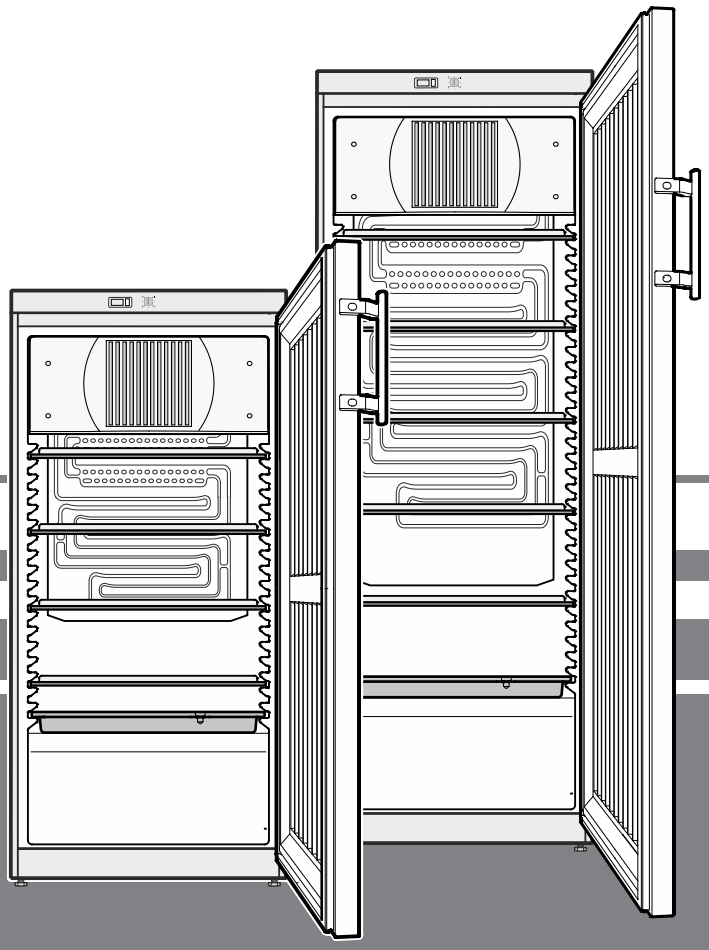
Original operating instructions

Refrigerator with explosion-proof interior container

Read the operating instructions before switching on for the first time



LKexv 2600
LKexv 3600
LKexv 5400

7083 099-02

LIEBHERR

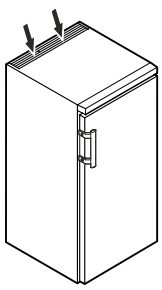
Content

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Priority of warnings

⚠ **DANGER**	identifies a situation involving direct danger which, if not obviated, may result in death or severe bodily injury.
⚠ **WARNING**	identifies a dangerous situation which, if not obviated, may result in death or severe bodily injury.
⚠ **CAUTION**	identifies a dangerous situation which, if not obviated, may result in minor or medium bodily injury.
NOTICE	identifies a dangerous situation which, if not obviated, may result in damage to property.
Note	identifies useful information and tips.

Safety instructions and warnings



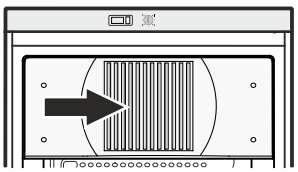
- **WARNING:** do not seal ventilation openings on the appliance housing or enclosure.
- **WARNING:** only use the mechanical devices or other aids recommended by the manufacturer to help speed up the defrosting process.
- **WARNING:** do not damage the refrigerant circuit.
- **WARNING:** do not use any electrical devices in the refrigerator compartment which do not comply with the design recommended by the manufacturer.
- **WARNING:** the mains cable must not be damaged while installing the appliance.
- **WARNING:** multi-sockets or distributor strips and other electronic devices (such as halogen transformers) must not be positioned and operated at the rear of appliances.
- **WARNING:** this appliance must be secured as described in the operating instructions to rule out any potential risks due to its instability.
- To prevent injury and damage to property, the appliance should only be installed by two people.
- After unpacking it, check the appliance for signs of damage. Contact the supplier if it is damaged. Do not connect the appliance to the mains power supply.
- Avoid prolonged skin contact with cold surfaces (e.g. chilled/frozen products). If necessary, take safety action (e.g. gloves).
- All repairs and work on the appliance may only be carried out by customer service personnel or other trained personnel. The same applies to changing the mains power cable.
- Only carry out repair and other work on the appliance when the mains plug has visibly been disconnected.
- Only install, connect and dispose of the appliance as described in these operating instructions.
- In the event of a fault, pull out the plug or switch off the fuse.
- When disconnecting the appliance from the mains, pull on the plug. Do not pull on the cable.
- Do not allow naked flames or ignition sources to enter the appliance.

⚠ **WARNING**

Danger of sparks produced by friction due to dust on the fan blades.

Do not store dusty objects in the appliance.

Clean the ventilation slots on the recirculated air fan every month using a vacuum cleaner.



Symbols on the appliance

	The symbol can be located on the compressor. It refers to the oil in the compressor and indicates the following danger: swallowing or inhaling can be fatal. This is only relevant for recycling. There is no danger in normal operation.
	Warning about inflammable substances.
	A sticker to this effect may be applied to the rear of the appliance. It refers to the foampadded panels in the door and/or the housing. This is only relevant for recycling. Do not remove the sticker.

Intended use

This appliance has an interior free of ignition sources for professional use and is suitable for storing highly inflammable products in sealed containers at temperatures between 3°C and 16°C.

The interior is licensed as a Zone 2 hazardous area under 2014/34/EU (ATEX Directive).

Typical products for storage include research samples, reagents, laboratory inventory, etc. which are classed in explosion group IIB+H2 and temperature class T6 under 2014/34/EU (ATEX Directive).

The explosion group is shown on the safety data sheet of the product for storage. If you are uncertain, contact the supplier of the product.

For the storage of valuable or temperature-sensitive substances or products the use of an independent, constantly monitoring alarm system is necessary.

This alarm system must be designed so that each alarm status is detected immediately by an authorised person who can then take appropriate action.

Foreseeable incorrect use

Do not use the appliance for the following applications:

- Storage and cooling of medication, chemically unstable substances, blood, bodily fluids, cell tissue, liquids or gases for the purposes of infusion, application or insertion into the human body.
- Use in potentially explosive atmospheres.
- Use outdoors or in areas where it is exposed to splash water or damp conditions.

Incorrect use of the appliance will result in damaging or spoiling the goods stored in it.

Declaration of conformity

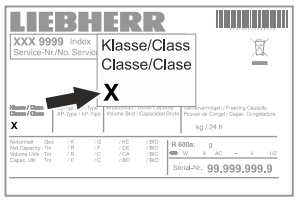
The refrigerant circuit has been tested for leaks. The appliance complies with the relevant safety regulations and EU Directives 2006/42/EG, 2014/30/EU, 2009/125/EG and 2011/65/EU.

Noise emissions from the appliance

The noise level while the appliance is operating is below 70 dB(A) (relative noise level 1 pW).

Climate rating

The climate rating indicates at what room temperature the appliance may be operated to achieve full cooling capacity and what the maximum humidity level in the area around the appliance may be to ensure that no condensation forms on the exterior housing.

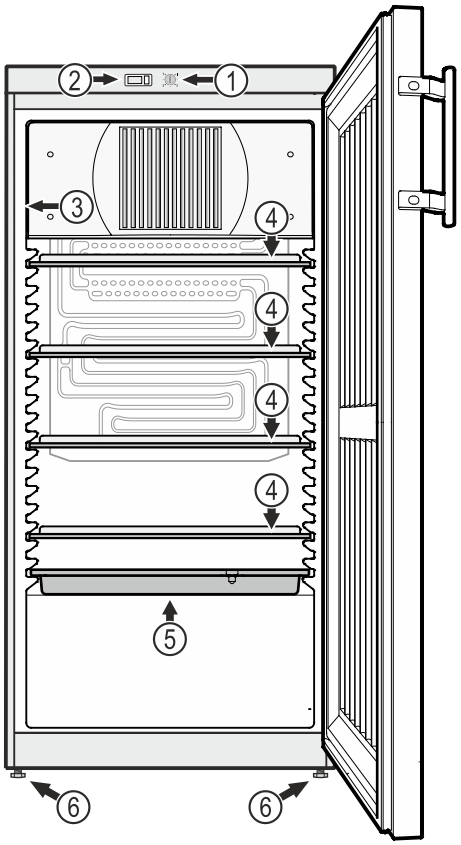


The climate rating is indicated on the type plate.

Climate rating	Max. room temperature	Max. relative humidity
3	25 °C	60%
4	30 °C	55%
5	40 °C	40%
7	35 °C	75%

The minimum room temperature at the place of installation is 10°C.

Description of the appliance



(1) Temperature control
(2) Temperature display
(3) Type plate
(4) Adjustable shelves
(5) Defrost water collection tray
(6) Adjustable-height feet

NOTICE

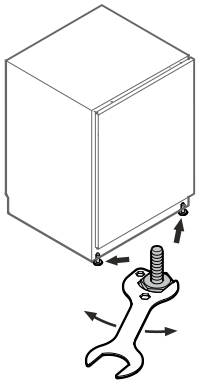
The maximum load per shelf is 40 kg.

Setting up

- Do not place the appliance in direct sunlight or near radiators and similar sources of heat.
- Standard EN 378 specifies that the room in which you install your appliance must have a volume of 1 m^3 per 8 g of R 600a refrigerant used in the appliance, so as to avoid the formation of inflammable gas/air mixtures in the room where the appliance is located in the event of a leak in the refrigerant circuit. The quantity of refrigerant used in your appliance is indicated on the type plate on the inside of the appliance.
- Always install the appliance directly against the wall.

Levelling the appliance

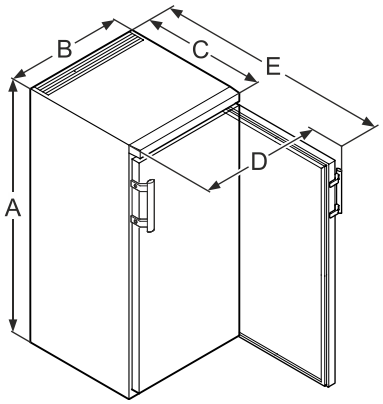
Compensate floor unevenness using the adjustable feet.



NOTICE

The appliance must be aligned horizontally and vertically. If the appliance is not level, the main body of the appliance can be deformed and the door will not close properly.

Appliance dimensions (mm)



	A	B	C	D	E
LKexv 2600	1250	600	610	650	1180
LKexv 3600	1640	600	610	650	1180
LKexv 5400	1640	750	730	850	1410

Electrical connection

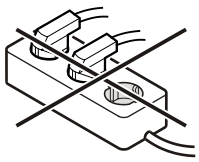
Only operate the appliance with **alternating current (AC)**.

The permissible voltage and frequency are indicated on the type plate. The position of the type plate is shown in the section entitled **Description of the appliance**.

The socket must be properly earthed and protected by a fuse. The tripping current of the fuse must be between 10 A and 16 A.

The socket must not be situated behind the appliance and must be easily accessible.

Do not connect the appliance using an extension cable or extension socket.



Do not use stand-alone inverters (conversion of direct current to alternating current/three-phase current) or energy-saving plugs. Risk of damage to the electronic control system!

Switching the appliance on and off

You are recommended to clean the interior of the appliance before switching it on for the first time (see **Cleaning**).

Switching the appliance on

Connect the appliance to the mains - the appliance is switched on.

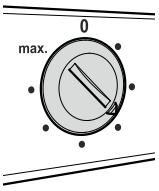
Switching the appliance off

Pull out the mains plug or set the temperature control to **0**.

Note

When the temperature control is turned to "0", the refrigeration system is switched off, but the appliance is not completely disconnected from the mains.

Setting the temperature



Set the temperature inside the appliance using the temperature control.

The nearer the temperature control is to the **max.** setting, the colder the interior temperature. Set the control between "**0**" and "**max.**" as required.

Note

The temperature in the warmest area of the interior may be higher than the temperature setting.

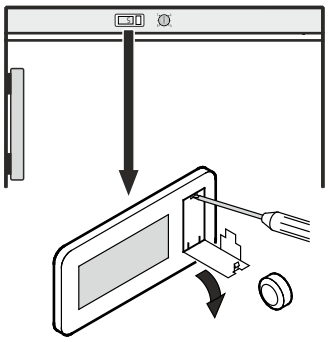
If the door is left open for a lengthy period, the temperature in the appliance's compartments may rise dramatically.

Temperature display

The temperature display is powered by a battery which is available from your specialist dealer.

Changing the battery

- Open the battery compartment using a small screwdriver.
- Replace the battery.
- Close the battery compartment.



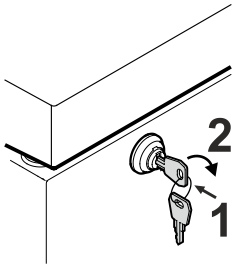
If **Er** or **HH** appears in the display, the appliance has a fault. Consult the customer service department indicating the fault number displayed.

Safety lock

The lock in the appliance door is equipped with a safety mechanism.

Locking the appliance

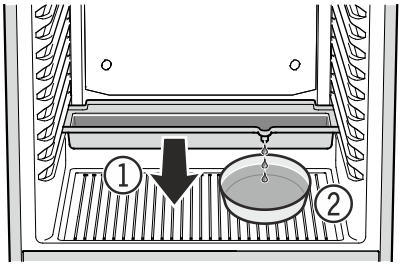
- Insert the key as shown by arrow **1**.
- Turn the key 90°.



To unlock the appliance, the same procedure must be repeated in the same order.

Defrosting

The refrigerator compartment defrosts automatically.



① The defrost water drains into a tray situated below the evaporator. This tray must be emptied from time to time.

Pull the tray out towards you and empty.

② To avoid having to empty the defrost water collection tray frequently, you can place a container under the drain opening in the tray.

The defrost water collection tray may only be inserted on the lowest support rib.

When operating at a very cold thermostat setting, the interior rear wall may ice up.

In this case, the appliance must be defrosted manually.

• Pull out the mains plug!

- Transfer items to other appliances.
- Leave the door of the appliance open while defrosting. Mop up the remaining water with a cloth and clean the appliance.

Cleaning

⚠ WARNING

Before cleaning, always disconnect the appliance from the mains. Pull out the plug or switch off the fuse.

⚠ WARNING

Risk of electrostatic discharge.
Only clean plastic parts with a damp cloth!

⚠ CAUTION

Risk of damage to the appliance components and risk of injury due to hot steam.

Do not use steam cleaning equipment to clean the appliance.

NOTICE

All surfaces in the appliance must be cleaned at regular intervals!

- Clean the inside, equipment parts and outer walls with lukewarm water and a little detergent. Do not use chemical solvents or any cleaning agents containing sand or acid.
- To avoid short-circuits, ensure no cleaning water penetrates into the electrical components when cleaning the appliance.
- Dry all parts well with a cloth.
- The dust should be removed from the refrigeration unit and heat exchanger - metal grid at the back of the appliance - once a year.
- Do not damage or remove the type plate on the inside of the appliance. It is very important for servicing purposes.

Malfunctions

You may be able to rectify the following faults by checking the possible causes yourself:

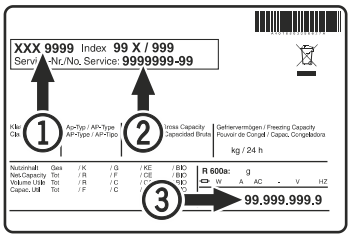
- **Appliance does not function:**

– Is the appliance switched on?
– Is the plug correctly fitted in the mains socket?
– Is the fuse intact?

- **The temperature is not low enough:**

– Is the temperature setting correct (see "Setting the temperature")?
– Does the separately installed thermometer show the correct reading?
– Is the ventilation system working properly?
– Is the appliance set up too close to a heat source?

If none of the above causes apply and you cannot rectify the fault yourself, contact the nearest customer service department stating the type designation ①, service number ② and appliance number ③ as indicated on the type plate.



The position of the type plate is shown in the section entitled **Description of the appliance**.

Disposal notes



The appliance contains reusable materials and should be disposed of properly - not simply with unsorted household refuse. Appliances which are no longer needed must be disposed of in a professional and appropriate way, in accordance with the current local regulations and laws.

Do not damage the refrigerant circuit of an appliance that is no longer needed during its disposal.

This appliance contains inflammable gases in the refrigerant circuit and insulation foam.

Your local council or a waste disposal contractor can provide information about how to dispose of the appliance correctly.

Shutting your appliance down

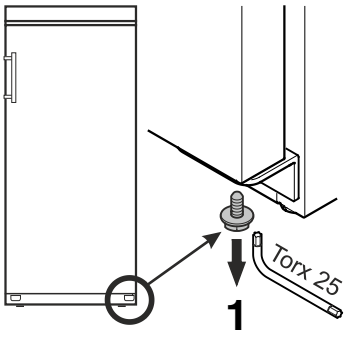
If the appliance is left empty for a lengthy period, it must be switched off, defrosted, cleaned and dried and the door is to be left open to prevent mould formation.

Changing over door hinges

Door hinges should only be changed by a trained expert.

Changing the door hinges must be done by two people.

1. Remove screw from lower hinge bracket.



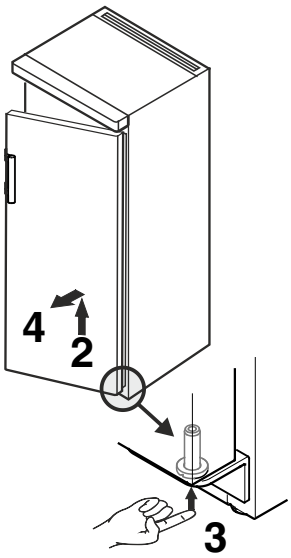
2. Open the door approx. 45° and lift upwards.

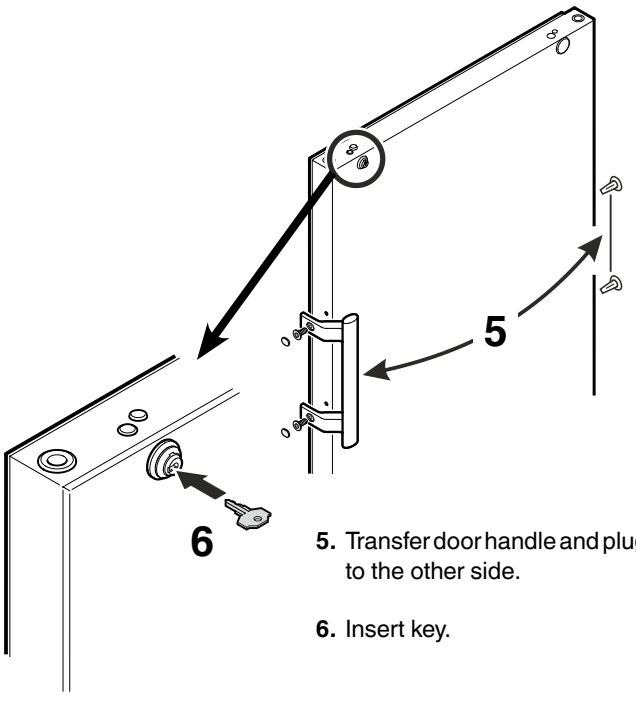
Important

As a result of its heavy weight, the door must be held secure by one person.

3. Push the pin upwards using your fingertip.

4. Pull the door to the front and remove it downwards.



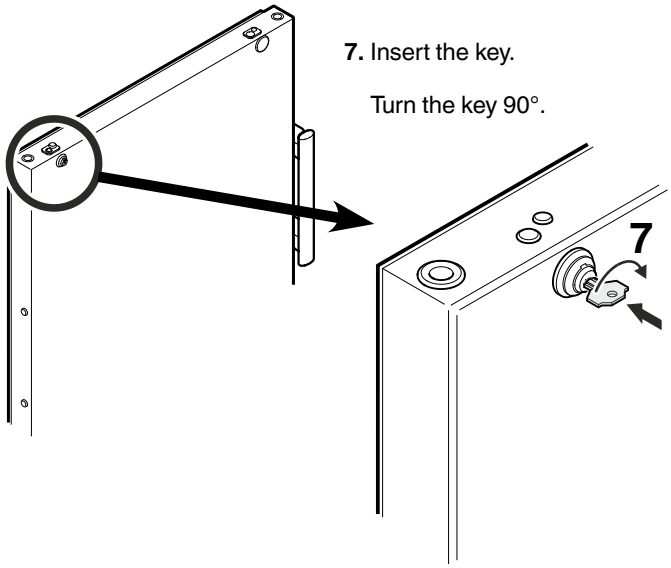


5. Transfer door handle and plugs to the other side.

6. Insert key.

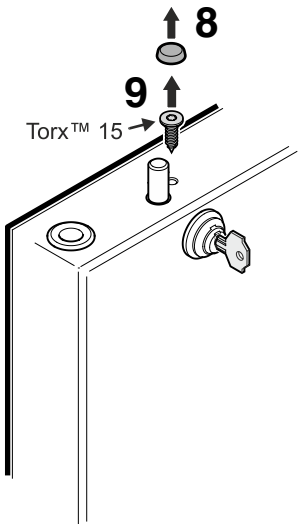
7. Insert the key.

Turn the key 90°.



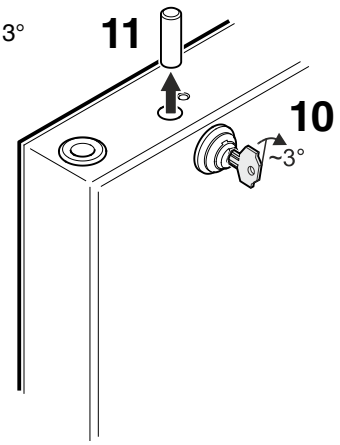
8. Remove cover.

9. Remove screw.

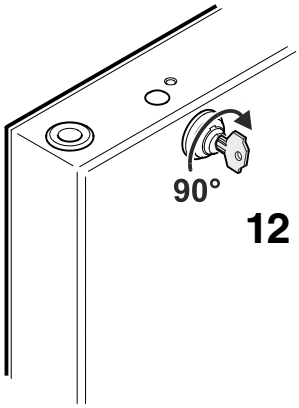


10. Turn the lock approx. 3° clockwise.

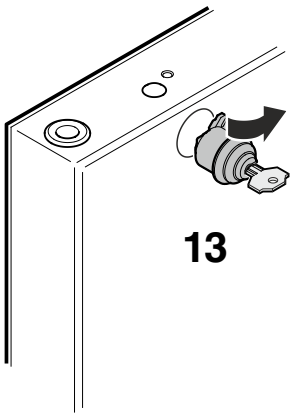
11. Remove pin.



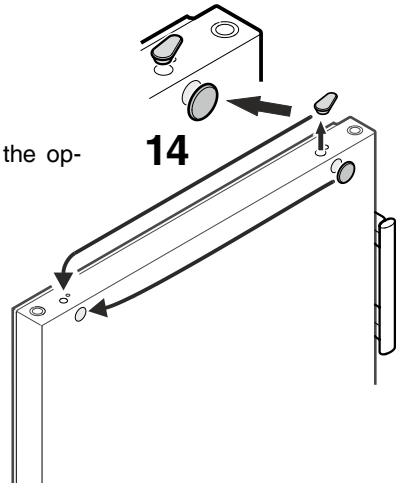
12. Turn the lock 90° clockwise.

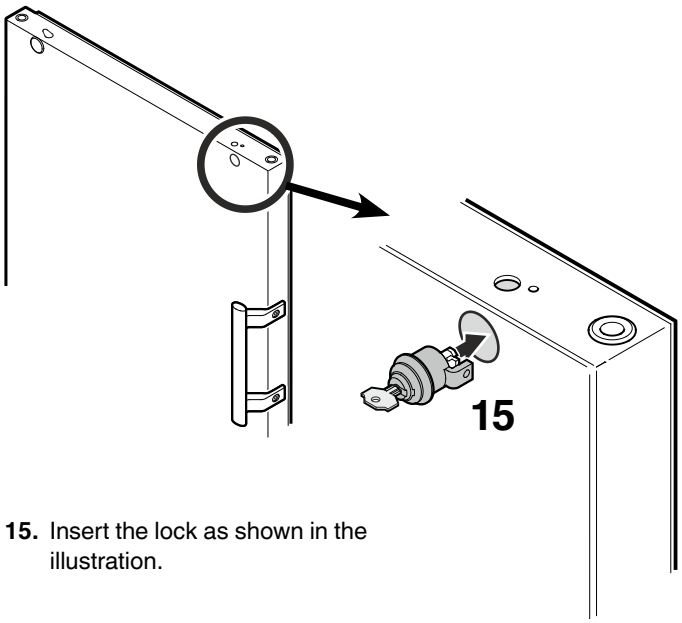


13. Remove lock.



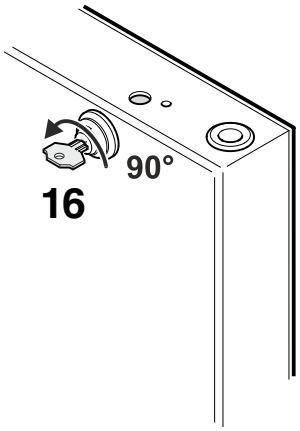
14. Transfer covers to the opposite side.

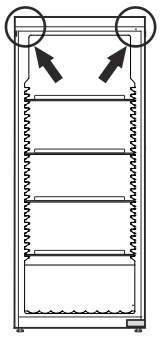


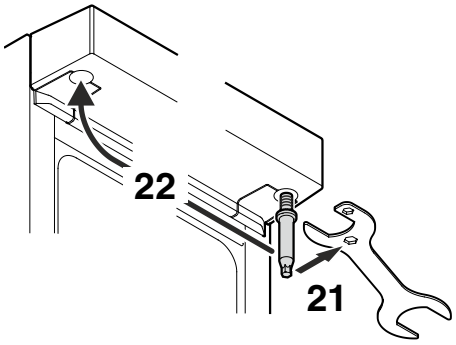


15. Insert the lock as shown in the illustration.

16. Turn back the lock 90° anticlockwise.





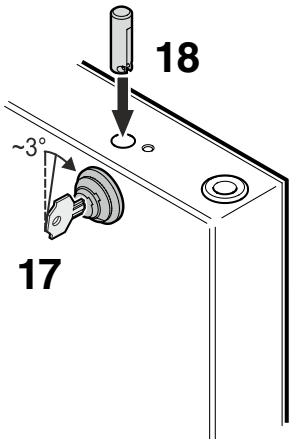


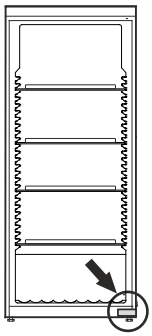
21. Unscrew the pin.
Use the spanner provided.

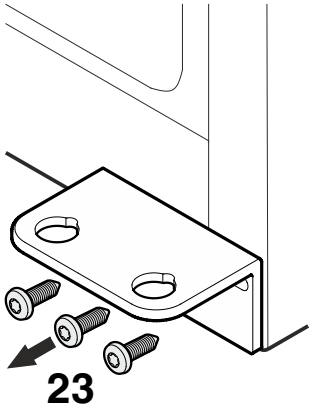
22. Screw in the pin on the opposite side.

17. Turn the lock further - approx. 3° clockwise.

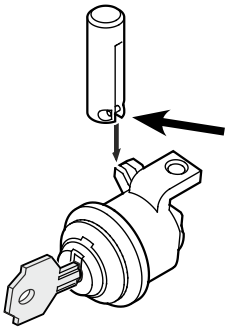
18. Insert pin.



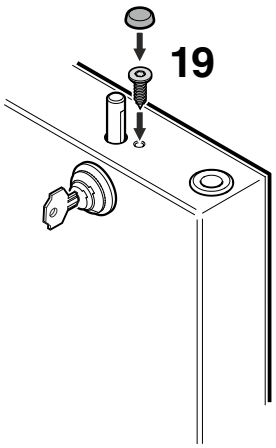




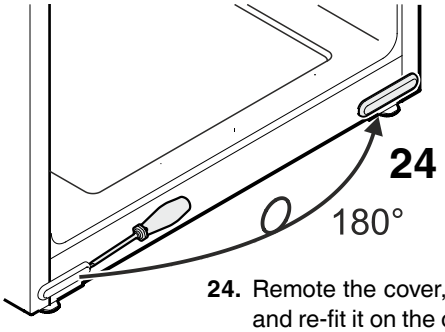
23. Unscrew hinge bracket.



Note on point 18
After insertion, the pin's cross pin must be engaged in the groove of the catch.



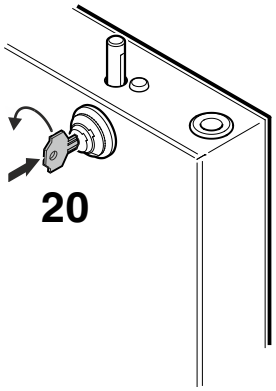
19. Screw in the screw and attach the cover cap.

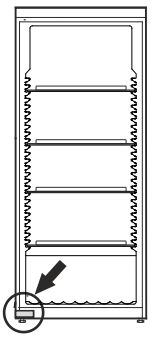


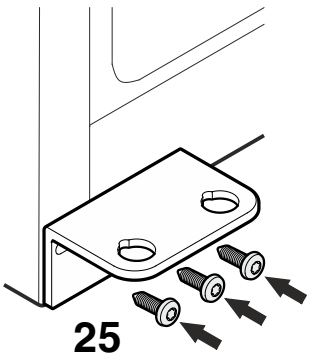
24. Remote the cover, turn it through 180° and re-fit it on the opposite side.

20. Insert the key.

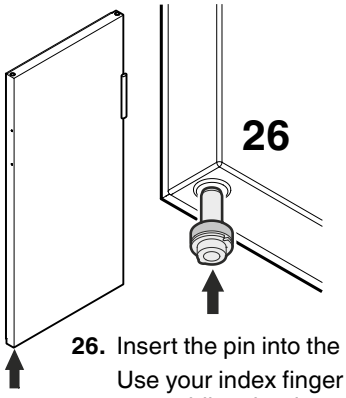
Turn the key 90°.







25. Screw hinge bracket into place.

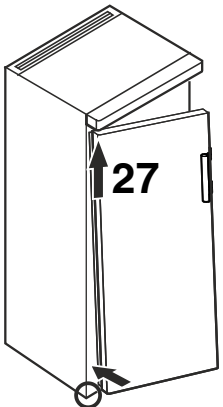


26. Insert the pin into the left-hand door mounting.
Use your index finger to hold the pin while you are assembling the door.

27. Locate the door on the upper pin as shown in the illustration and guide it to the lower hinge bracket.

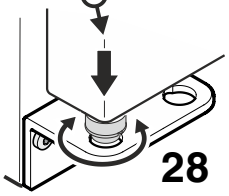
Important

As a result of its heavy weight, the door must be held secure by one person.

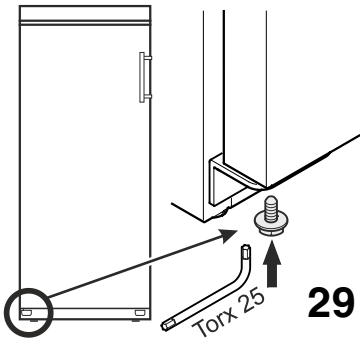


28. Lift the door upwards and turn the pin until it fits into the bore hole of the hinge bracket.

Slowly lower the door downwards. The lower part of the pin must be fully engaged in the bore hole of the hinge bracket.

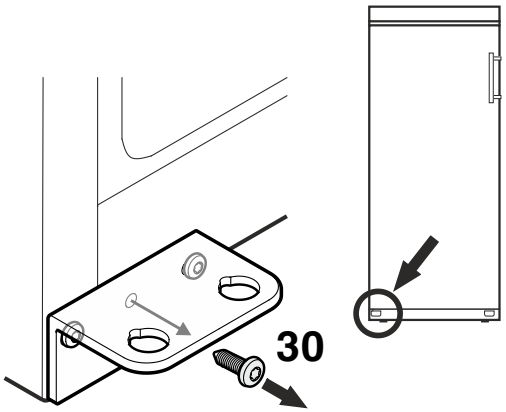


29. Screw the screw into the pin again and tighten.



Adjusting the lateral tilt of the door

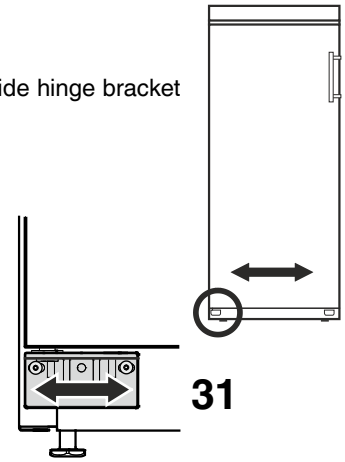
If the door is at an angle, adjust the angle.



30. Remove middle screw from hinge bracket.
This screw is no longer needed.

31. Undo screws and slide hinge bracket to the right or left.

Tighten screws.



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