secure the hose assembly in place

Valve-holder bracket



- Mount the bracket (1) for the valve-mount in the correct position and secure it with the screw (2)

Hose support

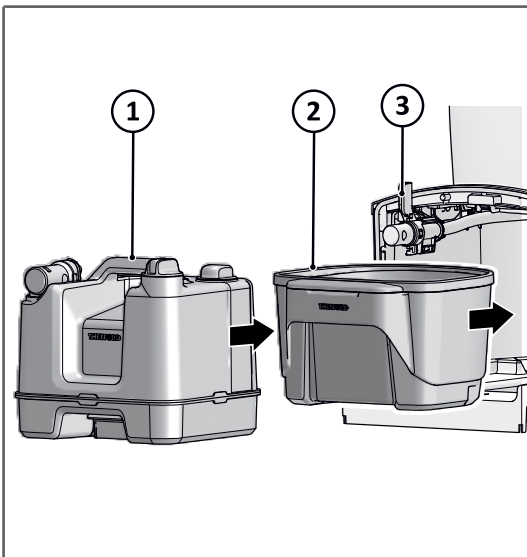


- Use one of the leftover clamps and screws (1) to mount the hose in the designated position



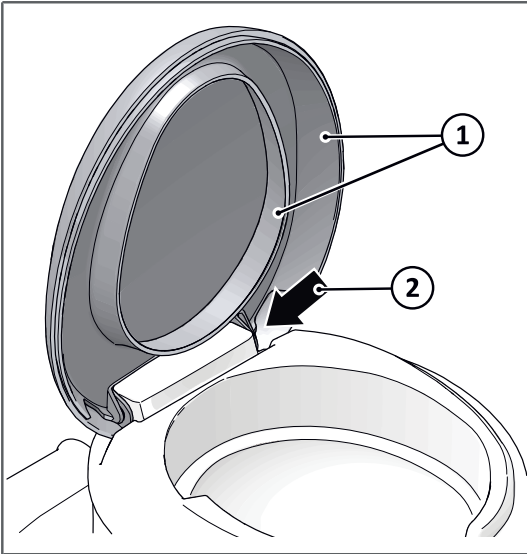
Depending on the most used orientations of the bowl in your situation, it may be needed to use a different position for the hose-support (1). By turning the bowl between the two common positions for your installation, you are able to find the best spot. The hose must never end up above the solids-bucket.

Solids bucket and urine tank



- Slide in the solids bucket (2) first
- Slide in the urine tank (1) next
- Turn the urine valve handle (3) clock-wise to the horizontal position, to secure the connection and open the valve

Toilet seat and cover



- Take the seat and cover together (1)
- Mount the combination on the toilet by hooking in one side first
- Pull sideways, close to the hinge-point on the other side, hooking the other side in (2)



The seat and cover can be placed back on the toilet one by one.

9. After installation



Read the applicable instructions in chapter *Safety* first.

Visual and functional checks

Check if:

- All packaging materials have been removed.
- If you have removed the toilet before the conversion:
 - Ensure that the wall seal is positioned correctly.
 - Ensure all fasteners are tightened with the correct amount of torque. Read the applicable instruction in chapter *Installation*

Ensure that the wall seal is positioned correctly.

- There are no leaks from the toilet bowl to the urine tank.
- The urine-holding tank and solids bucket can be removed and placed back.
- The service door opens and closes properly.
- The service door is waterproof after installation.

10. Service & questions



Read the applicable instructions in chapter *Safety* first.

Service



All servicing must be carried out by an approved competent person.

Questions

If you have questions about your product, parts, accessories or authorised services visit www.thetford.com.

If you contact an authorised local Service Centre in your country, provide the details of the model and serial number plus the date of purchase. The data badge can be found on the base of the toilet and underneath the urine tank.



Please note that the SK220 Separation Toilet Kit does not contain a new label. The existing label for the C220 series remains on the appliance. The label on the bottom of the urine tank indicates it is from a separation toilet and can be used when contacting your dealer or customer service.

Toilet label

Urine tank label



Warranty

For our warranty clause, please refer to the conditions mentioned on www.thetford.com.

Declaration of Conformity

Thetford hereby declares that this product is in compliance with the essential requirements and other relevant provisions of the applicable Directives and Standards. A copy of the Declaration of Conformity can be found at www.thetford.com.

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