



Refrigerator N4000 Series

User Manual



DECLARATION OF CONFORMITY

This declaration of conformity is issued under the sole responsibility of:

THETFORD B.V.

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Product Types; Absorption Fridges Model Number/Description; N3000 and N4000 Series

The products mentioned in this declaration are in conformity with;

- ECE Regulation 10

Based upon

Based upon standard(s) EN 50498

- EMC Directive 2014/30/EU

Based upon standard(s) EN 55014-1

EN 55014-2 EN 61000-3-2

EN 61000-3-3

- Low Voltage Directive 2014/35/EU

Based upon standard(s) EN 60335-1

EN 60335-2-24 EN 60335-2-102

- Gas Appliance Directive 2009/142/EC

(until 20 April 2018)

- Gas Appliance Regulation (EU) 2016/426 (from 21 April 2018) Based upon standard(s) EN 732

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Name

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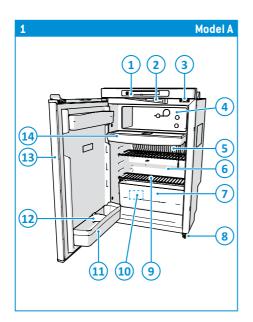
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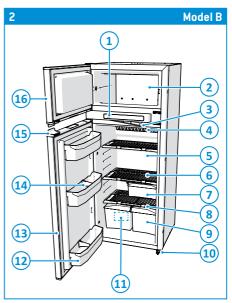
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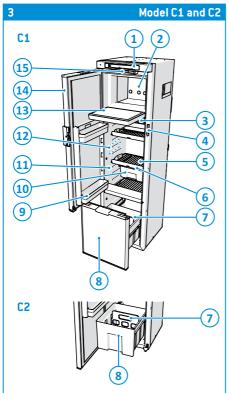
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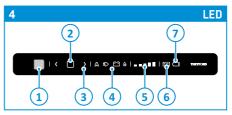
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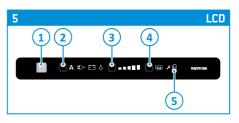
Declaration of conformity N3000 and N4000 Series

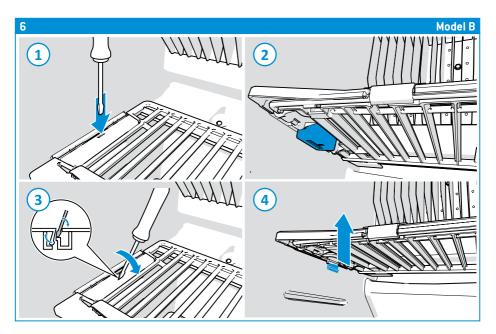


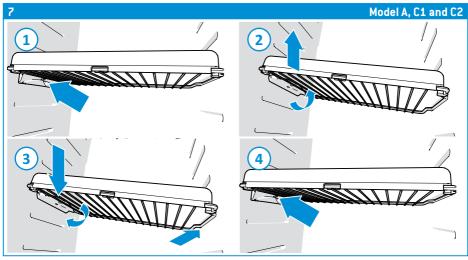


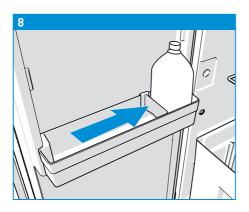


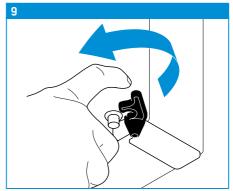


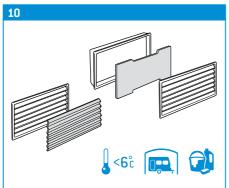


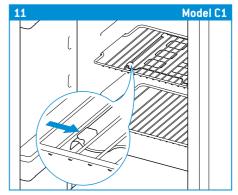


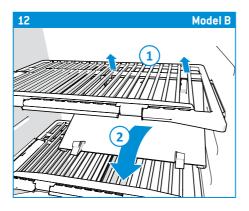


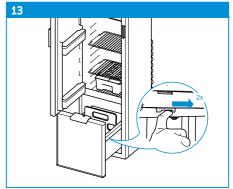


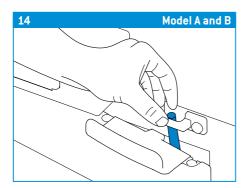


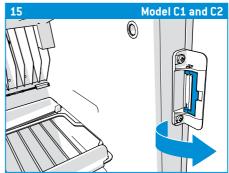


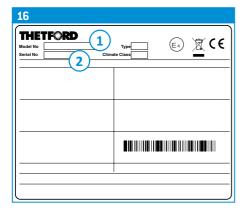












EN Original User Manual

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1. Introduction

This is the user manual for your Thetford refrigerator. Read the safety instructions and information on use and maintenance of the refrigerator carefully before continuing. This will enable you to use the refrigerator safely and efficiently. Retain this manual for future reference.

For the latest version of this manual, please visit www.thetford.com.

2. Symbols

Key to symbols:



Warning. Risk of serious injury and/or damage.



Caution. Risk of injury and/or damage.



Attention. Important information.



Note. Information.

3. Safety



This appliance may be used by children aged 8 years or older and persons with reduced physical, sensory or mental capabilities and/or lack of experience and knowledge only if they are supervised or have been given instructions on the safe use of this appliance and understand the potential hazards.



Keep children younger than 8 years away from the appliance, except under constant supervision.



Do not allow children to play with the appliance. Children can become trapped and possibly suffocate.



Do not allow children to clean or maintain this equipment unattended.



Do not use the drawer as a step or ladder.



Use only parts supplied by the manufacturer.



Do not change or adjust anything on the appliance, unless the change is authorised by the manufacturer or its representative.



While driving, it is only allowed to run your refrigerator on gas if the vehicle is equipped with a safety closing device according to the local regulations in force.



If you smell gas: Directly close the valve of the gas bottle, extinguish any naked flames, do not switch on any electrical devices or lighting, open the windows and leave the room. Then contact the Customer Service Department in your country or holiday location.



If you smell a pungent odour from the cooling system: Switch off the refrigerator, extinguish any naked flames, provide sufficient ventilation through vents, windows and doors. Then contact the Customer Service Department in your country or holiday location.



Make sure the awning is well air ventilated, when refrigerator vents are located inside awning.



Do not block the air vents.



Do not use the refrigerator on gas when vehicle is located indoors.



If the supply cord is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons in order to avoid a hazard.



Do not store explosive substances such as aerosol cans with a flammable propellant in this appliance.



When positioning the appliance, ensure the supply cord is not trapped or damaged.



Do not locate multiple portable socket-outlets or portable power supplies at the rear of the appliance.



A filter must be used when operating on Liquefied Petroleum Gas (LPG). The filter must be prescribed by a qualified technical person.



Never open or damage the cooling system at the back of the refrigerator. The cooling system is pressurised and contains substances that can be harmful to your health.



Make sure that installation, electrical connection and maintenance of the gas system will be done by a qualified technical person, according to the national legislation in force.



Let a qualified person perform a yearly inspection of the gas system, the burner area and the combustion seal to repair any damages or malfunctions.



Never attempt to repair parts of the gas system, the gas flue or electrical components by yourself. The repairs may only be done by a qualified technician. Please contact the Customer Service Department for further support and addresses.



Never expose the refrigerator to rain.



The refrigerator only runs on liquid gas (propane, butane or a mixture of these boths). It does not run on natural gas or coal gas.



Only use gas which is mentioned on the serial label inside the refrigerator.



 $\label{lem:make} \mbox{Make sure the type and position of the gas bottle meets the latest technical regulations.}$



Change the gas bottle in open air and out of reach of any possible source of ignition.



Never obstruct the ventilation openings in the gas bottle storage location.



Keep flammable material away from the refrigerator.



Do not use gas to power your refrigerator in the vicinity of petrol stations.



Respect the expiry date printed on the packaging of food.



Defrosting, cleaning or maintenance of the refrigerator can shorten the preservability of food.

- Suitable for camping use.
- Appliances are connected to more than one source of energy.
- As the constant regulation of temperature can not be guaranteed, the refrigerator might not be suitable for proper storage of medications. Refer to the instructions included with the medications.
- Only store food items in the refrigerator which are wrapped or packed.

4. Main components

See images 1 to 5 and for a visual reference.

(1.) Model A	(2.) Model B	(3.) Model C1 & C2
 LED control panel or LCD touchscreen Battery pack hatch Door lock Frozen food compartment Cooling fins Fresh food compartment Vegetable bin Security lock (not present on all refrigerators) Storage shelves Serial ID label Door bins Bottle retainer Refrigerator door Frozen food compartment door 	(2.) Model B 1. LED control panel or LCD touchscreen 2. Frozen food compartment 3. Battery pack hatch 4. Cooling fins 5. Fresh food compartment 6. Storage shelves 7. Slide-out box (optional) 8. Shelf food retainer 9. Vegetable bin 10. Security lock (not present on all refrigerators) 11. Serial ID label 12. Door bins 13. Bottle retainer 14. Refrigerator door 15. Door lock 16. Frozen food compartment	 LED control panel or LCD touchscreen Frozen food compartment Cooling fins Door lock Storage shelves Shelf food retainer (optional) Drawer divider (optional) Drawer for bottles and vegetables Door bins Slide-out box (optional) Fresh food compartment Serial ID label Frozen food compartment door Refrigerator door
	door	15. Battery pack hatch

(4.) LED control panel

- 1. On/off button
- 2. Confirmation button
- 3. Arrow buttons
- 4. Energy sources
- 5. Cooling level indicators
- 6. Anti-condensation
- 7. Battery empty (optional)

(5.) LCD touchscreen

- 1. On/off button
- 2. Energy source button
- 3. Cooling level button
- 4. Anti-condensation button
- 5. Error code



The refrigerator has a CI-bus option and can be connected to a compatible central vehicle display (if available and installed by the RV manufacturer).

5. Set up your refrigerator

Before using the appliance:

- 1. Ensure that the DC/AC electricity supply is connected and turned on.
- 2. Ensure that the gas supply is connected and turned on.





See images 4 and 5 for a visual reference.

Switch on (LED)

 Push the on/off button (1) and hold it for 1 second. The light in the on/off button turns blue and the last selected settings will light up.

Switch on (LCD)

Push the on/off button (1). The on/off button turns blue and the last selected settings are shown on the display.

Select energy source (LED)

Select energy source (LCD)



Allways use the gas connection or 230V to start up and cool.

- Push the confirmation button (2) and hold it for 2 seconds until the energy source symbols start to blink.
- Push the arrow buttons until the desired sources is selected. For more information on available sources, see chapter Energy sources.
- Push the confirmation button with quick touch (press and let go) to confirm your selection.



If you do not confirm, after 10 seconds the lights will dim and the selected settings will not be saved

 Push the energy source button (2) several times until the desired source is selected.
 For more information on available sources, see chapter Energy sources.

Select cooling level (LED)

Select cooling level (LCD)



We advise to set the refrigerator on cooling level 3, with an ambient temperature between 15 $^{\circ}$ C and 25 $^{\circ}$ C.

Select cooling level (LED)

- Push the confirmation button (2) and hold it for 2 seconds until the source symbols start to blink.
- **6.** Push the confirmation button again. The cooling level indicators start to blink.
- 7. Push the arrow buttons (3) to select the desired cooling level.
- Push the confirmation button to confirm your selection. Your control panel should now confirm, and turn off, leaving a blue light in the on/off button.



If you do not confirm, after 10 seconds the lights will dim and the selected settings will not be



To improve the cooling performance of your refrigerator in high temperatures, Thetford advises to install the Ventilator Kit. It helps to detract the warm air quicker to the vents. The Ventilator Kit is suitable for all Thetford refrigerators.

6. Energy sources

There are four available functions:



Automatically selects the desired source

■ The control panel shows the A and the best source available.



230V - Mains

This refrigerator is equipped with electronics to ensure optimal cooling performances at all input voltages between 210 V and 250 V.



12V - Battery of the vehicle

- Operating on 12V is only effective while the engine of the vehicle is running.
- The performance of the refrigerator when operating on 12V is dependent on the thickness and length of the wiring and the overall installation of the (towing) vehicle
- In case the refrigerator is installed in a caravan, the refrigerator needs a D+ signal (engine running) from the towing vehicle to operate in DC mode while travelling.
- The Recreational Vehicle manufacturer can choose to shut off the 12V option as an energy source.

Select cooling level (LCD)

 Push the cooling level button (3) (several times) until the desired cooling level is selected.



Gas - Gas connection of a gas bottle

- When using gas, make sure the gas bottle valve is opened.
- Make sure the control panel is powered from the battery or AA batteries (in the case of a stand-alone model).
- When selecting gas, the flame should be ignited within 30 seconds. If the system fails, restart the refrigerator and select the gas source again. For safety reasons it is not possible to ignite the flame within 15 minutes after driving.
- From about 1000m above sea level, problems of a physical nature can occur when lighting the gas. This does not mean that the refrigerator is not working properly.

7. Controlling options

Batteries empty (N4000-E+ series, stand-alone model)

See images 1, 2 and 3 for a visual reference.

Stand alone models can be equipped with a LED+ control panel that is only functional when the control panel is powered. A stand-alone model (installed by the RV manufacturer) is operational using $6 \times 1.5V$ AA/LR6 batteries in the event of no mains or battery.



The refrigerator will run on batteries for approximately 7 days in combination with gas supply.

When the red symbol 'batteries empty' blinks, you must replace the batteries within 24 hours.



Do not use rechargeable batteries for this function of the refrigerator.



If you are not going to use this function for more than two weeks, remove all batteries.

Anti-condensation (model B and C1)

To prevent the control panel from condensation, the anti-condensation function is automatically switched on. Only switch off this function when there is little energy. To switch off the function:

See images 4 and 5 for a visual reference.

LED LCD

- Press the arrow buttons (3) simultaneously and hold them for 2 seconds. The symbol 'anti-condensation off' lights up on the control panel.
- Press the arrow buttons simultaneously and hold them for 2 seconds to switch on the anti-condensation function again.
- Push the button again to switch on the anticondensation function again.

Push the anti-condensation button (4). The

symbol on the control panel will light up.

8. Use of the fresh food compartment

To organise your fresh food compartment as desired, move the storage shelves and door bins in height.



To prevent your refrigerator from ice formation, always cover liquid products, let warm products cool down before placing them and do not open the door any longer than necessaru.



The maximum storage capacity of the drawer is 15kg.

Moving the storage shelves (model B only)

See image 6 for a visual reference.

- Place a tool with a flat end firmly inside the oval opening of the clip (1).
- Hold the block under the clip with your free hand (2).
- Gently move the tool away from the fridge wall (approximately 30 degrees) while keeping its end on the bottom of the oval opening [3].
- After removing the safety block, rotate the clip upwards to release the shelf (4).
- Move the storage shelf to the desired position.
- Rotate the clip downwards until the shelf snaps into place.
- Place the block at bottom of the shelf until you hear a click.

Moving the storage shelves (model A, C1 and C2)

See image 7 for a visual reference.

The shelves of models A, C1 and C2 are secured to prevent inadvertent entrapment and possible suffocation of children.



Do not remove the fixed shelves, so children have no space to be entrapped in the fresh food compartment.

If it is necessary to move a fixed shelf, undo the screws that are placed in the shelf near the shelf clamps.

- Turn the plastic clamps of the storage shelf downwards (1).
- Lift that side a bit (2).
- Move the storage shelf to the desired position.
- Place the right side the corresponding groove and the left side in the clamp (3).
- Turn the plastic clamp upwards (4).
- Replace the screws after you have finished.



Ensure that the door can still be closed after reorganising shelves and bins.

9. Use of the frozen food compartment

 Use the frozen food compartment to store perishable foodstuffs or frozen foods for short periods.



Never keep carbonated liquids in the frozen food compartment.



The frozen food compartment temperature cannot be guaranteed if the refrigerator performs in a vehicle interior temperature below 10°C. Food might defrost.



Never eat ice-cubes or popsicles directly out of the frozen food compartment. This can cause burns

10. While driving



While driving, it is only allowed to run your refrigerator on gas if the vehicle is equipped with a safety closing device according to the local regulations in force.

See image 8 for a visual reference.

- Make sure no products in your refrigerator can move while driving. Secure the bottles in the door and the drawer with the bottle retainer and drawer divider (if present). Secure all food on the storage shelves with the shelf food retainers (if present).
- Close the door.

See image 9 for a visual reference.



When you close and press the door of the refrigerator, the door locks automatically. While driving this door lock also secures the door. Some models have an extra security lock on the bottom of the refrigerator. To be sure the door will not open while driving, push the black security lock over the pin on the door.

11. Winter use

See image 10 for a visual reference.

■ When you are going to use the refrigerator with an outside temperature below 6°C, install a suitable winter cover, as illustrated.



This cover will protect your refrigerator against too cold air and makes sure the refrigerator will still perform optimally.



Make sure you remove the winter cover again once the temperature is above 6°C.

12. Maintenance and cleaning



Before carrying out any kind of maintenance or cleaning on your refrigerator, switch off your refrigerator and disconnect both the AC and DC power sources.

It is important to regularly clean the refrigerator for optimal performance. First remove the shelves, door bins, slide-out box and the drawer. Then clean those parts and the inside of the refrigerator with a soft cloth and a mild household cleaner. Use a wet, soft cloth for the outside of the refrigerator. Make sure the vents on the outside of the vehicle are always dust-tight.

Removing slide-out box system (model C1 and C2)

See image 11 for a visual reference.

To remove the slide-out box system:

- Completely open the fresh food compartment door and remove the slide-out box.
- Then slide the rail system to the right, as illustrated.
- Remove and clean the slide-out box system.
- After cleaning, place the system back in reverse order.
- Make sure the slide-out box system snaps into place.

Removing slide-out box system (model B)

See image 12 for a visual reference.

To remove the slide-out box system:

- Completely open the fresh food compartment door and remove the slide-out box.
- Locate the two clips at the back of the rail system (1).
- Pull the clips upwards and forwards until they are released.
- Lower the front and slide the rail system further to the front (2).
- Remove and clean the slide-out box system.
- After cleaning, place the system back in reverse order until you hear a click. For left turning door, place the system into the slots on the right-hand side.
- Make sure the system locks into place.

Removing drawer (model C1)

See image 13 for a visual reference.

To remove the drawer for refrigerator model C1:

- Pull the drawer until the stop and push it a little bit back.
- Then push the guide locks backwards, as illustrated.
- Pull the drawer until the stop and push it a little bit back.
- Then push the guide locks backwards, as illustrated.
- Pull the drawer further to the front and lift the wheels over the curves.
- Remove and clean the drawer.
- After cleaning, pull out the guides until they snap into place.
- Place the drawer back in reverse order.



Do not use abrasive cleaners, metal scouring pads or hard brushes. They could damage the refrigerator.



Never clean the refrigerator with soap or aggressive, caustic or soda-based cleaning agents.



Water through the vents may damage your refrigerator.



The loose parts of the refrigerator are not suitable for the dishwasher.

13. Defrosting

A layer of ice on the cooling fins will decrease the cooling capacity and durability of your refrigerator. Therefore your refrigerator is provided with an automatic defrost system, which reduces ice formation.

It is also possible to defrost your refrigerator manually. To do this:

- Remove all food.
- Switch off the refrigerator and open the doors.
- Put a towel in the frozen food compartment and on the bottom of the fresh food compartment to catch any leakage water.



Do not speed up the defrosting process by removing the ice layer with force or sharp objects or by using a hair-dryer or any other electrical device.

14. Troubleshooting

Problem	Possible cause	Solution
Refrigerator does not start	Refrigerator is not switched on	Switch on the refrigerator
	Vehicle is not level	Make sure the vehicle is level
		Try to start the refrigerator on another power source
Model with LCD display: Error codes 1, 2, 4, 5, 8, 9, 12 or 13 light up on the control panel	Multiple causes	Switch the refrigerator off and on again. If the problems still exist, contact a service centre
	Gas bottle is empty	Replace the gas bottle
rror code 3 lefrigerator does not work on	The valve of the gas bottle and/or the shut-off valves are closed	Open the valves
gas	Refrigerator is not switched on	Switch on the refrigerator
		Try to run the refrigerator on another power source
Error code 6 or 7 Refrigerator does not work on	The engine is not running	Make sure the engine is run- ning
12V	12V fuse faulty	Check if the 12V fuse in the fuse box of your motor home or car is still operational
		Try to run the refrigerator on another power source
Error code 10	Mains are not available	Check if the mains is available
Refrigerator does not work on 230V		Try to run the refrigerator on another power source

Problem	Possible cause	Solution		
Error code 11 Refrigerator does not work in Auto	Sources are not connected	Connect the sources		
		Try to run the refrigerator on another power source manually		
Error code 18: All symbols light up		Wait a few seconds until the re- frigerator starts normally		
All lights are blinking		Switch the refrigerator off and on again. If the problems still exist, contact a service centre		
	Ventilation openings com- pletely or partially blocked	Clean or remove blockage		
	Vehicle is not level	Make sure the vehicle is level		
	Selected cooling level too low	Select a higher cooling level		
Refrigerator has insufficient cooling	Fans not switched on	Switch on the fans		
	Door is not properly closed	Close the door		
	Too much ice on cooling fins	Defrost the refrigerator		
		If the problems still exist, contact a service centre		

15. Storage

If you do not use the refrigerator for a longer period:

- Empty the refrigerator.
- Defrost the frozen food compartment.
- Clean the complete refrigerator thoroughly.
- Install the winter cover over the vents, to protect your refrigerator during storage.
- Keep the fresh food compartment door, as well as the frozen food compartment door, open during storage.

To keep the door open during storage:

See image 14 for a visual reference.

Model A and B: Rotate the storage lock and secure it by using the strike plate.

See image 15 for a visual reference.

Model C1 and C2: Rotate the storage lock.



Make sure the gas taps of the gas bottle are closed during storage.



Water through the vents may damage your refrigerator. Make sure the vent openings are covered before washing your vehicle before stalling.

To use the refrigerator after storage:

Rotate the storage lock back to its original position.

16. Warranty and servicing

For our warranty procedure and policy, refer to www.thetford.com

All servicing must be carried out by an authorized person. Before any service work is started, the appliance must be disconnected from the electrical supplies.

For service, please contact your authorised local Service Centre giving details of the model and serial number on the Serial ID label plus date of purchase.

See image 16 for a visual reference.

- 1. Model number
- 2. Serial number

See images 1, 2 and 3 for position of the Serial ID label.

17. Technical specifications

Table 1: Refrigerator specifications

Model	Display	Total volume (L)	Gross volume (L)	Volume frozen food comp. (L)	Energy con- sumption (kWh/24h)	Energy consump- tion gas (g/24h)	Net weight (kg)
N4080	LED+	81	71	10	2.6	270	22.5
N4090	LED+ or LCD	89	78	11	2.9	300	22.5
N4097	LED+ or LCD	96	86	11	2.9	300	23.5
N4100	LED+ or LCD	97	86	11	2.8	330	27
N4104	LED+ or LCD	105	94	11	2.8	330	27
N4108	LED+ or LCD	106	90	11	2.9	300	24
N4112	LED+ or LCD	113	98	11	2.9	300	24
N4141	LED+ or LCD	141	135	15	4.5	468	38
N4142	LED+ or LCD	142	137	15	4.5	468	37
N4145	LED+ or LCD	141	136	26	4.3	437	37
N4150	LED+ or LCD	149	145	27	4.3	437	37.5
N4170	LED+ or LCD	167	156	29	4.3	437	39
N4175	LED+ or LCD	175	165	31	4.3	437	39.5



Above volumes and energy consumption has been calculated according to IEC 62552-3:2020.

18. Disposal

Your refrigerator has been designed and manufactured with high quality materials and components, which can be recycled and reused. The cooling system contains ammonia as the coolant and ozone friendly cyclopentane as the blowing agent in the foam.

When your refrigerator has reached its end of life, dispose the product according to the local rules. Do not dispose the refrigerator with normal household waste. The correct disposal of your old product will help prevent potential negative consequences to the environment and human health.



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