

Vertical Display and Storage

B1350-2

SKOPE Gen2: Three Door Chiller



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B1350-2
SKOPE Gen2: Three Door Chiller
User Manual

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INSTALLATION

Safety Information

When using any electrical appliance, safety precautions should always be observed. Read these instructions carefully and retain for future reference.

- When used by, or near, young children or infirm persons, close supervision is necessary. Young children should be supervised to ensure that they do not play with the appliance.
- Do **NOT** use this appliance for other than its intended use.
- Do **NOT** cover the grilles or block the entry or exhaust of airflow by placing objects up against the refrigeration unit.
- Do **NOT** probe any opening.
- Only use this appliance with voltage specified on the rating label.
- Ensure adequate ventilation of the SKOPE refrigeration unit.
- Be careful not to touch moving parts and hot surfaces.
- Regulations require that all electrical work be carried out by authorised persons. For your own safety, and that of others, ensure this is done.
- If the supply cord becomes damaged, it must be replaced by a SKOPE authorised service agent, or similarly qualified person, in order to avoid a hazard.
- If the refrigeration unit is required to be installed or removed from the cabinet, ensure all necessary safety precautions are observed.
- This chiller is not designed to be stable in motion. Exercise caution when moving or transporting this chiller.

Warning:

Do NOT overload the power supply. See the rating label inside the cabinet for power supply and current draw.

Caution:

Disconnect the cabinet from the mains power supply before attempting any cleaning or maintenance.

INSTALLATION

Fitting the Kick Panel

For transit purposes the kick panel is packed inside the cabinet, with the electronic controller temporarily attached to the front of the refrigeration unit. Before fitting the kick panel to the cabinet the controller must be attached to the inside of the kick panel.

To fit the kick panel:

1. Loosen the two keyhole screws holding the controller box onto the refrigeration unit. Lift the controller box off the keyhole screws and carefully pull out from the unit compartment.
2. Locate the controller box onto the back of the kick panel, so the two screws in the top of the controller box slot into the keyholes in the kick panel. Tighten the keyhole fixing screws through the top set of slots (see Figure 1 below).
3. Open the cabinet doors wide open. This is to allow the fitting of the kick panel. Sit the kick panel over the two corner bottom locating brackets and push on to the two top keyhole fixing screws. Tighten both the screws. Ensure the controller cables are well clear of any sharp objects on the refrigeration unit.

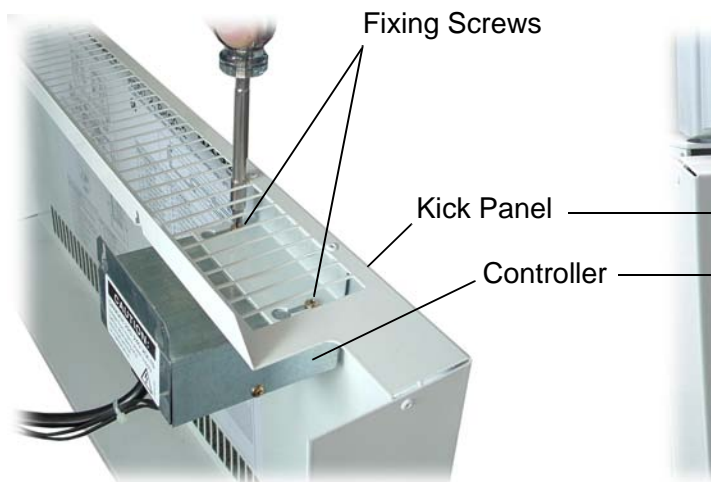


Figure 1:
Attaching the Electronic Controller



Figure 2:
Electronic Controller Relocated

INSTALLATION

Fitting the Illuminated Sign

For transit purposes the illuminated sign is packed inside the cabinet.

To fit the illuminated sign unit to the roof of the cabinet:

1. Loosen the four retaining screws on the roof of the cabinet and fit both the sign side panels over the screws. Slide the panels forward, flush with the front of the cabinet, and tighten screws.
2. Clip the sign rear panel into the retaining slots on the rear of the sign sides (see Figure 4 below).
3. Fit the sign unit by engaging the clips into retaining slots on the front of each side panel and pull sign unit firmly down. Ensure the two screws in the back of the sign unit fit into slots in the cabinet top angle bracket and then tighten all the screws.
4. Turn the sign retaining clips on top of each side panel, to hold the sign unit firmly in position (see Figure 3 below).
5. Connect the sign ENSTO 3-pole plug into the power supply socket on the roof of the cabinet.

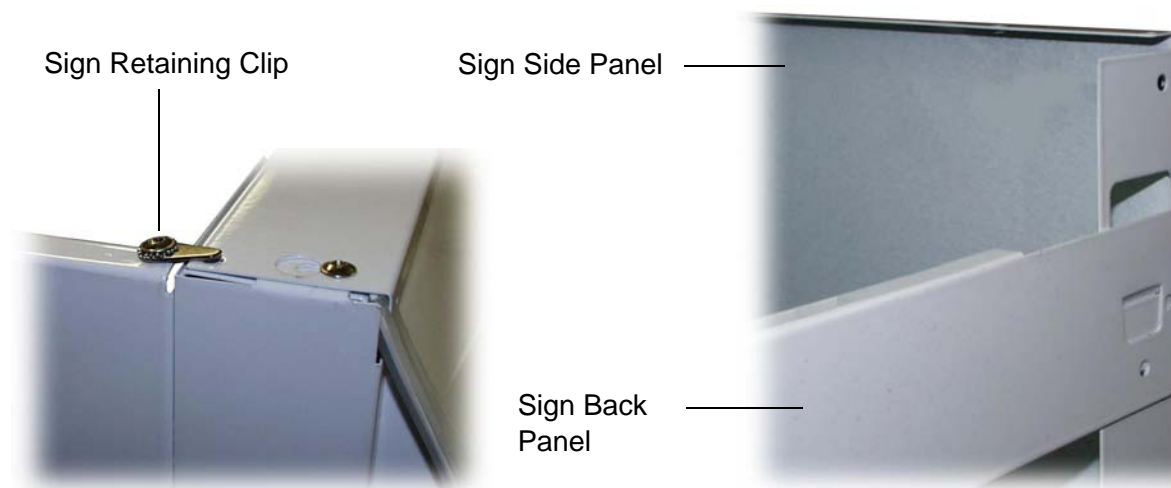


Figure 3: Sign Retaining Clip

Figure 4: Sign Rear Panel

INSTALLATION

Positioning of Machine

Mains Flex

For transit purposes the mains flex and plug are clipped to the roof of the cabinet. For convenience, the flex should be retrieved before the machine is positioned when walls and partitions may make access difficult.

Ventilation

When positioning the cabinet, ensure adequate ventilation is provided around the refrigeration unit at floor level. The castors must remain fitted as the refrigeration unit draws air from underneath the cabinet. Avoid blocking any air vents or placing objects up against the front of the cabinet. The maximum recommended operating ambient temperature is 40°C.

Siting the cabinet

When siting the cabinet, avoid direct sunlight and warm draughts etc. Adequate allowance should be made for door opening. The doors have internal torsion bars which are pre-tensioned at the factory. The cabinet must be positioned on a level surface for the doors to shut and seal correctly and to prevent the condensate tray from overflowing.

Isolating Switch

This cabinet has a mains isolating switch and IEC (appliance) socket, located in the refrigeration unit compartment. This switch and socket can be used to isolate all cabinet and unit electrics, without unplugging the cabinet from the wall.

When installing the cabinet, ensure the mains isolating switch is turned on.

OPERATION

Operation of Machine

Plug in the machine and check operation of the refrigeration unit, electronic controller and cabinet lighting.

Refrigeration Unit

The compressor, and evaporator and condenser fans should all operate initially. This may be verified by listening for compressor switch on, and checking air movement out of the slots in the front kick panel. The internal cabinet air will continue to circulate at all times, as the evaporator fan operates continuously.

The compressor should switch off when the cabinet internal temperature reaches approximately +2°C, and switch on again at approximately +4°C.

A fan reversing device, reverses the condenser fan motor for a period of time during the compressor 'off-cycle'. This rotation change is to assist with self-cleaning of the condenser coil. Otherwise, the condenser fan operates continuously in a clockwise (LE) direction.

Electronic Controller

The electronic controller, located in the front kick panel, will either display the internal cabinet temperature or the controller set point. The compressor 'ON' icon will indicate when the compressor is operating (see pages 14-15 for controller display).

Cabinet Lighting

The lights which illuminate the top sign and cabinet interior will initially come on, when the machine is turned on, and will stay on permanently. The lights will require a period of time to stabilise following initial start up.

OPERATION

Fitting the Shelves

The chiller is supplied with either four or five cabinet shelves which may be positioned at different heights to suit various products. Each shelf is held in place with eight shelf clips which engage in each of the shelf support strips. The support strips are marked with a '+' for easy location of shelf clips.

To fit the cabinet shelves:

1. Unpack the shelves and shelf clips from inside the cabinet.
2. Establish the desired position for the shelves and securely engage a shelf clip in each of the shelf support strips (see Figure 5 below).
3. Sit the shelves onto the shelf support clips.

Loading Product

For even cooling and efficient operation allow air space around packages etc. Do not allow products to overhang the front of the shelf as this could prevent the door from shutting or cause glass breakage. Leave an airspace of at least 75mm (3") above packages etc. on the top shelf.

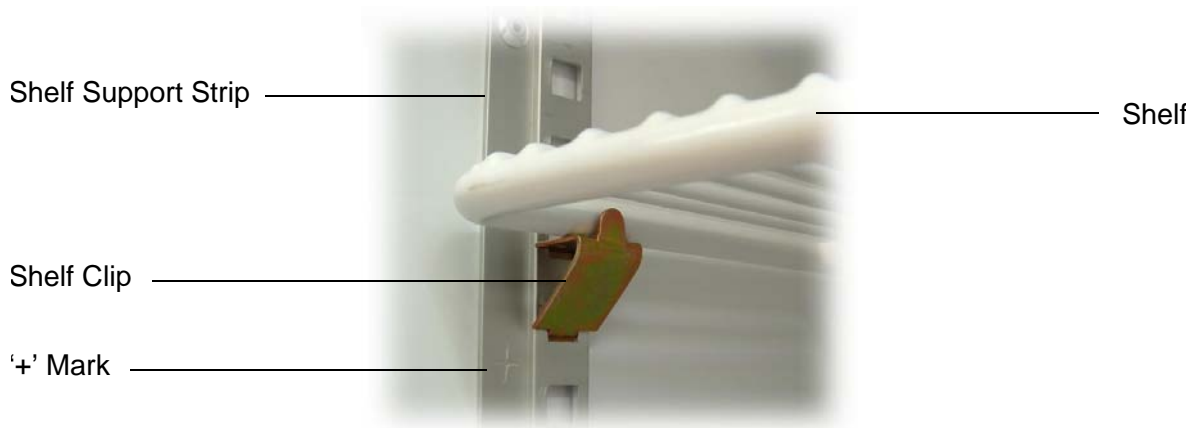


Figure 5: Shelf Clip

OPERATION

Cleaning

When necessary, wipe the interior and exterior of the cabinet with a damp cloth. Ensure the cabinet is disconnected from the mains power supply before cleaning. Periodic cleaning of the condenser coil is also recommended.

Condenser coil

The condenser coil **MUST** be kept clean for efficient and reliable operation. Clean the condenser coil with a brush and vacuum cleaner regularly. The condenser coil is located behind a side baffle, on the right hand side of the refrigeration unit (see Figure 6 on p13).

To access the condenser coil:

1. Disconnect the cabinet from the mains power supply.
2. Remove the cabinet kick panel, by loosening the two screws at the top of the kick panel. Access to these screws can be made easier by opening the cabinet doors. Raise the kick panel vertically to clear the keyholes off the screw heads, then tilt the panel forward and lift off the bottom fixing brackets.
3. Remove the cabinet wiring junction box by loosening both the end keyhole fixing screws.
4. Remove the two screws holding the side baffle to the condenser coil and carefully pull the baffle out from the unit.
5. The condenser coil can now be accessed for cleaning. Clean the condenser coil with a brush and vacuum cleaner.
6. Refit the side baffle and cabinet wiring junction box.
7. Refit the cabinet kick panel, and reconnect to the power supply.

Caution:

The cabinet **MUST** be disconnected from the mains power supply before cleaning the condenser coil.

OPERATION

Servicing

Servicing should be carried out by an authorised service agent. Detailed service and spares information is available in the SKOPE B1350-2 Operating and Service Manual (Part No. MAN1228).

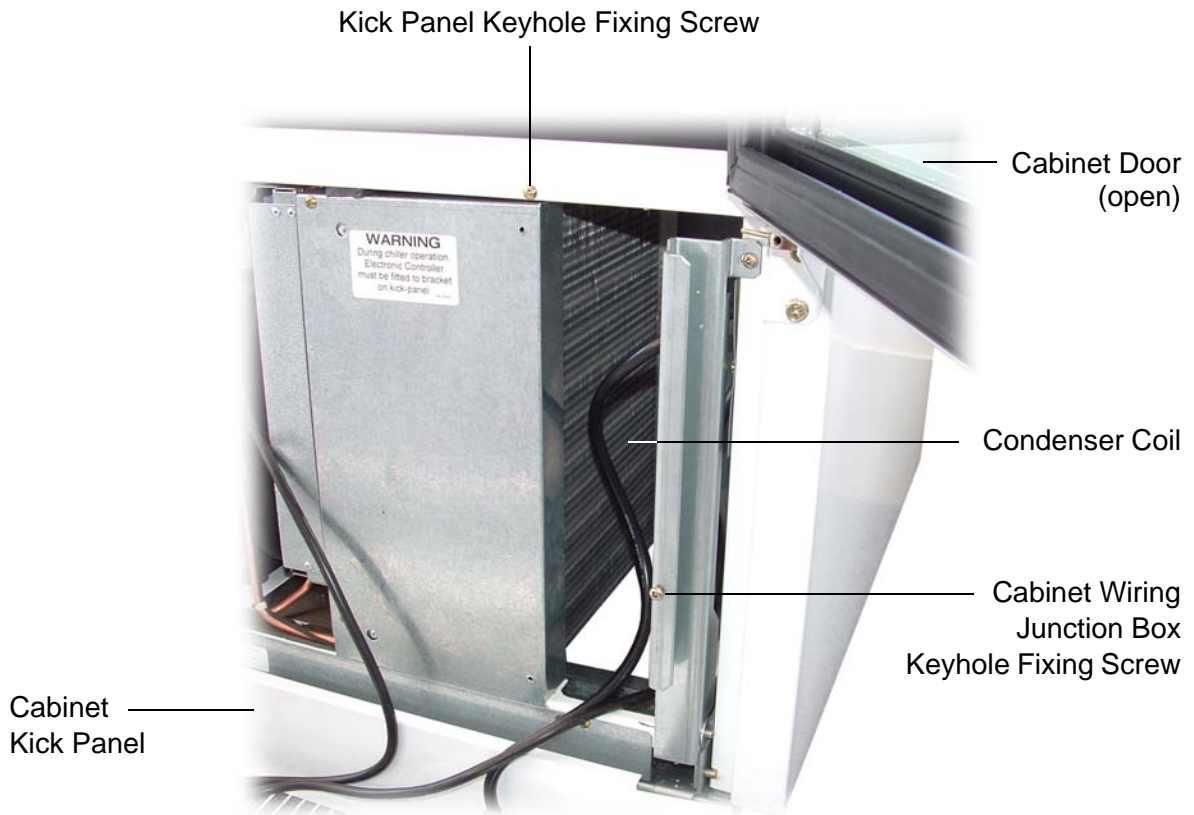


Figure 6: Condenser Coil

ELECTRONIC CONTROLLER

Controller Display

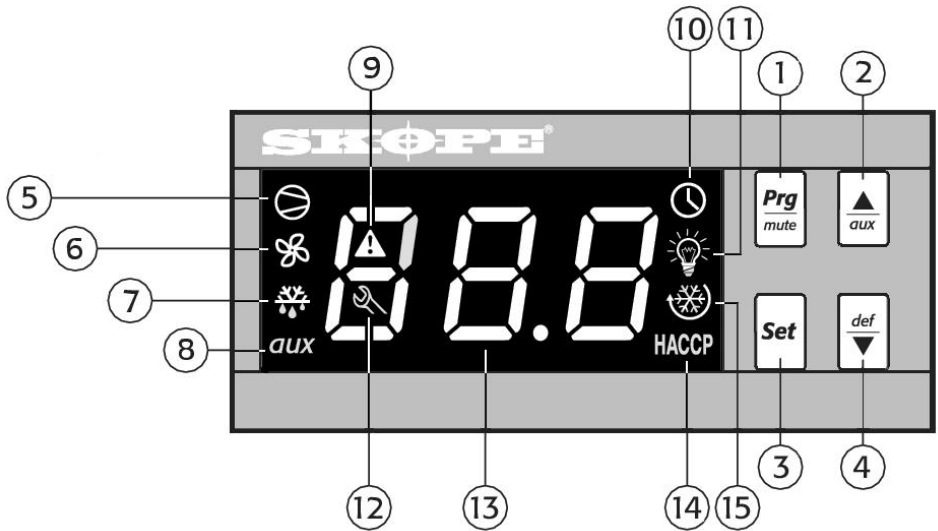


Figure 7: Controller Display

Keypad

ITEM	KEY	FUNCTION
1		Prg / mute: To initiate programme sets, press for 5 seconds. Mutes the audible alarm (buzzer) and deactivates the alarm relay.
2		UP / aux: To scroll settings UP (in programme mode).
3		Set: If pressed for more than 2 seconds displays and / or enables changing the temperature setpoint (see page 16).
4		DOWN / def: To scroll settings DOWN (in programme mode).

Table 1: Keypad Functions

ELECTRONIC CONTROLLER

Icons









ITEM	ICON	FUNCTION
5		COMPRESSOR: ON when the compressor and condenser fan starts. Flashes when activation of the compressor is temporarily delayed.
6		FAN: n.a.
7		DEFROST: ON when the defrost is activated. Flashes when the activation of the defrost is temporarily delayed due to procedures in progress.
8	<i>AUX</i>	AUX: n.a.
9		ALARM: Flashes in the event of alarms.
10		CLOCK: n.a.
11		LIGHT: n.a.
12		SERVICE: Flashes in the event of malfunctions.
13		DISPLAY: Shows the cabinet temperature.
14	HACCP	HACCP: n.a.
15		CONTINUOUS CYCLE: n.a.

Table 2: Icon Functions

ELECTRONIC CONTROLLER

Temperature Setpoint

The chiller temperature setpoint is factory set at 2.0°C. If necessary the standard setting can be adjusted between 1°C and 3.5°C (see Table 3 below).

SKOPE do not recommend that the setpoint be changed unless it is absolutely necessary, and then only by small increments at a time.

To View and Adjust the Temperature Setpoint:

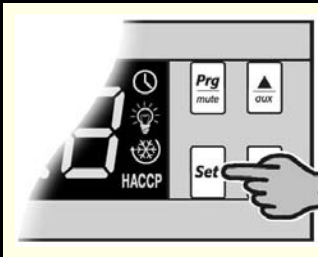
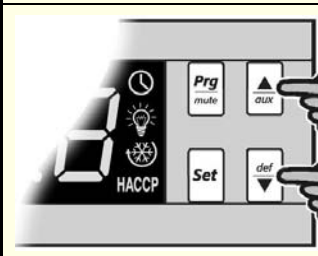
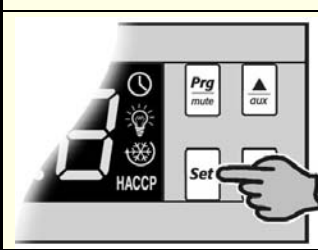
	<p>1. To view the setpoint: press and hold the SET key for 2 seconds, until the setpoint value flashes.</p>
	<p>2. To adjust the setpoint: press either the UP or DOWN keys to display the required setpoint value.</p>
	<p>3. Press the SET key again to memorise the new setpoint value. If this is not done within 60 seconds, changes will be lost and you will need to repeat the above procedure.</p>

Table 3: Viewing and Adjusting the Temperature Setpoint

ELECTRONIC CONTROLLER

Troubleshooting

Complaint	Possible Cause	Repair
1. Cabinet not operating and no controller display:	<ul style="list-style-type: none">• Loss of power supply.	<ul style="list-style-type: none">• Check mains power supply.
2. Cabinet lights not operating:	<ul style="list-style-type: none">• Blown cabinet fuse.• Failed fluorescent tube.• Controller alarm.	<ul style="list-style-type: none">• Requires technical repair by a SKOPE Authorised Service Agent.• Check fluorescent tubes.• Determine cause and eliminate (see pages 18-19).
3. Power consumption is higher than expected:	<ul style="list-style-type: none">• Unit operating too hot.• Cabinet door is opened excessively.	<ul style="list-style-type: none">• Clean condenser. Ensure the chiller is installed with good ventilation around the refrigeration unit.• Keep door/s open for minimum time.
4. Product is too warm and spoiling:	<ul style="list-style-type: none">• Restricted cabinet airflow.• Temperature setpoint is too warm.	<ul style="list-style-type: none">• Ensure product is not blocking airflow slots and there is air space around all the product.• Adjust setpoint (see page 16).
5. Warm cabinet temperatures and/or compressor operating for long periods (more than 1 hour):	<ul style="list-style-type: none">• Blocked condenser.• Poor refrigeration unit ventilation.	<ul style="list-style-type: none">• Clean condenser (see pages 12-13).• Ensure the cabinet is installed with good ventilation around the refrigeration unit.

Table 4: Troubleshooting

ELECTRONIC CONTROLLER

Controller Alarms











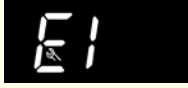

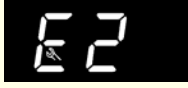

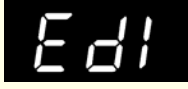
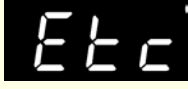







CODE	DISPLAY ICON	ALARM DESCRIPTION		
	 Flashing	Product HIGH temperature alarm	➔	
	 Flashing	Product LOW temperature alarm		
	 Flashing	Refrigeration system high temperature pre-warning	➔	
	 Flashing	Refrigeration system high temperature shutdown		
	 Flashing	Ambient probe fault		
	 Flashing	Evaporator probe fault		
	 Flashing	Condenser probe fault		
	None	Defrost over-time limit		➔
	 Flashing	Real-time clock fault		
	 Flashing	Controller E prom error		
	 Flashing	Controller E prom error		
	None	Start defrost request	➔	
	None	End defrost request		

Table 5: Controller Alarms

ELECTRONIC CONTROLLER

INITIAL ACTION	FINAL ACTION
<ol style="list-style-type: none"> 1. Check the cabinet product loading to ensure ventilation slots are not blocked and that product does not overhang the shelves. 2. Ensure the cabinet is installed with good refrigeration unit ventilation. 3. Check and clean the condenser coil (see pages 12-13). 4. Unplug cabinet from the power supply for 1 minute, then reconnect to power supply. 	<p>If alarm persists, contact SKOPE.</p>
<ol style="list-style-type: none"> 1. Clean the condenser coil (see pages 12- 13). 2. Check refrigeration ventilation. Ensure clear airpath at the top and front of the cabinet (to extract hot air). A minimum of 200mm clear space is required in front of the refrigeration unit. 3. Ensure the cabinet is installed in a suitable environment. 4. Unplug cabinet from the power supply for 1 minute, then reconnect to power supply. 	
<p>Unplug cabinet from the power supply for 1 minute, then reconnect to power supply.</p>	
<p>None</p>	<p>None</p>