SKOPE®

REFRIGERATION SOLUTIONS

SK1300

SKOPE SK1300

2 DOOR
Top Mounted Vertical Cooler

Operating and Service Manual

December 2001 Edition MAN7976

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SPECIFICATIONS

CABINET CONSTRUCTION	
Exterior / Interior finish:	White powdercoat on galvanised steel.
Insulation:	50mm thick, polyurethane foam. Cyclo-isopentane blowing agent: C_5H_{10}/C_5H_{12}
DIMENSIONS	
Height (standard castors):	2195mm
Height (adjustable castors):	2215 to 2230mm
Width:	1480mm
Depth:	700mm
Floor area:	1.04m^2
Internal volume:	1310 litres
ELECTRICAL	
230-240 Volts a.c. 50 Hz, single phase supply.	
Rated current:	5.6 Amps
LIGHTING	
Vertical interior side light:	2 x 58 Watt fluorescent tubes.
Centre pillar light:	1 x 58 Watt fluorescent tubes.
ILLUMINATED SIGN	
370mm high sign box, with 1.5mm thick polycarbonate curved sign panel.	
Sign light:	1 x 30 Watt fluorescent tube
DOORS	
Self-closing, aluminium framed, double glazed with toughened safety glass.	
SHELVING	
White plastic coated, adjustable steel wire shelves.	
REFRIGERATION SYSTEM	
Integral top mounted, SKOPE Cyclone® refrigeration unit. Induced draught condenser and evaporator coils.	
Nominal capacity:	820 Watts
Compressor:	Danfoss SC21G
Refrigerant:	R134a
Charge:	720 grams

SKOPE Industries Limited reserve the right to alter specifications without notice.

ASSEMBLY INSTRUCTIONS

If the SKOPE SK1300 cabinet has been supplied with the SKOPE Cyclone® unit and sign assembly already assembled, commence installation at 'Positioning of Machine'.

- Remove protective block from base of SKOPE Cyclone® unit before assembly.
- Lift the SKOPE Cyclone® unit onto the cabinet top. Steps or a platform about 1 metre high are suggested. Note: Cyclone® Unit weight = 48 Kg.
- Check seal against cabinet top - ensure there are NO gaps!
- Take care to avoid damaging sealing strip on base.
- Revolve unit so compressor is at L/H end.
- Engage left hand slot fully into clip.
- Screw down right hand end.
- Fit side panels onto cabinet - engage keyhole over screws, slide to rear and tighten screws.
- Clip rear panel into place.
- Connect internal light and sign plugs into power supply sockets located in front of SKOPE Cyclone® unit. Clip sign into place.
- Fasten sign securing screws to top of each sign panel.

Proceed with installation as detailed in 'Assembly & Installation Instructions' booklet attached to door of cabinet.

POSITIONING OF MACHINE

The mains flex exits below the rear panel behind the SKOPE Cyclone® unit. The flex should be retrieved before the machine is positioned, when walls and partitions may make access difficult.

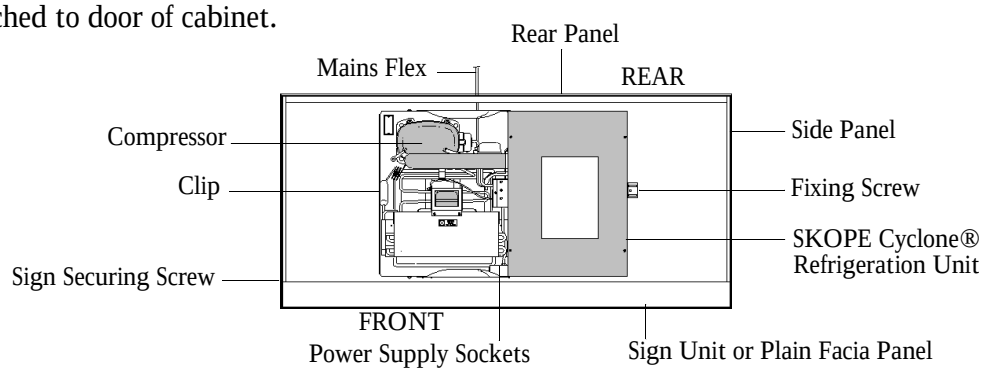
When positioning the machine, a gap must be left between the top of the sign panels and ceiling, of at least 200mm.

Adequate ventilation must be provided above the SKOPE Cyclone® unit for efficient operation. Maximum recommended ambient temperature 32°C.

Avoid direct sunlight, warm draughts etc.

When siting the machine, adequate allowance should be made for door opening. The doors have internal torsion bars which are pretensioned at the factory. The machine must be positioned on a level surface for the doors to shut and seal correctly, and to prevent the condensate tray from overflowing.

Remove all packaging material from the shelves, fit shelf support brackets at the desired heights and relocate shelves.



Cabinet Top View

Figure 1

SAFETY INFORMATION

When using any electrical appliance, basic safety precautions should always be observed. READ THESE INSTRUCTIONS CAREFULLY. Do not use this appliance for other than its intended use.

DO NOT OVERLOAD POWER SUPPLY-Machine rated at 5.6 Amp @ 240 Volt.

- Use this appliance only on the voltage specified on the rating plate, or in these instructions.
- Ensure ventilation of SKOPE Cyclone® refrigeration unit.
- Condenser coil must be kept clean. To ensure trouble free performance, it is recommended that on a regular basis the unit be isolated from the power supply and a vacuum cleaner used to remove dust and fluff from the condenser.
- Be very careful not to touch moving parts.
- Do not cover the grilles or block the entry or exhaust of airflow by placing any object or material up against or on top of the unit.
- Do not probe any opening.
- Remove Cyclone® unit for transportation. The refrigerator is not designed to be stable in motion.
- Disconnect machine mains power supply before attempting to perform any electrical service or maintenance.
- If the power supply cord of the machine is damaged, the cord must be replaced by a cord with part number as specified for the relevant refrigeration unit in 'Standard Parts Identification' section of this manual.
- Regulations require that all electrical work be carried out only by authorised persons. For your own safety and that of others, ensure this is done.

OPERATION OF MACHINE

Plug in machine and check operation of SKOPE Cyclone® unit and lights. Compressor, evaporator and condenser fans should all operate initially. This may be verified by listening for compressor switch on, checking air movement around the top left hand side of the cabinet and out of the louvered outlet inside the cabinet or out of the bottom of the rear duct. Compressor and Condenser fan should switch off when cabinet internal temperature reaches 2°C to 4°C. The internal cabinet air will continue to circulate at all times. The lights which illuminate the top sign and cabinet interior are permanently on.

Ensure the door gaskets form a good seal with the cabinet.

LOADING

Shelves may be positioned at different heights to suit various products. Always ensure that the shelf clips are securely engaged in each of the six shelf support strips.

Support strips are marked '+' for easy location of shelf clips.

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.

CLEANING

When necessary, wash both interior and exterior of cabinet with soapy water. Exterior of cabinet may be waxed with automobile polish for extra protection.

THE MACHINE MUST BE DISCONNECTED FROM THE MAINS SUPPLY BEFORE CLEANING THE CONDENSER.

Condenser coil must be kept clean for efficient and reliable operation. Clean with a brush and vacuum cleaner regularly.

Access to the condenser is gained by removal of the sign panel:

Undo two screws which hold the top of the sign to the side panels. The sign panel can then be lifted vertically, unplugged and removed. Alternatively, the bottom clips in the sign may be engaged on the top clips of the side panels to provide a space for cleaning.

The preventative maintenance recommendation is to clean the condenser at 1 to 6 month intervals. Certain conditions may necessitate more regular attendance (e.g. dusty or kitchen environment).

Servicing and electrical work should be carried out by an authorised Service Agent. Brief instructions are located on the top of the SKOPE Cyclone® unit. SKOPE recommend fitting of approved spare parts only (refer to chapters 5, 6 & 8).

SIGN

Internal access may be gained with the sign unit in place. To replace a tube, ballast, starter or fuse (Mk.4 sign only) etc. undo the 5 screws securing the sign top cover and remove. On the Mk.4 sign, the sign top panel can be removed by loosening the 4 fixing screws (1-2 turns) and pulling the sign top forward and then lifting up.Slide the sign panel up carefully to gain access to the interior. When replacing, carefully slide the sign panel down into the retaining lugs, taking care not to scratch the panel. Refit the top cover with screws and star washers.

Sign Removal

Undo two screws which hold the sign top cover to the side panels. Alernatively for Mk.4 sign, pivot sign box retainer brackets, located on sign sides, clear of sign box top. The sign can now be lifted vertically and released from its retaining clips. Unplug the power flex and remove the sign.

If required, the sign may be positioned so that its bottom clips engage with the side panel top clips. This will allow a working space of about 250mm (10") for unplugging power connectors.

Side Panels

To remove, loosen the securing screws and slide the panel forward to disengage the 'keyhole'. (If a back panel is fitted, this must be unclipped and removed first.)

SKOPE CYCLONE UNIT

The SKOPE Cyclone® unit is a self-contained refrigeration module which aligns with 'port holes' on top of the cabinet. Refrigerated air is directed through louvers, down the front of the cabinet and returns up a full width rear duct.

NOTE: Identification of the correct Cyclone® unit model is essential before commencing servicing. Refer to chapter 5 of this manual for further details of each model.

Condenser fan motor, evaporator fan motor and thermostat may be serviced with Cyclone® unit in place.

To provide easier access, the sign, sides and back may be removed and the Cyclone® unit may be unbolted and shifted or removed completely (see 'Sign Removal').

Condenser Fan/Motor Replacement

- Remove cover from control box and withdraw motor flex.
- Undo two top screws from mounting bracket, and remove complete assembly.

Evaporator Fan/Motor Replacement

- Undo four screws from evaporator box lid. Remove lid by lifting vertically.
- Remove cover from control box and withdraw motor flex. Carefully withdraw flex through evaporator wall.
- Undo two top screws from mounting

bracket, and remove complete assembly.

- Reseal the flex hole in the evaporator box carefully on replacement.

Thermostat

This is pre-set to give an internal air temperature of 2°C to 4°C and in normal circumstances should not be adjusted.

Thermostat Setting

Saginomiya: To make colder; turn clockwise. To make warmer; turn anti clockwise.

Danfoss KP69: To make colder; turn differential adjustment anti clockwise. To make warmer; turn clockwise.

Thermostat Replacement

- Undo four screws from evaporator box lid. Remove lid by lifting vertically.
- Withdraw the capillary from evaporator, noting position and length in coil.
- Remove cover from control box or undo thermostat bracket and remove thermostat.
- When refitting, ensure the capillary is fitted in the original position.

SKOPE Cyclone® Unit Removal

- Remove the sign as described above and disconnect internal light flex plug.
- Undo bolt or screw at right hand of evaporator box, then lift the complete unit to the right.
- Turn the unit until the lifting handles are facing the front.
- The unit may now be removed form the cabinet.

CAUTION: Avoid damage to the underside sealing strip by not dragging the module. If damage to the seal occurs, it must be repaired prior to reinstallation.

NOTE: Steps or platform about 1 metre high is suggested. This will allow the unit to be lifted, carried and put down at about waist height. Weight of unit: 48Kg (106lb).

Recommended Service Procedures

SKOPE recommend the SKOPE Cyclone® demountability and exchangeability philosophy, which in essence means:The customer must not be inconvenienced during system maintenance. In the unlikely event of Refrigeration failure, an exchange unit is simply swapped in a matter of minutes. There is no cabinet down time or unloading product. In one 5 minute visit, the customer's inconvenience ends. The faulty Cyclone® is then removed to the workshop for repair as time allows.

For a suspected refrigerant problem, disconnect the evaporator fan motor and with the system running, a ‘frost line’ will become obvious (after approximately 5 minutes):Entire evaporator, accumulator, and suction line right up to compressor must be frosting. Compressor at suction inlet will sweat.

If these conditions are not met, the system is faulty, either a) short of refrigerant, or b) compressor not pumping efficiently, or c) capillary restriction.

The system must then be opened (see Refrigerant Handling R134a Precautions section) and gauges temporarily fitted (i.e. either temporarily fit line piercing valves or braze in service lines):

1. Short of refrigerant:
Where the frosting effect is shorter than required (unless all refrigerant is lost, where there is no frosting effect). Only a small amount of refrigerant will exit the system.

A leak test (refrigerant / dry nitrogen mix, up to 250 psig) should be performed to locate the leak. If no leak is found, a pressure test should be performed (dry nitrogen only, up to 250 psig) if there is no pressure drop over 24 hours, the fault should be treated as a capillary restriction.

2. Compressor not pumping efficiently:
Where the frosting effect is not as cold as it should be. Symptoms include: compressor

body hotter than normal, condenser cooler than normal, and the compressor may make an unusual hissing sound. All of these symptoms depend on the severity of the problem.

The only way to prove a pumping problem is to perform a compressor pump-down test: braze closed compressor suction line, Open discharge line; then run the compressor to pull a vacuum on a vacuum gauge. The compressor should pull down to approximately 30" (inches) vacuum then turn the compressor off and this vacuum must be held without any loss for 5 minutes. If the Compressor does not pass these tests; it is not pumping efficiently and must be replaced.

There are different methods to proving pumping efficiency. If the test is performed with a system charged with refrigerant, a deep vacuum will not be achieved.

3. Capillary restriction:
With a totally blocked capillary, there will be no refrigeration effect. A partially blocked capillary may have similar symptoms to a system being short of refrigerant. Flush a restricted capillary with dry nitrogen. If the capillary will not clear, it must be replaced.

After the repair, the drier must be replaced (every time the refrigeration system is opened, the drier must be replaced).

The Cyclone® must be fully evacuated and charged to the volume of refrigerant indicated on the Cyclone® serial plate. All service lines must be purged.

Finally, pinch-off the gauge process lines (or remove line piercing valves) and braze the system closed. SKOPE recommend against leaving service valves in the system as these are prone to leak (and are open to abuse). Perform a final system leak test.

Refrigerant R134a Handling Precautions

It it necessary to maintain dedicated HFC service equipment and parts:

- Refrigeration gauges
- Service lines / Fittings
- Vacuum Pump
- Charging equipment
- Driers
- Compressors
- Temperature / Pressure chart

HFC (R134a) refrigeration systems require special service procedures because of the highly hygroscopic (moisture sensitive) polyester compressor oil:

- The system (especially compressor) must only be open for the very minimum time (to prevent moisture ingression). All parts required for servicing must be at hand; before the system is opened, and there should be no interruption until the system is on the vacuum pump (or hermetically sealed). The system must not be open for longer than 20 minutes maximum.
- The drier must be replaced every time the system is opened.
- Clean work practices are essential.
- SKOPE recommend brazing the system closed after service; as valves are prone to leak due to the nature of R134a.

CABINET

Electrical

Power supply for cabinet fittings enters at the top right hand side of the cabinet and is directed along the inside of the control panel to the interior light.

To gain access to the internal connections, open the doors fully and remove the control panel fixing screws at each end. When refitting, ensure star washers are refitted.

INTERIOR LIGHTS

Side Lights

To replace fluorescent tube or starter, compress the back section of the diffuser so that it disengages from the side light housing, and push back to gain access to light.

When refitting, engage back section of the diffuser into housing. Compress and snap front section of diffuser into place, progressively down its full length (see figure 2).

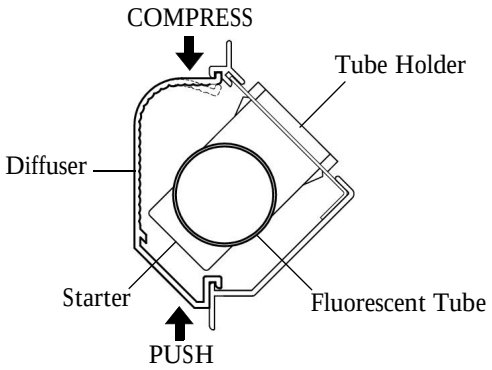


Figure 2

Centre Pillar Light

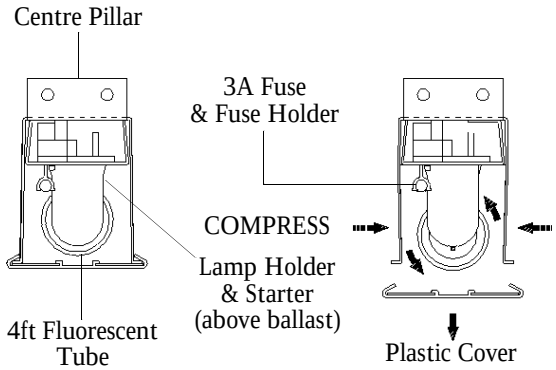
When the standard centre pillar is fitted (with 4 ft fluorescent tube - figure 3): the tube, ballast, starter and fuse are located inside the centre pillar, and may be replaced without removing shelves or product from the cabinet. See 'Standard Parts Identification' section for part numbers.

If the cabinet has the optional full height centre pillar (with 5 ft fluorescent tube - figure 4): the ballast is fitted on a step in the cabinet top, located behind the control panel and the fuse is fitted at the top of the pillar and protrudes into the interior of the cabinet. See 'Standard Parts Identification'.

Compress the centre pillar at the top. Unclip and 'peel' off the plastic cover from top to bottom. The fluorescent tube may be removed by revolving it until the pin position allows withdrawal.

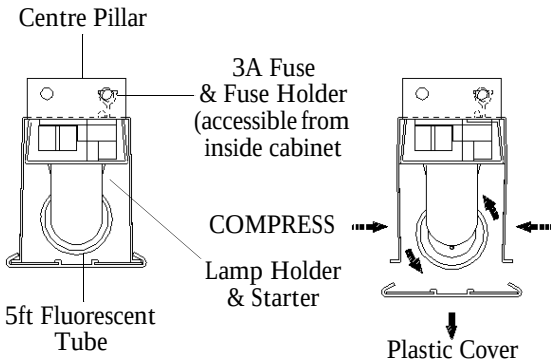
When refitting, compress the pillar top and clip the plastic cover on progressively from top to bottom.

NOTE: The plastic cover is fitted with metal strips to attract the magnetic door gasket.



4ft Centre Pillar Light

Figure 3



5ft Centre Pillar Light

Figure 4

DOORS

Door Torsion

Type 'SB' doors have several different style hinge plates but the torsion mechanism remains the same for each. Turn capstan with silver steel rod or drill shank to remove tension on pin. Remove pin and turn capstan to achieve desired tension then replace pin (see figure 5 below).

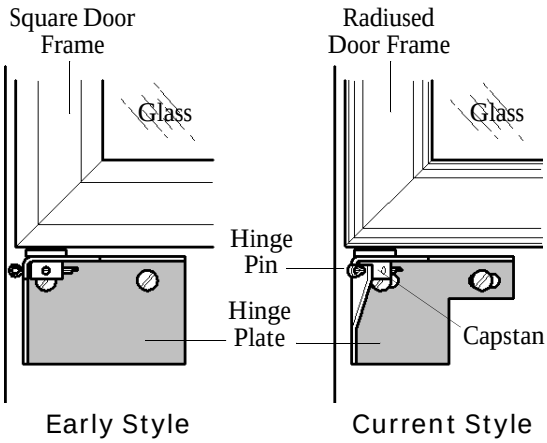


Figure 5

Door Gasket Replacement

The door gaskets simply clip into the door frame extrusion and may be removed for repair or replacement simply by peeling from frame, starting at corner. New gaskets, when fitted, may be lightly lubricated with a clear silicone grease or similar compound. This will lessen the possibility of the gasket rolling. Should the gasket be out of shape when in place, use hot air (i.e.. from hair drier) to realign.

Door Removal

Slacken off door tension and remove pin. Remove control panel, unbolt top hinge and lift door clear of bottom pivot. CAUTION: Doors are heavy and for safety reasons the removal procedure should be carried out by two people.

Door Repair

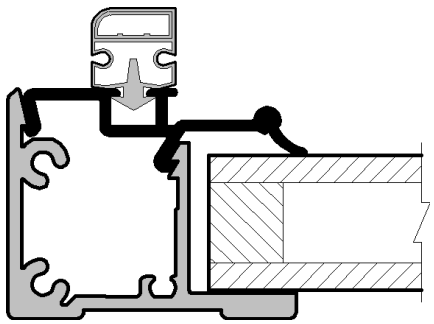
To repair torsion bar assembly, turn door upside down and pull out old torsion bar. Angle torsion bar to clear the hook at end. Replace parts as required and refit.

NOTE: Glass replacement is not considered economical as the glass is fixed to the frame for integral strength. Door replacement is recommended. (See page 6.9 for part numbers)

Glass Door Identification

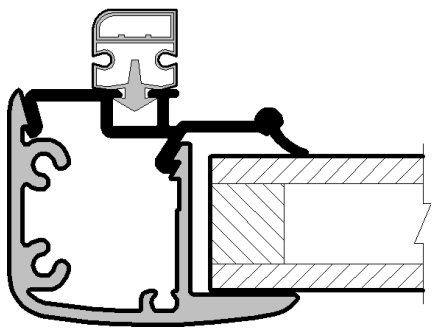
SKOPE glass doors fitted to the SK1300 have either the Mk. 2 - square door frame profile (see figure 6), or the new Mk. 3 - radiused door frame profile (see figure 7).

See diagrams below for the two different door extrusion profiles.



Mk. 2 - Square Door Frame Profile

Figure 6



Mk. 3 - Radiused Door Frame Profile

Figure 7

Gasket Replacement

The door gaskets simply clip into the door gasket retainer, and may be removed for repair or replacement simply by peeling away from gasket retainer, starting at the corners.

New gaskets, when fitted, may be lightly lubricated with a clear silicone grease or similar compound. This will lessen the possibility of the gasket rolling. Should the gasket be out of shape when in place, use hot air (i.e. from hair drier) to realign.

Door Tension Adjustment

IMPORTANT: Doors should only be tensioned enough that they self-close, with the door gasket forming an air tight seal. Over tensioning could result in deformation of the internal torsion bar.

1. Turn capstan with steel rod (Ø3mm), to remove tension on the split pin.

2. Using another steel rod, turn the capstan in the direction that the door closes, to increase the tension.

3. Replace split pin when the required tension adjustment has been made.

In the event the door tension can no longer be adjusted, the torsion bar may need replacing (see 'Torsion Bar Replacement' below).

Torsion Bar Replacement

1. Remove door from cabinet (see 'Door Removal' p.14). Lay door down on a flat surface.

2. Remove old torsion bar by carefully levering out the bottom bush from the door frame. Pull old torsion bar out from door frame. The end of the torsion bar will need manoeuvred, to allow the 'flat hook' end to clear the hinge hole.

3. Remove existing capstan and bush from old torsion bar.

4. Thread the capstan, complete with the bush, over the 'round hook' end of the new torsion bar (see figure 8).

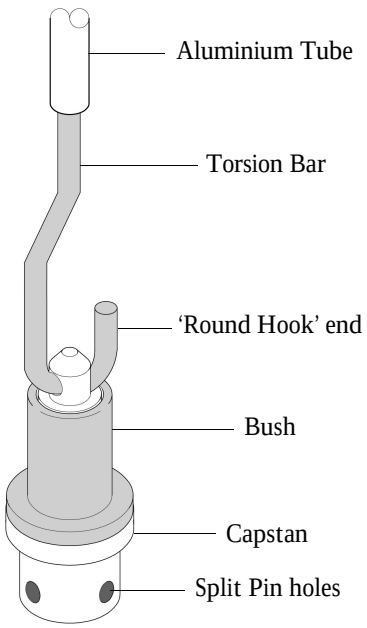
5. Ensure the aluminium tube, moves freely up and down the torsion bar.

6. Fit the new torsion bar into the door frame. Ensure the open end of the 'flat hook' points upwards, and manoeuvre the torsion bar through the bottom hinge hole. When the torsion bar is correctly installed, the capstan should not turn.

7. Hammer bottom of capstan into hinge hole, until the bush is flush with frame.

8. Refit door to cabinet.

9. Adjust door tension (see 'Door Tension Adjustment' this page).



Door Torsion Bar

Figure 8

PRESSURE TEMPERATURE CHART

TEMPERATURE		R134a		R404A	
°F	°C	KPa	psig	Kpa	psig
-38.2	-39	-47	14.0	37	5.4
-36.4	-38	-45	13.2	44	6.3
-34.6	-37	-42	12.3	50	7.3
-32.8	-36	-38	11.4	57	8.3
-31.0	-35	-35	10.4	64	9.3
-29.2	-34	-32	9.4	71	10
-27.4	-33	-28	8.4	79	11
-25.6	-32	-25	7.3	86	13
-23.8	-31	-21	6.2	94	14
-22.0	-30	-17	5.0	103	15
-20.0	-29	-13	3.8	111	16
-18.4	-28	-9	2.6	120	17
-16.6	-27	-4	1.3	129	19
-14.8	-26	0	0.0	138	20
-13.0	-25	5	0.7	148	21
-11.2	-24	10	1.4	158	23
-9.4	-23	15	2.2	168	24
-7.6	-22	20	2.9	179	26
-5.8	-21	26	3.7	189	27
-4.0	-20	31	4.5	200	29
-2.2	-19	37	5.4	212	31
-0.4	-18	43	6.3	224	32
1.4	-17	49	7.2	236	34
3.2	-16	56	8.1	248	36
5.0	-15	63	9.1	261	38
6.8	-14	69	10	274	40
8.6	-13	77	11	288	42
10.4	-12	84	12	302	44
12.2	-11	91	13	316	46
14.0	-10	99	14	331	48
15.8	-9	107	16	346	50
17.6	-8	116	17	361	52
19.4	-7	124	18	377	55
21.2	-6	133	19	393	57
23.0	-5	142	21	410	59
24.8	-4	151	22	427	62
26.6	-3	161	23	445	65
28.4	-2	171	25	463	67
30.2	-1	181	26	481	70
32.0	0	192	28	500	73
33.8	1	202	29	519	75
35.6	2	213	31	539	78
37.4	3	225	33	559	81
39.2	4	237	34	580	84
41.0	5	249	36	601	87
42.8	6	261	38	623	90
44.6	7	274	40	645	94
46.8	8	287	42	668	97
48.2	9	300	44	691	100
50.0	10	314	46	715	104
53.6	12	342	50	776	113
57.2	14	372	54	828	120
60.8	16	403	58	881	128
64.4	18	436	63	938	136
68.0	20	471	68	996	145
77.0	25	565	83	1154	167
86.0	30	670	97	1327	193
95.0	35	787	114	1518	220
104.0	40	916	133	1728	251
113.0	45	1060	154	1957	284

TROUBLE SHOOTING

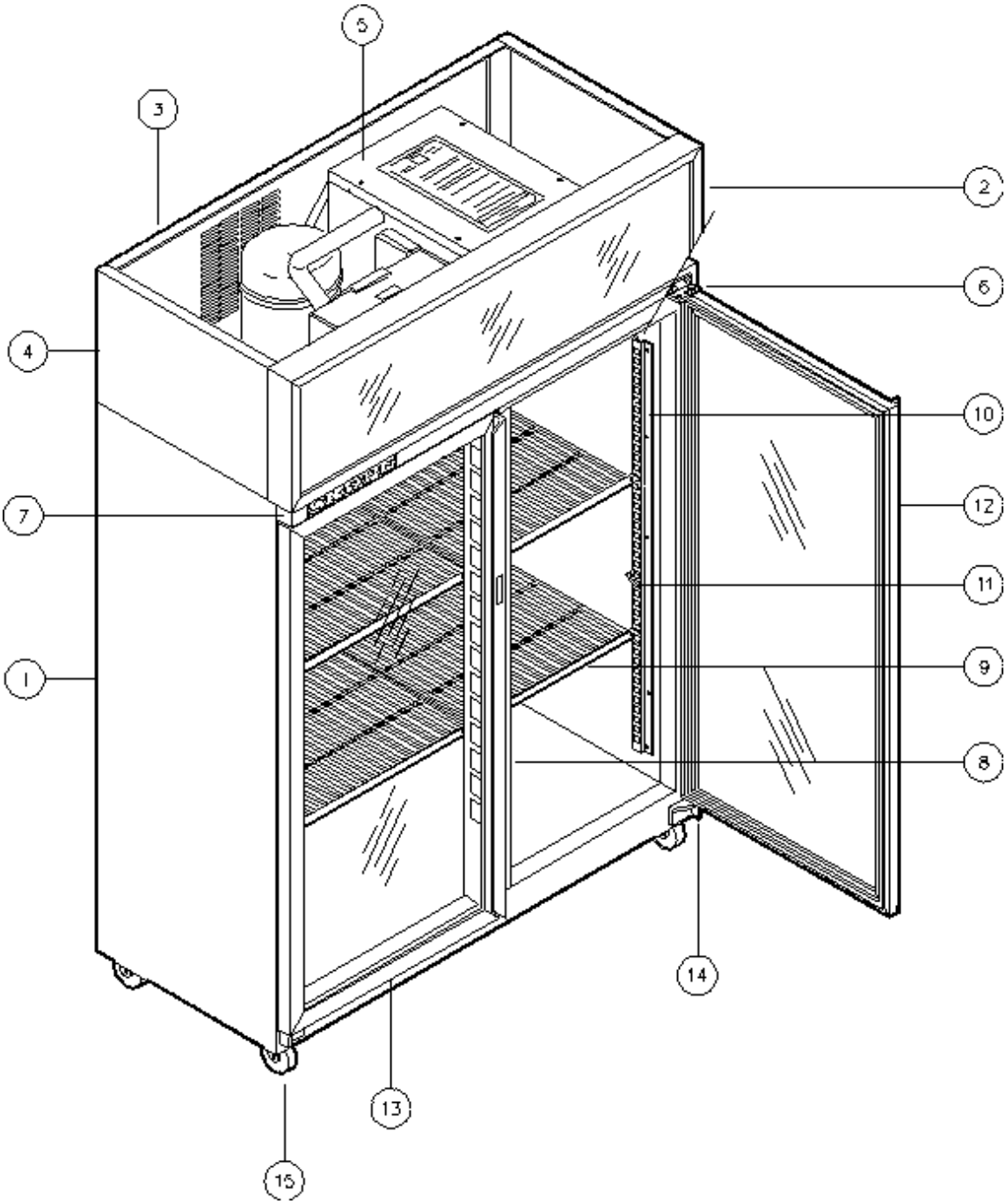
Complaint	Possible Cause	Repair
1. Compressor will not start - no hum.	Fuse removed or blown, no power.	Replace fuse, Check reason.
	Overload protector tripped.	Refer to electrical section.
	Thermostat stuck in open position.	Repair or replace control.
	Thermostat off due to cold location.	Relocate control.
	Wiring improper or loose.	Check wiring against diagram.
2. Compressor will not start - hums but trips on overload protector.	Improperly wired.	Check wiring against diagram.
	Low voltage to unit.	Determine reason and correct.
	Start capacitor defective on CSIR or CSR motor.	Determine reason and replace.
	Run capacitor defecive on PSC motor.	Determine reason and replace.
	Relay failing to close.	Determine reason and correct, replace if necessary.
	Compressor motor has a winding open or shorted.	Check resistance values. Replace compressor if necessary.
	Internal mechanical trouble in compressor.	Replace compressor.
3. Compressor starts, but does not switch off - starts winding.	Improperly wired.	Check wiring against diagram.
	Low voltage to unit.	Determine reason and correct.
	Relay failing to open, due to welded contacts or relay incorrectly mounted.	Determine reason and correct, replace if necessary.
	Run capacitor defective on CSR motor.	Determine reason and replace.
	Excessively high discharge pressure.	Clean condenser.
		Check power input watts.
		Possible overcharge, insufficient condenser cooling, or non-condenible gasses.
	Compressor motor has winding open or shorted. Check continuity and resistance.	Replace compressor if faulty.
	Internal mechanical trouble in compressor (tight). May be lubrication.	Replace compressor.

Complaint	Possible Cause	Repair
4. Compressor starts and runs but short cycles on overload protector (relay may chatter on RSIR, CSIR and CSR motors).	Additional current passing through overload protector.	Check wiring diagram. Check for added fan motors etc., connected to wrong side of protector.
	Low voltage to unit.	Determine reason and correct.
	Overload protector defective.	Check current, replace protector.
	Run capacitor defective on CSR motor.	Determine reason and replace.
	Excessive discharge pressure.	Clean condenser, check ventilation, check for restrictions in refrigeration system.
	Suction pressure too high.	Check for possibility of misapplication.
	Compressor too hot - insufficient suction gas cooling.	Check refrigerant charge (fix leak), add if necessary. Check return vapour temperature and suction superheat.
	Compressor motor has a winding shorted.	Replace compressor.
5. Unit runs OK, but short cycles.	Overload protector.	See 4 above.
	Thermostat: requires adjustment or incorrectly positioned.	Adjust or relocate thermostat.
	Incorrect refrigerant charge.	Adjust refrigerant charge.
6. Unit operates long or continuously. Unsatisfactory cabinet temperature.	Short of refrigerant.	Fix leak, add charge.
	Overcharge of refrigerant.	Remove refrigerant to correct charge.
	Thermostat not cooling correctly.	Adjst thermostat (clockwise colder).
	Cooler has excessive load.	Establish load within limits.
	Evaporator coil iced.	Defrost evaporator, check refrigeration.
	Restriction in refrigeration system.	Determine location and clear restriction. Flush with dry nitrogen. Replace component if blockage will not clear.
	Dirty condenser.	Clean condenser. Advise client how to regularly clean condenser.

Complaint	Possible Cause	Repair
6. (continued) Unit operates long or continuously. Unsatisfactory cabinet temperature.	Inadequate air circulation.	Internal: Improve air movement, allow airflow around stock. External: Remove any restrictions to condensing ventilation.
	Compressor not pumping efficiently.	Replace compressor.
	Filter dirty (if applicable).	Clean or replace.
	Faulty fan motor.	Check rotation. Replace if necessary.
7. Start capacitor open, shorted or blown.	Relay contacts not opening properly.	Clean contacts or replace relay if necessary.
	Prolonged operation on start cycle due to: (a) Low voltage to unit.	(a) Determine reason and correct.
	(b) Improper relay.	(b) Replace.
	Excessive short cycling.	Determine reason for short cycling (see 5 above), and correct.
	Improper capacitor.	Determine correct size and replace.
8. Relay defective or burned out.	Incorrect relay.	Check and replace.
	Line voltage too high or too low.	Determine reason and correct.
	Excessive short cycling.	Determine reason for short cycling (see 5 above), and correct.
	Relay being influenced by loose vibrating mount.	Remount rigidly.
9. Suction line frosted.	Evaporator fan not running.	Determine reason and correct.
	Overcharge of refrigerant capillary systems.	Correct charge.
10. Unit noisy.	Loose parts or mountings.	Find and tighten.
	Tubing rattle.	Reform to be free of contact.
	Bent fan blade causing vibration.	Replace blade.
	Fan motor bearings worn.	Replace motor.

CABINET ASSEMBLY - 3 inch wall

Model: SK1300



CABINET ASSEMBLY - 3 inch wall

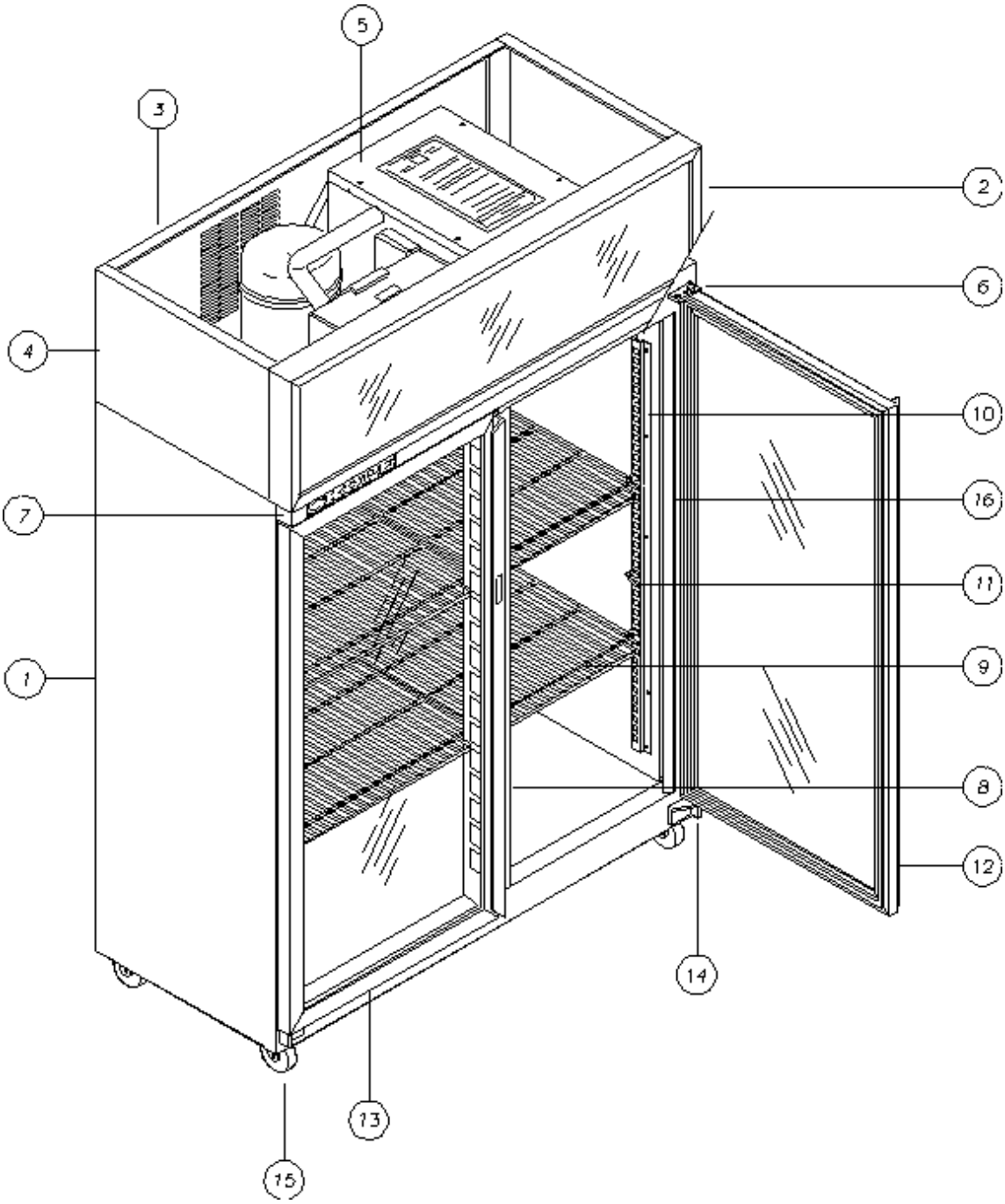
Model: SK1300

Item	Description	Part No.	Qty
1	Cabinet with Ducts & Shelf Support Strips	C1200/291	1
2	Sign Unit Assembly (Mk.3)	C1200/680	1
3	Sign Back	C1200/181	1
4	Sign Sides	V5000/182	2
5	SKOPE Cyclone® Refrigeration Unit *	V8020/375	1
6	Top Hinge Assembly: Type 'SB' (R/H)	C1200/388-99	1
	Top Hinge Assembly: Type 'SB' (L/H)	C1200/389-99	1
7	Control Panel	C1200/789	1
8	4 ft Pillar Light Assembly	C1200/670-32	1
9	Shelf	C1200/162-99	10
	Shelf Ticket Strip	PLE6615-0590	10
10	Shelf Support Strip	V5000/150	6
11	Shelf Bracket	V973-99	30
12	R/H Door Assembly: Type 'SB' (Mk.2) †	V6000/740R	1
	R/H Door Assembly: Type 'SB' (Mk.3) †	V6000/D01R	1
13	L/H Door Assembly: Type 'SB' (Mk.2) †	V6000/740L	1
	L/H Door Assembly: Type 'SB' (Mk.3) †	V6000/D01L	1
14	Bottom Hinge Bracket: Type 'SB' (R/H)	V5000/393-49	1
	Bottom Hinge Bracket: Type 'SB' (R/H)	V5000/394-49	1
15	Swivel Castors (95mm high)	SXX4339	4

* For alternative refrigeration unit options available, see pp.
† For door identification, see pp.

CABINET ASSEMBLY - 2 inch wall

Model: SK1300/2



CABINET ASSEMBLY - 2 inch wall

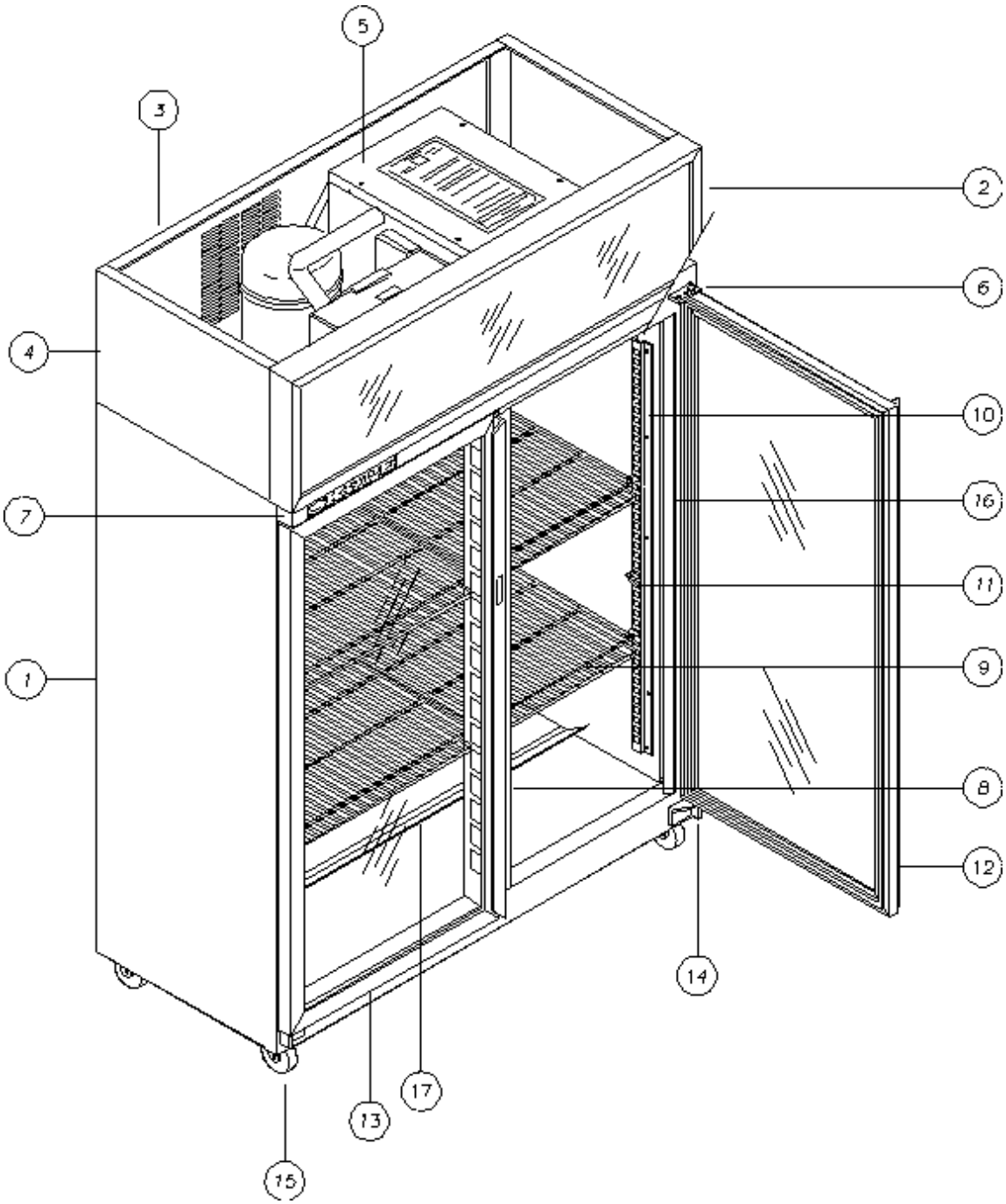
Model: SK1300/2

Item	Description	Part No.	Qty
1	Cabinet with Ducts & Shelf Support Strips	V1200/291	1
2	Sign Unit Assembly (Mk.4)	C1200/C19	1
3	Sign Back	C1200/181	1
4	Sign Sides	V5000/182	2
5	SKOPE Cyclone® Refrigeration Unit *	V8020/375	1
6	Top Hinge Assembly: Type 'SB' (R/H)	V5301/388-99	1
	Top Hinge Assembly: Type 'SB' (L/H)	V5301/389-99	1
7	Control Panel	C1200/789	1
8	4 ft Pillar Light Assembly	C1200/670-32	1
9	Shelf	V1200/162-99	10
10	Shelf Support Strip	V5000/150	6
11	Shelf Bracket	V973-99	30
12	R/H Door Assembly: Type 'SB' (Mk.3)	V6000/D01R	1
13	L/H Door Assembly: Type 'SB' (Mk.3)	V6000/D01L	1
14	Bottom Hinge Bracket: Type 'SB' (R/H)	V5000/393-49	1
	Bottom Hinge Bracket: Type 'SB' (R/H)	V5000/394-49	1
15	Swivel Castors (95mm high)	SXX4339	4

* For alternative refrigeration unit options available, see pp.

CABINET ASSEMBLY - Mk. 1 Side Light (SL)

Model: SK1300SL



CABINET ASSEMBLY - Mk. 1 Side Light (SL)

Model: SK1300SL

Item	Description	Part No.	Qty
1	Cabinet with Ducts & Shelf Support Strips	V1200/291	1
2	Sign Unit Assembly (Mk.4)	C1200/C19	1
3	Sign Back	C1200/181	1
4	Sign Sides	V5000/182	2
5	SKOPE Cyclone® Refrigeration Unit *	V8020/375	1
6	Top Hinge Assembly: Type 'SB' (R/H)	V5301/388-99	1
	Top Hinge Assembly: Type 'SB' (L/H)	V5301/389-99	1
7	Control Panel	C1200/789	1
8	4 ft Pillar Light Assembly	C1200/670-32	1
9	Shelf	V1200/162-99	10
10	Shelf Support Strip	V5000/150	6
11	Shelf Bracket	V973-99	30
12	R/H Door Assembly: Type 'SB' (Mk.3)	V6000/D01R	1
13	L/H Door Assembly: Type 'SB' (Mk.3)	V6000/D01L	1
14	Bottom Hinge Bracket: Type 'SB' (R/H)	V5000/393-49	1
	Bottom Hinge Bracket: Type 'SB' (R/H)	V5000/394-49	1
15	Swivel Castors (95mm high)	SXX4339	4

* For alternative refrigeration unit options available, see pp.

CABINET ASSEMBLY - Mk. 2 Side Light (XL)

Model: SK1300XL

CABINET ASSEMBLY - Mk. 2 Side Light (XL)

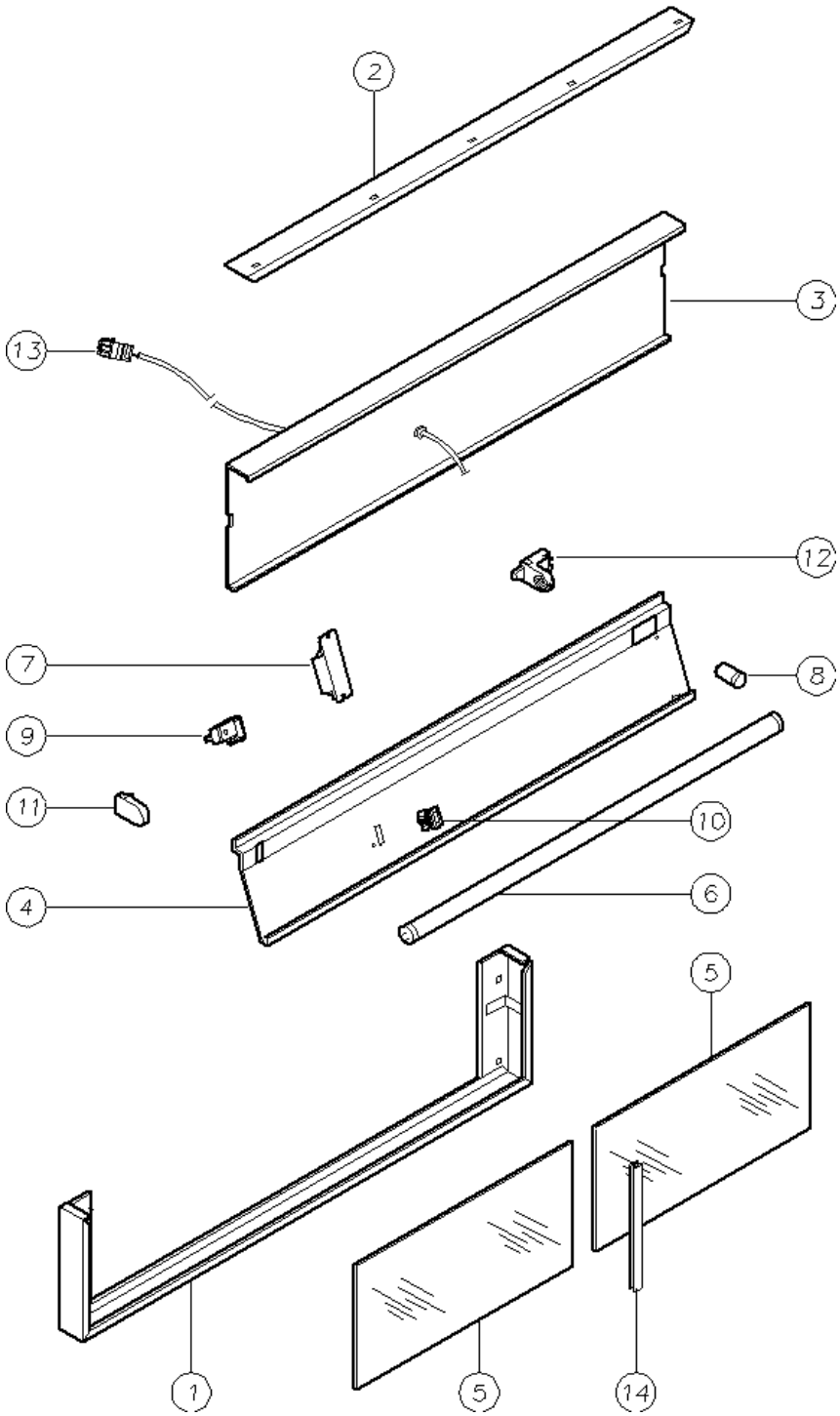
Model: SK1300XL

Item	Description	Part No.	Qty
1	Cabinet with Ducts & Shelf Support Strips	V1200/291	1
2	Sign Unit Assembly (Mk.4)	C1200/C19	1
3	Sign Back	C1200/181	1
4	Sign Sides	V5000/182	2
5	SKOPE Cyclone® Refrigeration Unit *	V8020/375	1
6	Top Hinge Assembly: Type 'SB' (R/H)	V5301/388-99	1
	Top Hinge Assembly: Type 'SB' (L/H)	V5301/389-99	1
7	Control Panel	C1200/789	1
8	4 ft Pillar Light Assembly	C1200/670-32	1
9	Shelf	V1200/162-99	10
10	Shelf Support Strip	V5000/150	6
11	Shelf Bracket	V973-99	30
12	R/H Door Assembly: Type 'SB' (Mk.3)	V6000/D01R	1
13	L/H Door Assembly: Type 'SB' (Mk.3)	V6000/D01L	1
14	Bottom Hinge Bracket: Type 'SB' (R/H)	V5000/393-49	1
	Bottom Hinge Bracket: Type 'SB' (R/H)	V5000/394-49	1
15	Swivel Castors (95mm high)	SXX4339	4

* For alternative refrigeration unit options available, see pp.

FLAT SIGN UNIT ASSEMBLY - Mk. 3

Part Number: C1200/680



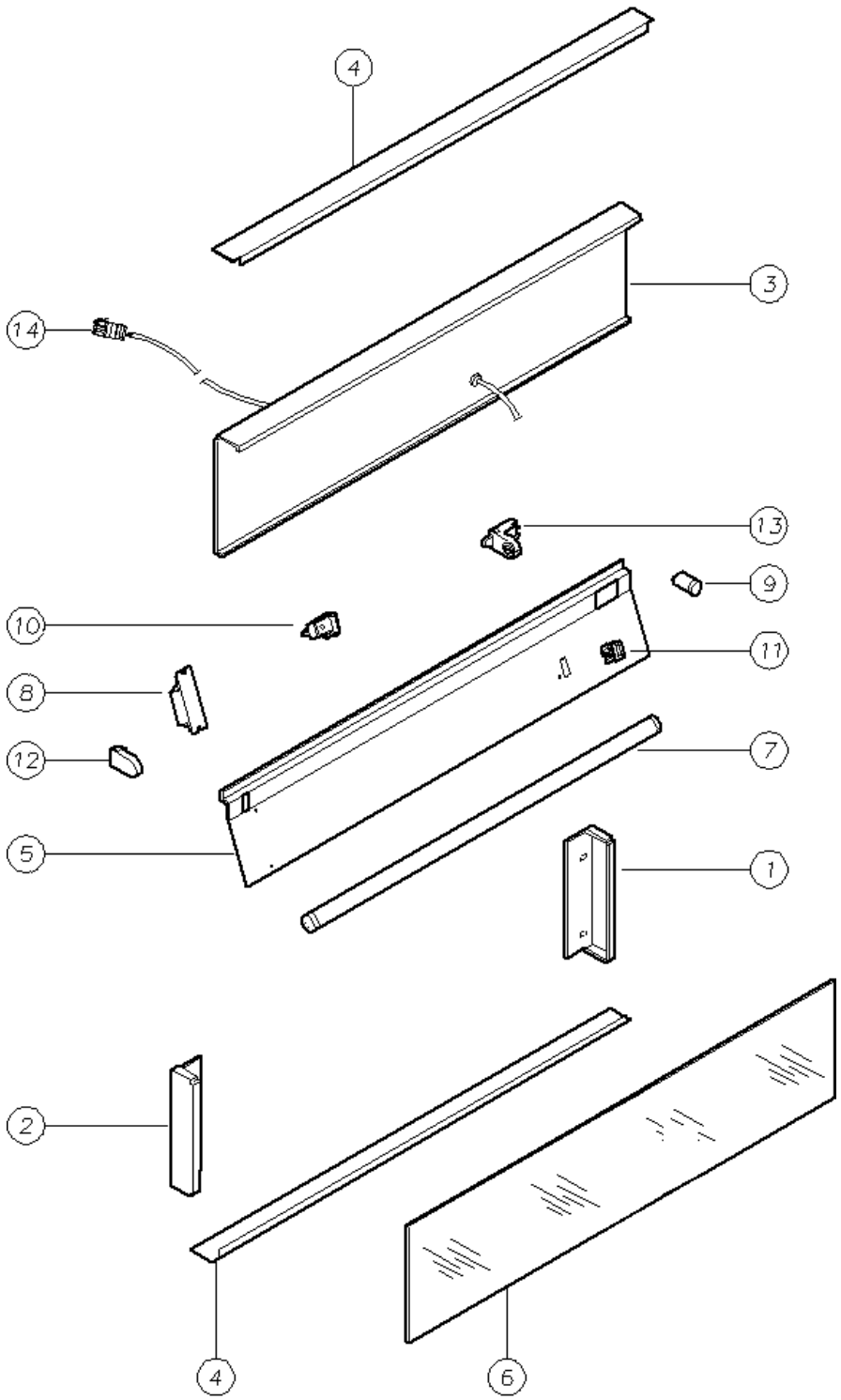
FLAT SIGN UNIT ASSEMBLY - Mk. 3

Part Number: C1200/680

Item	Description	Part No.	Qty
	Sign Unit Assembly	C1200/680	1
1	Sign Wrapper	C1200/681	1
2	Sign Top	C1200/682	1
3	Sign Reflector	C1200/683	1
4	Sign Wiring Cover	C1200/684	1
5	Sign Panel	V6000/189	2
6	36 Watt Fluorescent Tube (C55/10 6000K)	ELL5063	1
7	40 Watt Ballast	ELZ1251	1
8	Starter	ELZ2840	1
9	Fused Connector Block	ELZ6461	1
10	Fuse Holder	ELZ6462	1
	3.0 Amp Ceramic Fuse	ELZ6467	2
11	Lampholder	ELZ6270	1
12	Lampholder / Starter Holder	ELZ6271	1
13	‘Ensto’ Sign Supply Flex	V5000/934	1
	‘Ensto’ Plug	ELZ6458	1
14	Sign Panel Joining Strip	C1300/686	1

FLAT SIGN UNIT ASSEMBLY - Mk. 4

Part Number: C1200/C19



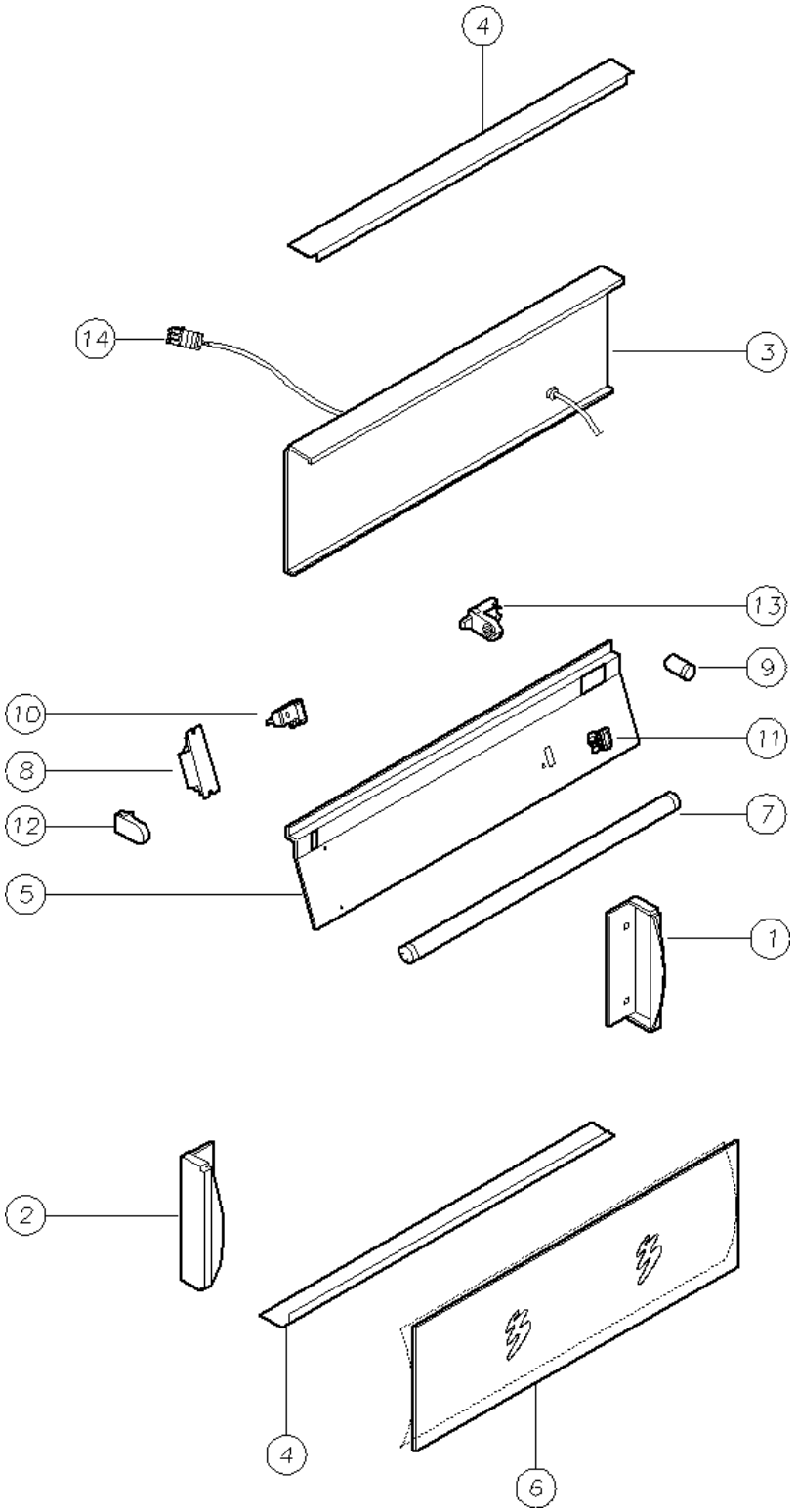
FLAT SIGN UNIT ASSEMBLY - Mk. 4

Part Number: C1200/C19

Item	Description	Part No.	Qty
	Flat Sign Unit Assembly	C1200/C19	1
1	Sign Box End (R/H)	V5000/C21	1
2	Sign Box End (L/H)	V5000/C22	1
3	Sign Reflector	C1200/C23	1
4	Sign Top & Bottom Panel	C1200/C24	2
5	Sign Wiring Cover	C1200/C26	1
6	Sign Panel - Opal	PLY8242	1
7	36 Watt Fluorescent Tube (C55/10 6000K)	ELL5063	1
8	40 Watt Ballast	ELZ1251	1
9	Starter	ELZ2840	1
10	Fused Connector Block	ELZ6461	1
11	Fuse Holder	ELZ6462	1
	3.0 Amp Ceramic Fuse	ELZ6467	2
12	Lampholder	ELZ6270	1
13	Lampholder / Starter Holder	ELZ6271	1
14	'Ensto' Sign Supply Flex	C1250/934	1
	'Ensto' Plug	ELZ6458	1

CURVED SIGN UNIT ASSEMBLY

Part Number: C1200/S21



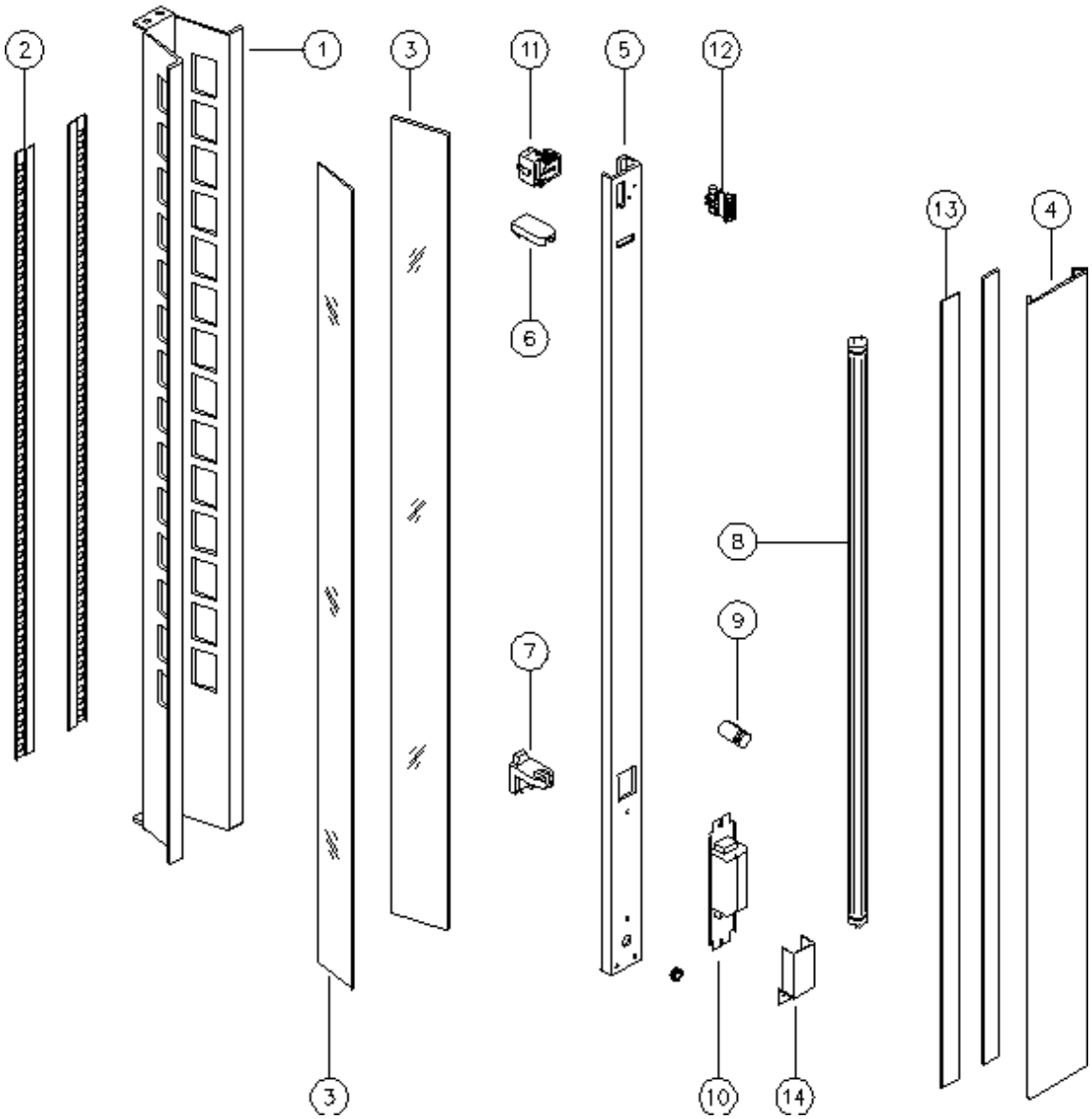
CURVED SIGN UNIT ASSEMBLY

Part Number: C1200/S21

Item	Description	Part No.	Qty
	Curved Sign Unit Assembly	C1200/S21	1
1	Sign Box End (R/H)	V5000/C21	1
2	Sign Box End (L/H)	V5000/C22	1
3	Sign Reflector	C1200/C23	1
4	Sign Top & Bottom Panel	C1200/C24	2
5	Sign Wiring Cover	C1200/C26	1
6	Sign Panel - Opal	PLY8242	1
7	36 Watt Fluorescent Tube (C55/10 6000K)	ELL5063	1
8	40 Watt Ballast	ELZ1251	1
9	Starter	ELZ2840	1
10	Fused Connector Block	ELZ6461	1
11	Fuse Holder	ELZ6462	1
	3.0 Amp Ceramic Fuse	ELZ6467	2
12	Lampholder	ELZ6270	1
13	Lampholder / Starter Holder	ELZ6271	1
14	'Ensto' Sign Supply Flex	C1250/934	1
	'Ensto' Plug	ELZ6458	1

4 ft PILLAR LIGHT ASSEMBLY

Part Number: C1200/670



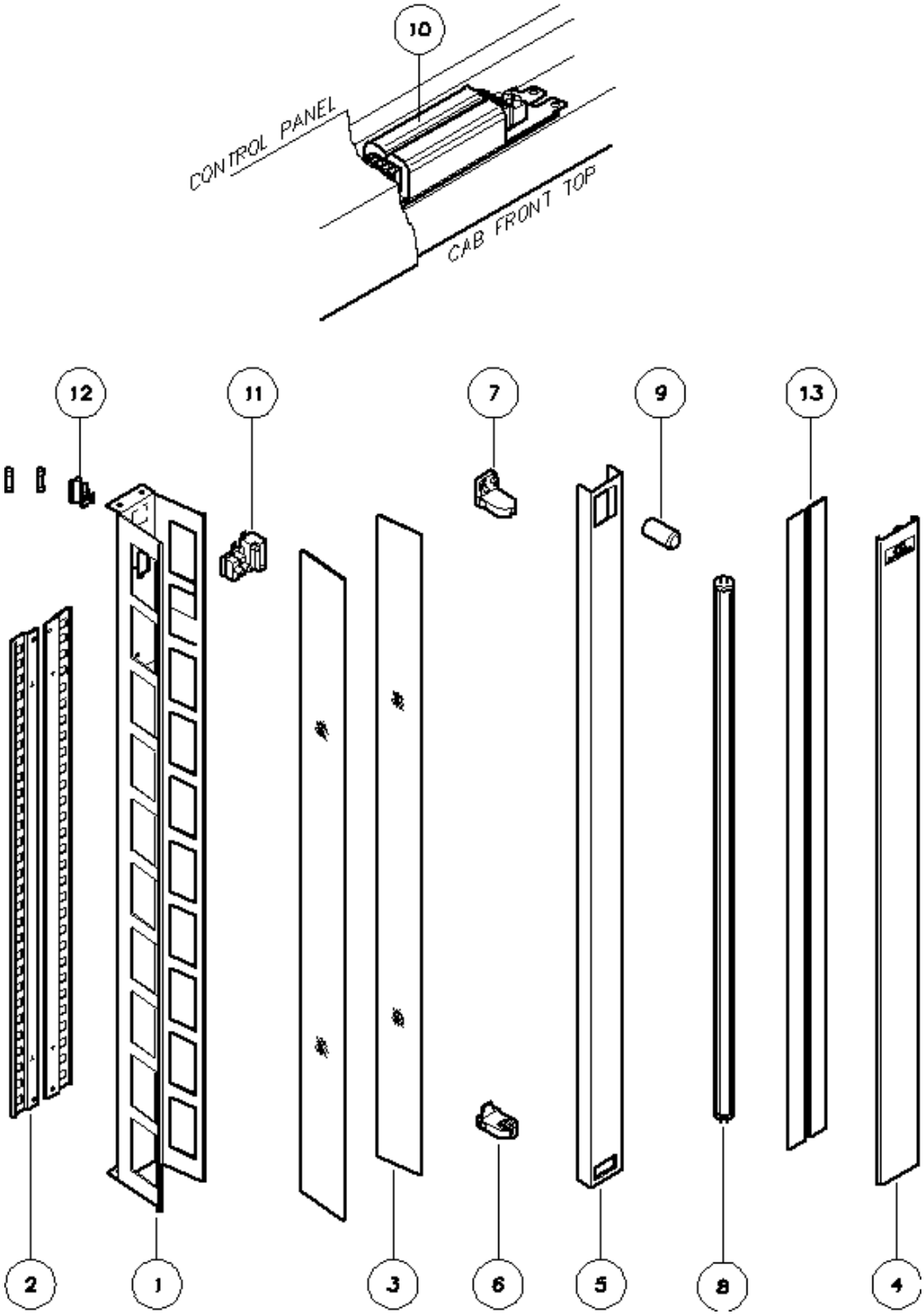
4 ft PILLAR LIGHT ASSEMBLY

Part Number: C1200/670

Item	Description	Part No.	Qty
	Pillar Light Assembly (4ft)	C1200/670	1
1	Sign Box End (R/H)	V5000/C21	1
2	Sign Box End (L/H)	V5000/C22	1
3	Sign Reflector	C1200/C23	1
4	Sign Top & Bottom Panel	C1200/C24	2
5	Sign Wiring Cover	C1200/C26	1
6	Sign Panel - Opal	PLY8242	1
7	36 Watt Fluorescent Tube (C55/10 6000K)	ELL5063	1
8	40 Watt Ballast	ELZ1251	1
9	Starter	ELZ2840	1
10	Fused Connector Block	ELZ6461	1
11	Fuse Holder	ELZ6462	1
	3.0 Amp Ceramic Fuse	ELZ6467	2
12	Lampholder	ELZ6270	1
13	Lampholder / Starter Holder	ELZ6271	1
14	'Ensto' Sign Supply Flex	C1250/934	1
	'Ensto' Plug	ELZ6458	1

5 ft PILLAR LIGHT ASSEMBLY

Part Number: V1200/L40



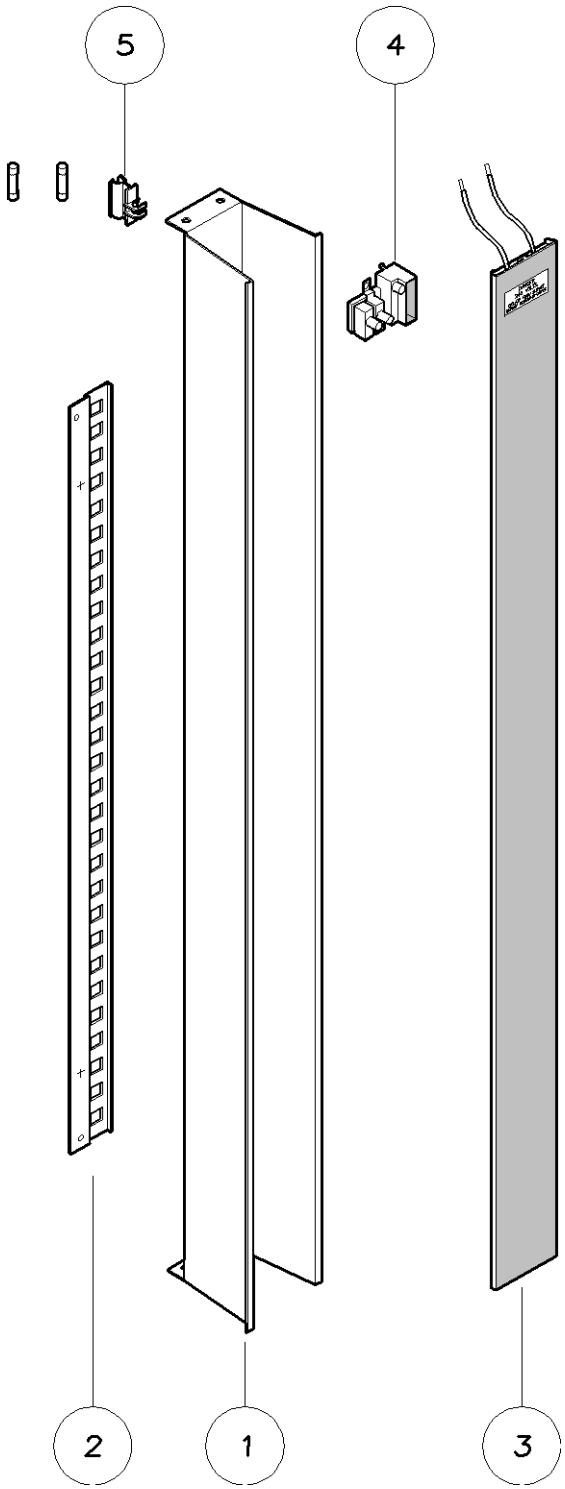
5 ft PILLAR LIGHT ASSEMBLY

Part Number: V1200/L40

Item	Description	Part No.	Qty
	Pillar Light Assembly (5ft)	V1200/L40	1
1	Centre Pillar	V1200/L61-32	1
2	Shelf Support Strip	ALXV5000/150	2
3	Centre Pillar Diffuse	PLY81053	2
4	Centre Pillar Cover	PLE4471BK-1560	1
5	Centre Pillar Lamp Channel	V1200/L60-32	1
6	Lamp Holder	ELZ6270	1
7	Lamp Holder / Starter Holder	ELZ6271	1
8	58 Watt Fluorescent Tube (L58W/21 4000K)	ELL6267	1
9	Starter	ELZ2840	1
10	65 Watt Ballast (fitted behind control panel)	ELZ8103	1
11	Fused Connector Block	ELZ6461	1
12	Fuse Holder	ELZ6462	1
	3.0 Amp Ceramic Fuse	ELZ6467	1
13	Centre Pillar Strip	V5000/82	1

SOLID CENTRE PILLAR ASSEMBLY

Part Number: C1200/L43



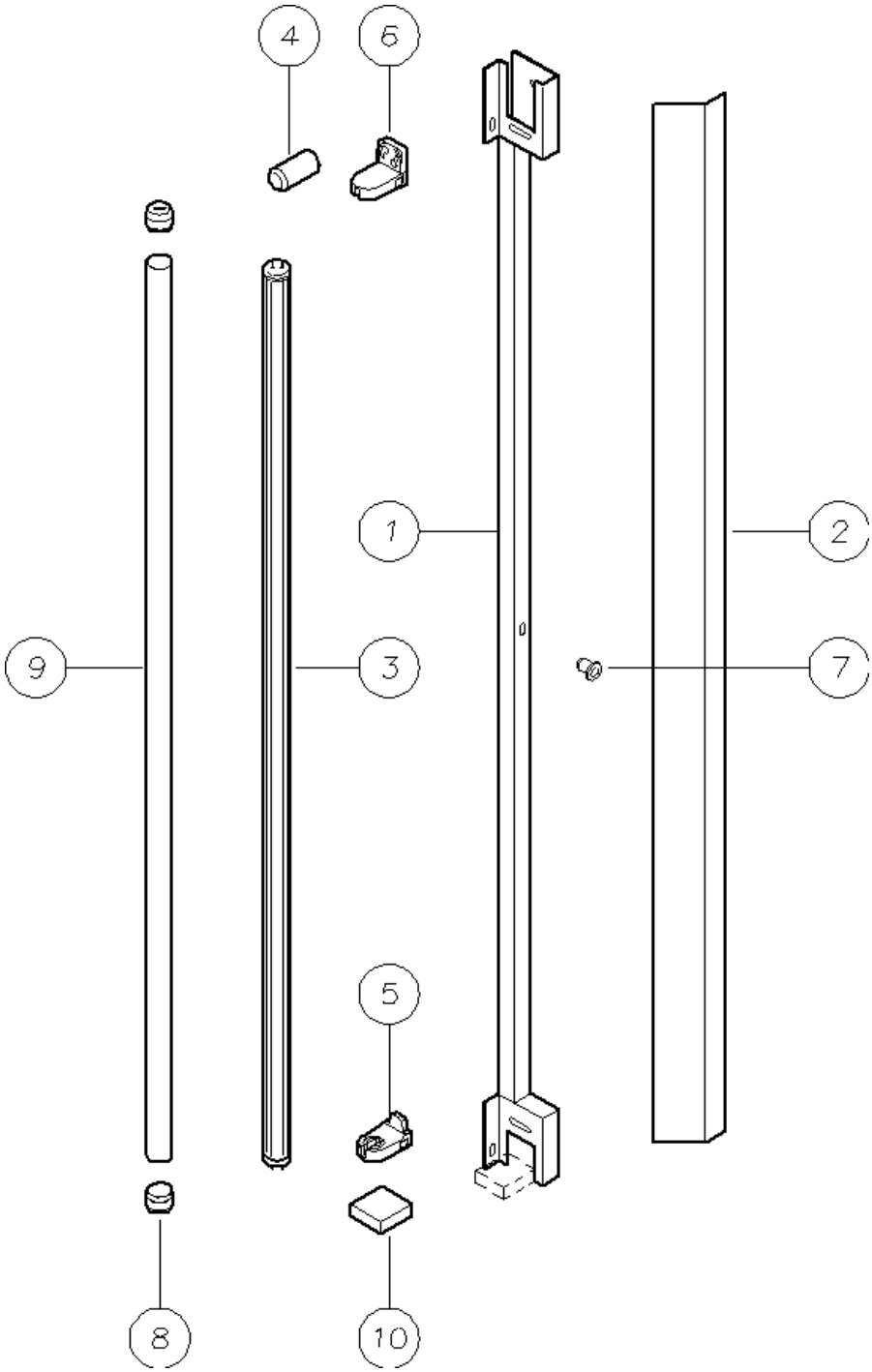
SOLID CENTRE PILLAR ASSEMBLY

Part Number: C1200/L43

Item	Description	Part No.	Qty
	Solid Centre Pillar Assembly	C1200/L43-32	1
1	Solid Centre Pillar	V1200/L64-32	1
2	Shelf Support Strip	ALXV5000/150	2
3	Pillar Cover and Element Assembly	V5060/L44	1
	Centre Pillar Cover	PLE4471BK-1560	1
	Centre Pillar Element	ELE2611	1
	Metal Strip - sides	V5000/82	2
	Metal Strip - centre	V7000/82	1
	Rubber Inseal (1560 x 60mm)	RUE5120	1
4	Fused Connector Block	ELZ6461	1
5	Fuse Holder	ELZ6462	1
	3.0 Amp Ceramic Fuse	ELZ6467	1

SIDE LIGHT ASSEMBLY (SL)

Part Number: V1200/L95



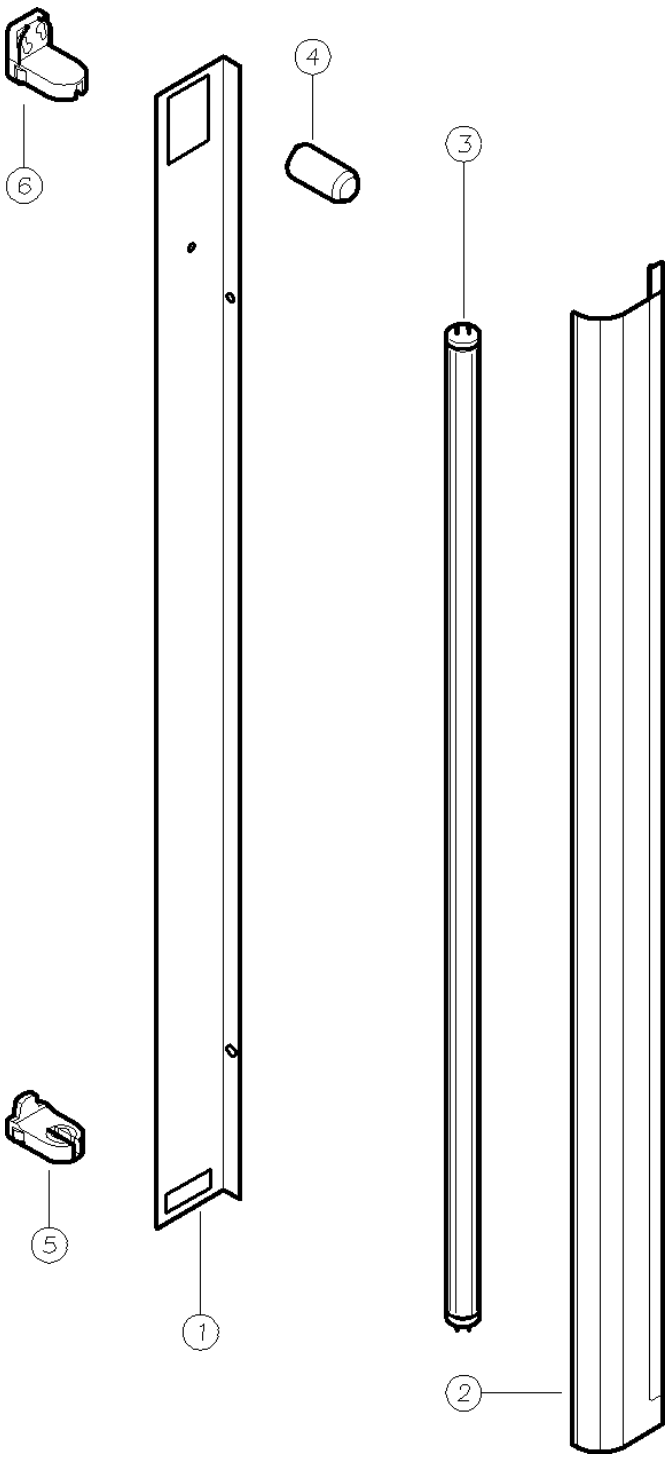
SIDE LIGHT ASSEMBLY (SL)

Part Number: V1200/L95

Item	Description	Part No.	Qty
	Side Light Assembly (L/H)	V1200/L95L-32	1
	Side Light Assembly (R/H)	V1200/L95R-32	1
1	Light Channel Assembly (L/H)	V1200/L92L-32	1
	Light Channel Assembly (R/H)	V1200/L92R-32	1
2	Side Light Cover	V1200/L94	1
3	58 Watt 5ft Fluorescent Tube (L58W/21 4000K)	ELL6267	1
4	Starter	ELZ2840	1
5	Lamp Holder	ELZ6270	1
6	Lamp Holder / Starter Holder	ELZ6271	1
7	Plastic Bush	PLM2775	1
8	Tube Protector End Cap	PLM5155	2
9	Tube Protector	PLM6268	1
10	Rubber Inseal	RUE5874	1

EXTRUDED SIDE LIGHT ASSEMBLY (XL)

Part Number: V5060/670



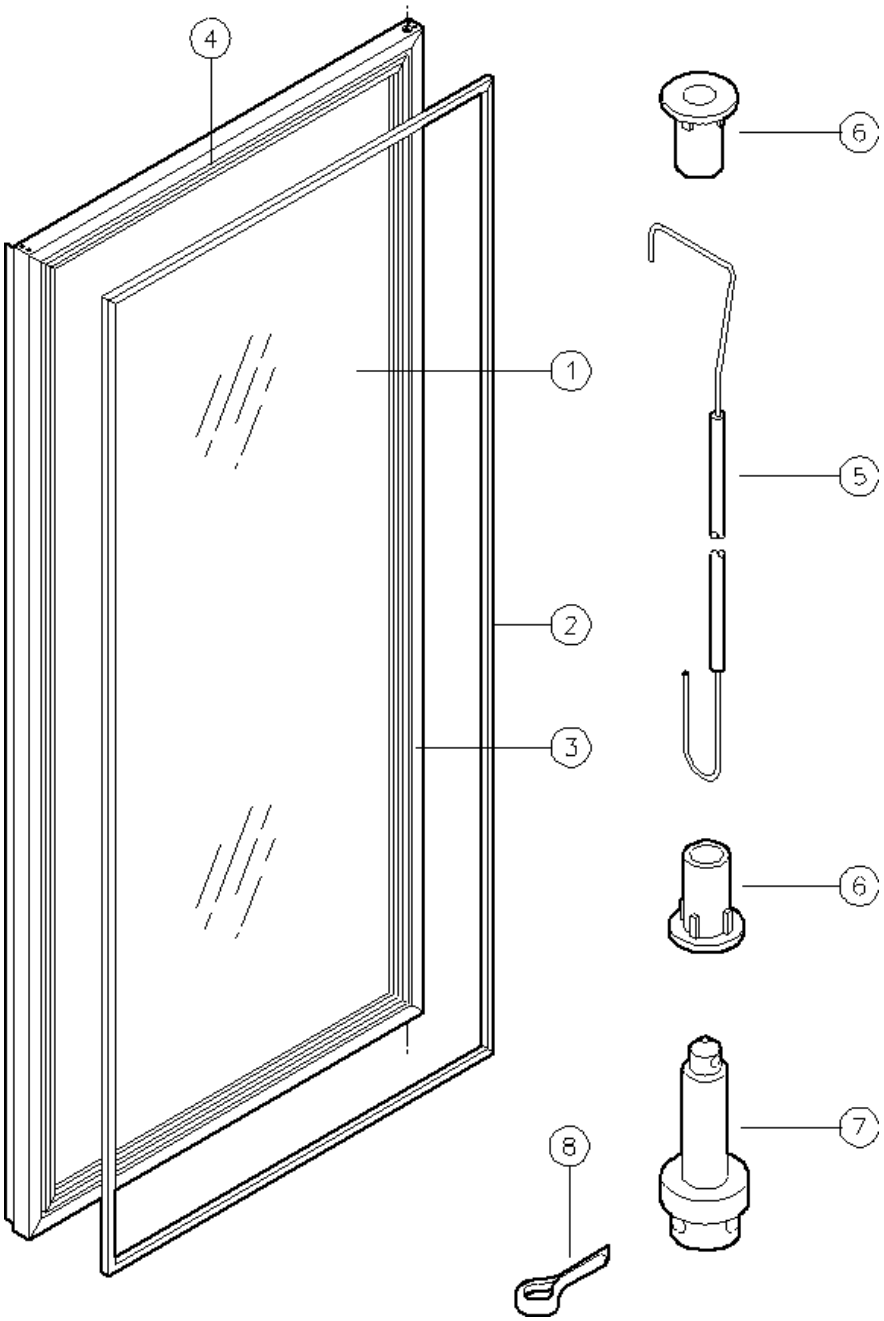
EXTRUDED SIDE LIGHT ASSEMBLY (XL)

Part Number: V5060/670

Item	Description	Part No.	Qty
	Extruded Side Light Assembly (L/H)	V5060/670L-32	1
	Extruded Side Light Assembly (R/H)	V5060/670R-32	1
1	Side Light Channel (L/H)	V5060/671L-32	1
	Side Light Channel (R/H)	V5060/671R-32	1
2	Side Light Diffuser	V5060/E71	1
3	58 Watt 5ft Fluorescent Tube (L58W/21 4000K)	ELL6267	1
4	Starter	ELZ2840	1
5	Lamp Holder	ELZ6270	1
6	Lamp Holder / Starter Holder	ELZ6271	1

GLASS DOOR ASSEMBLY

Part Numbers: V6000/741 or V6000/D02



GLASS DOOR ASSEMBLY

Model: Mk. 2 (Square door profile)

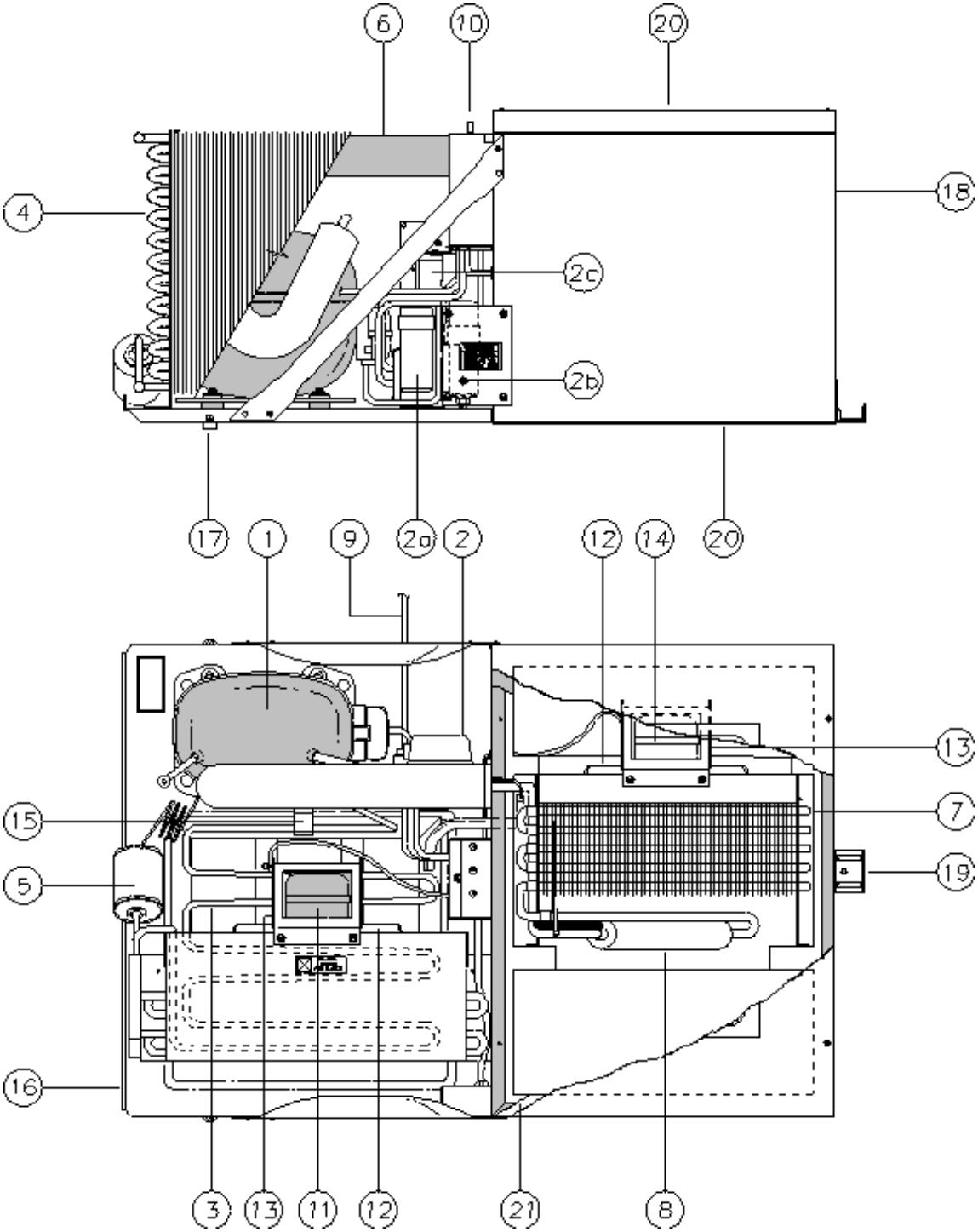
Item	Description	Part No.	Qty
1	Glass with Frame	V6000/741	1
2	Gasket	GKT4775	1
3	Thermal Break (long)	V5000/765	2
4	Thermal Break (short)	V6000/766	2
5	Torsion Bar	REF5014	1
	Torsion Bar Set (items: 3, 4 & 5)	REF4295	1
6	Bush	PLM5075	2
7	Capstan	TUR5100	1
8	Cotter Pin	FAS5076	1

Model: Mk. 3 (Radiused door profile)

Item	Description	Part No.	Qty
1	Glass with Frame	V6000/D02	1
2	Gasket	GKT4775	1
3	Thermal Break (long)	V5000/765	2
4	Thermal Break (short)	V6000/766	2
5	Torsion Bar	REF5014	1
	Torsion Bar Set (items: 3, 4 & 5)	REF4295	1
6	Bush	PLM5075	2
7	Capstan	TUR5100	1
8	Cotter Pin	FAS5076	1

SKOPE CYCLONE® REFRIGERATION UNIT

Model: SK1500-C
Part Number: V8020/375



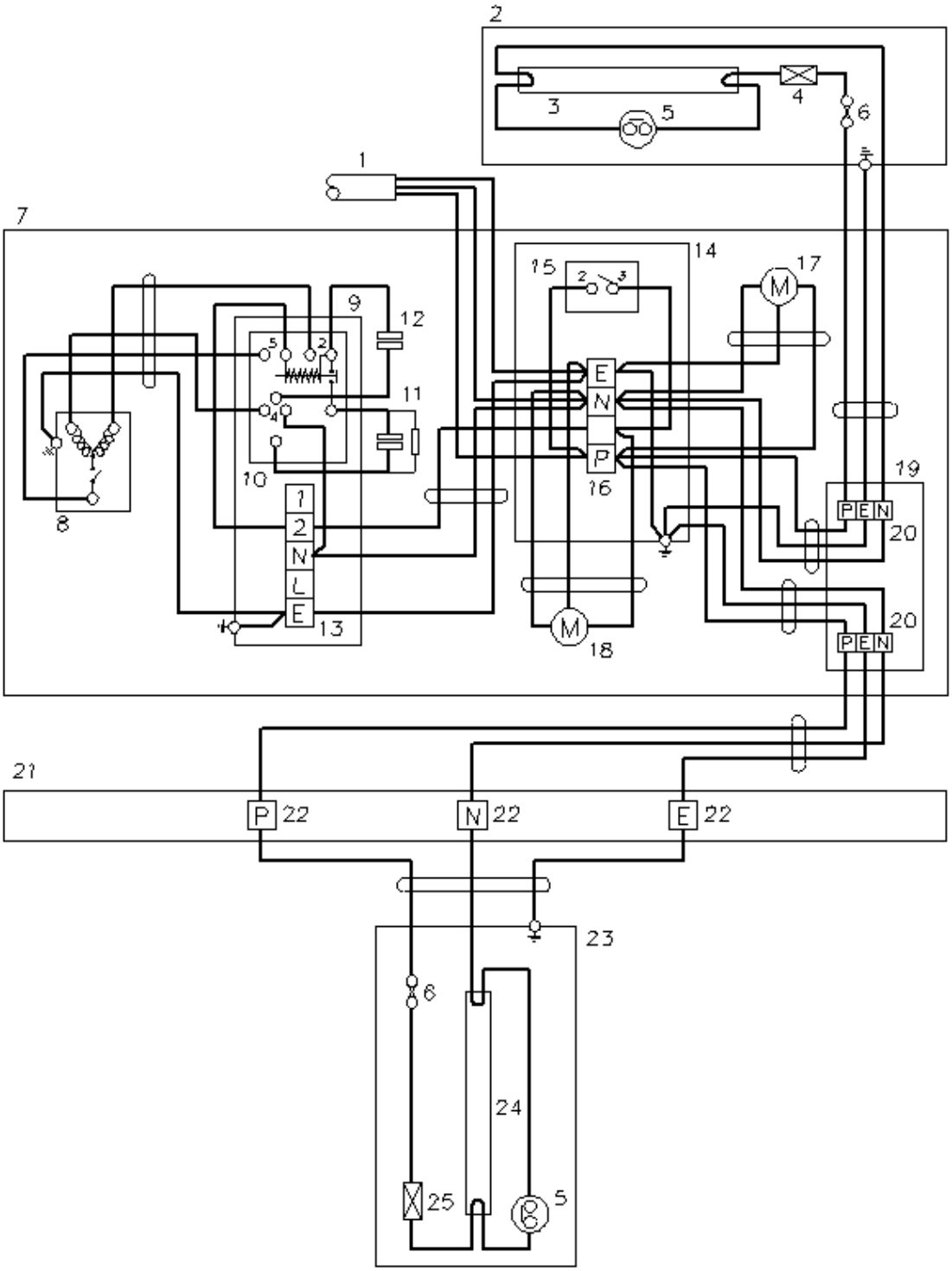
SKOPE CYCLONE® REFRIGERATION UNIT

Model: SK1500-C

Part Number: V8020/375

Item	Description	Part No.	Qty
	SKOPE Cyclone® Refrigeration Unit Assembly	V8020/375	1
1	Compressor - Danfoss SC21G	CPR6021	1
2	Electrics Kit (complete)	ELZ4818	1
2a	Start Capacitor	part of ELZ4818	1
2b	Run Capacitor	part of ELZ4818	1
2c	Relay	part of ELZ4818	1
3	Discharge Line	V8020/255-99	1
4	Condenser Coil	CLS4800	1
5	Drier	DRY6110	1
6	Suction Line with Capillary	V8020/377	1
7	Evaporator Coil	CLS4801	1
8	Accumulator	K0336983	1
9	Mains Supply Flex	V5000/397-99	1
10	Thermostat	ELO7702	1
11	Motor Assembly	V5000/404	2
12	Fan Blade	FAN4100	2
13	Motor Mount	V5000/235	2
14	Discharge Line Clamp	V5000/254	1
15	Condensing Unit Base	V8150/210-51	1
16	Condensing Unit Base Foot	PLM6108	2
17	Evaporator Box - Foamed	V5000/376	1
18	Retaining Bracket	V5000/226-99	1
19	Evaporator Box Lid - Foamed	V8150/225	1
20	Seal Strip (21m per unit)	RUE3991	1

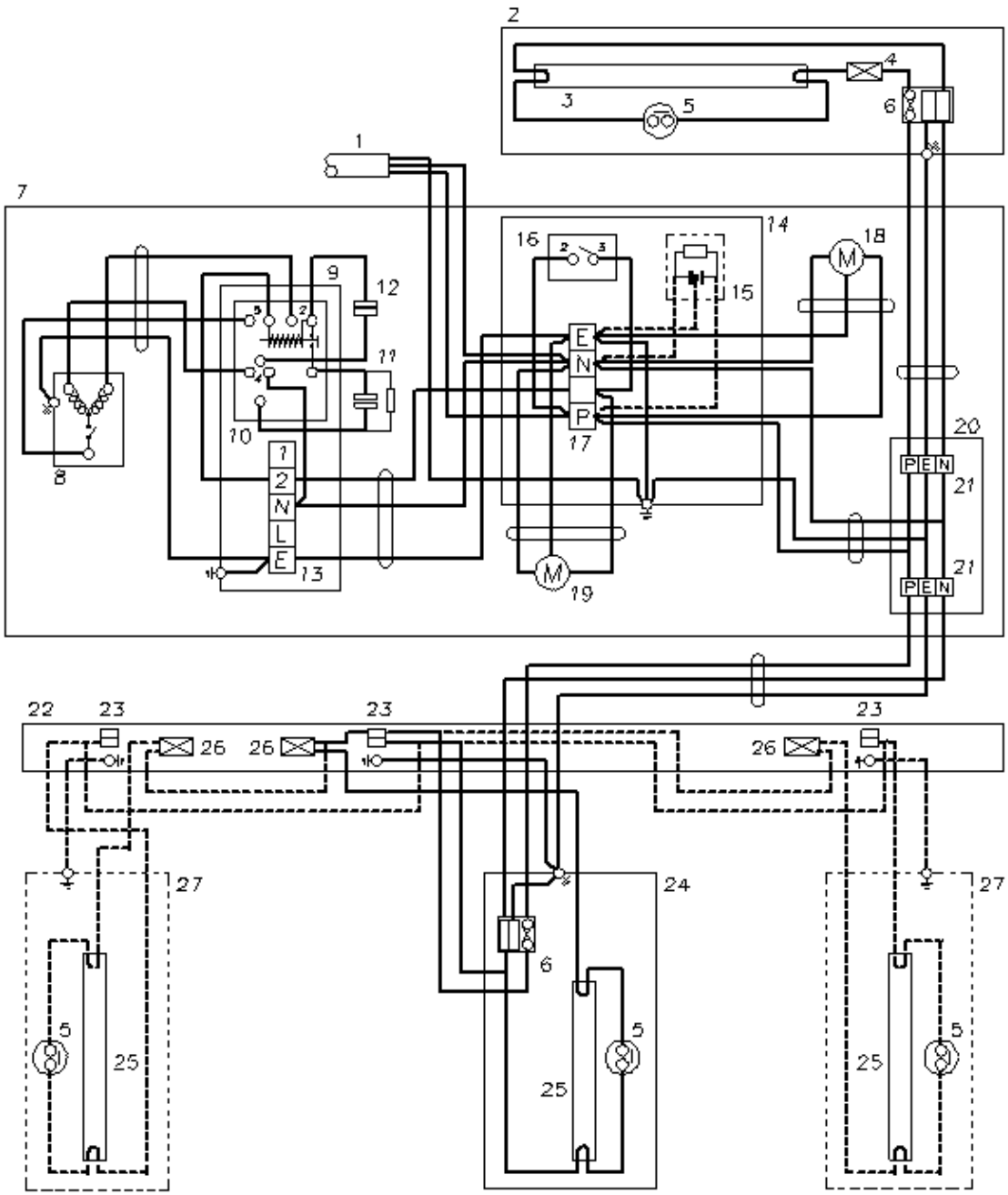
4 ft CENTRE PILLAR LIGHT



4 ft CENTRE PILLAR LIGHT

Item	Part Description
1	Mains Flex
2	Sign Box Assembly
3	30 Watt Fluorescent Tube
4	30 Watt Ballast
5	Starter
6	2.5 Amp Fuse (2)
7	SKOPE Cyclone® Refrigeration Unit
8	Compressor
9	Compressor Electrics Box
10	Relay
11	Run Capacitor
12	Start Capacitor
13	Compressor Terminal Block
14	Control Box
15	Thermostat
16	Control Box Terminal Block
17	Evaporator Fan Motor
18	Condenser Fan Motor
19	Socket Box
20	'Ensto' Connector (2)
21	Control Panel
22	Terminal Block (3)
23	Centre Pillar
24	40 Watt Fluorescent Tube
25	40 Watt Ballast

5 ft CENTRE PILLAR LIGHT



5 ft CENTRE PILLAR LIGHT

Item	Part Description
1	Mains Flex
2	Sign Box Assembly
3	36 Watt Fluorescent Tube
4	40 Watt Ballast
5	Starter
6	3.0 Amp Fuse (2)
7	SKOPE Cyclone® Refrigeration Unit
8	Compressor
9	Compressor Electrics Box
10	Relay
11	Run Capacitor
12	Start Capacitor
13	Compressor Terminal Block
14	Control Box
15	R.F.I. Suppression Capacitor (when fitted)
16	Thermostat
17	Control Box Terminal Block
18	Evaporator Fan Motor
19	Condenser Fan Motor
20	Socket Box
21	'Ensto' Connector (2)
22	Control Panel
23	Connector Block (3)
24	Centre Pillar
25	58 Watt Fluorescent Tube
26	60 Watt Ballast
27	Side Light Assembly (optional)

CABINET

Plain Fascia Panel

This panel is designed to replace the illuminated sign for situations where merchandising is not the primary function of the cooler. It simply clips into the same position as the illuminated sign. The sign replacement panel is available on new coolers, ex factory and may also be retrofitted.

Side Lights

A full height fluorescent tube (5 ft) is partially recessed into the side of the cabinet, to provide increased illumination. A clear cylindrical cover is fitted to protect the tube from damage. The ballast is fitted on a step in the cabinet top behind the control panel. All lighting and ancillary heating elements (optional) are protected through the fuse fitted in the centre pillar.

5 ft. Centre Pillar Illumination

A full height fluorescent tube (5 ft) is fitted inside the centre pillar. A fuse holder is fitted at the top of the pillar and protrudes into the interior of the cabinet. The ballast is fitted on a step in the cabinet top behind the control panel.

Solid Doors

For use in non merchandising applications and energy conservation. Due to the thicker construction, the sign, control panel and hinging systems are also required to be replaced. Internal and external finishes of the door must be specified when ordering.

Switched Centre Pillar Illumination

The switched centre pillar has a heater element running the full height of the doors, which prevents condensation occuring when the illumination is off. The switch is inside the cabinet on the centre pillar.

Deep Shelves

Deep shelves are fitted in conjunction with solid doors.

Swivel Castors

There are three kinds of optional swivel castors:

1. Front Locking:
95mm high, fitted with a foot operated wheel lock.

2. Adjustable:
115mm to 130mm adjustable and non-lockable.

3. Adjustable Front Locking:
115mm to 130mm adjustable with foot operated wheel lock.

A Castor Plate is required for mounting of each adjustable castor.See page 8.5 for part numbers.

Adjustable Feet

Adjustable between 32mm to 69mm. A Castor Plate is also required for mounting of each adjustable foot.

Adjustable Kick Panel

Adjustable Kick panels are supplied in kitset form. The kit consists of front and side panels which are adjustable to suit varying castor and feet heights.

There are two types of Adjustable Kick Panel Kits available:

- Adjustable Castor Kick Panel Kit:
  This suits when swivel castors are fitted. This includes the standard non-adjustable castor as well as the optional adjustable and front locking types.
- Adjustable Foot Kick Panel Kit:
  This suits when adjustable feet are fitted.

To fit Adjustable Kick Panels: (see page 8.10)

- Fit the Fixed Kick Panel to the cabinet front base with self taping screws.
- Fit Adjustable Kick Panel to the outside

of the Fixed Front Kick Panel with M4 screws. (position height to suit floor level).

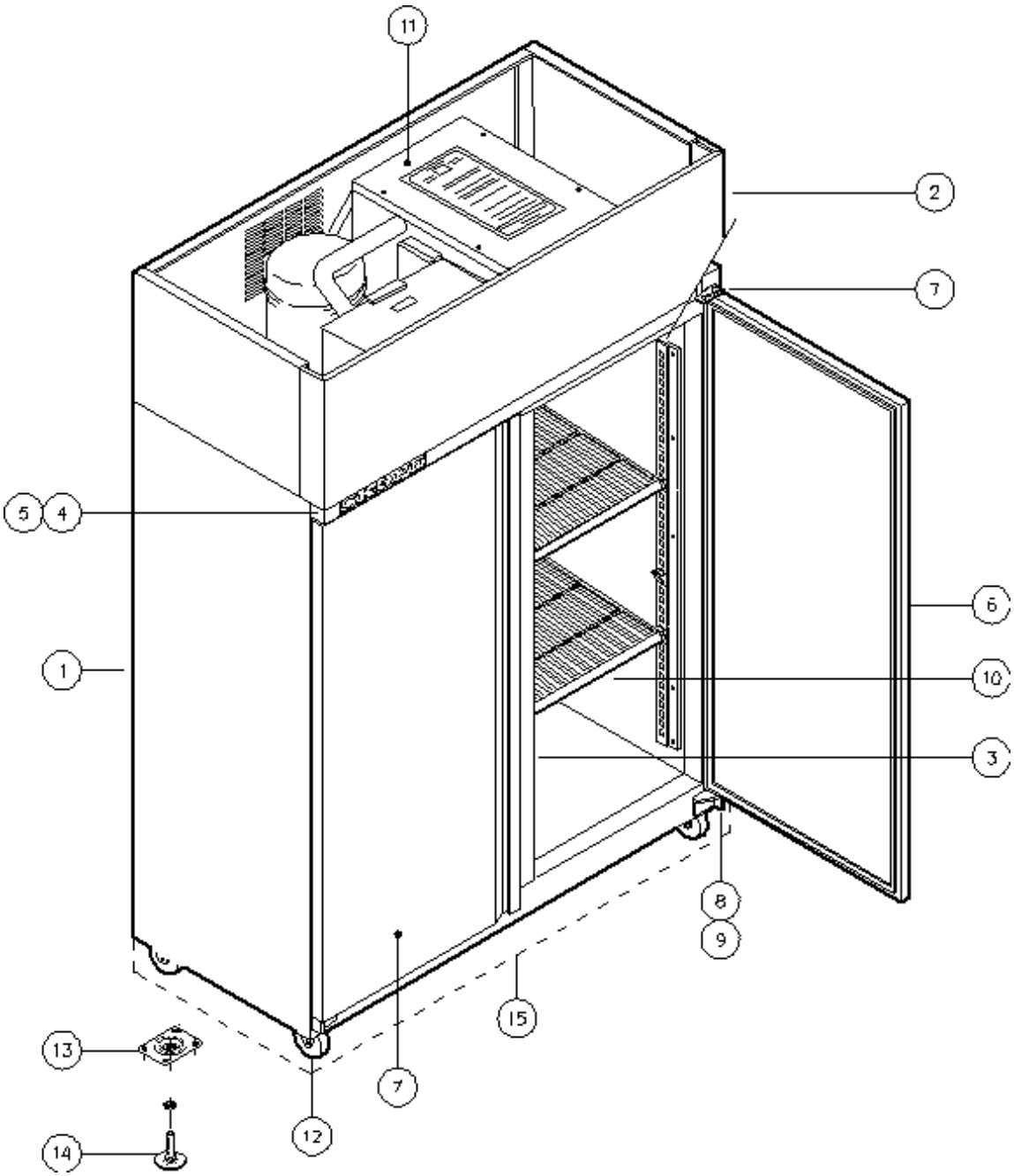
- Fit the Adjustable Side Panels and the Fixed Side Panesl to the Fixed Front Kick Panel with one M4 screw.
- Fit the Fixing Brackets to the Side Panel and the Adjustable Side Panel with one M4 screw.
- Drill 2.7mm diameter holes into the cabinet back to secure the Fixing Brackets and Side Panels with self taping screws.
- Loosen the M4 screw to align the Adjustable Panels suitable to the floor level.

Temperature Indicators

The Dial Thermometer is fitted as standard and is located inside the cabinet. Part No. V5000/95A.

There are two kinds of optional temperature indicators:

CABINET ASSEMBLY

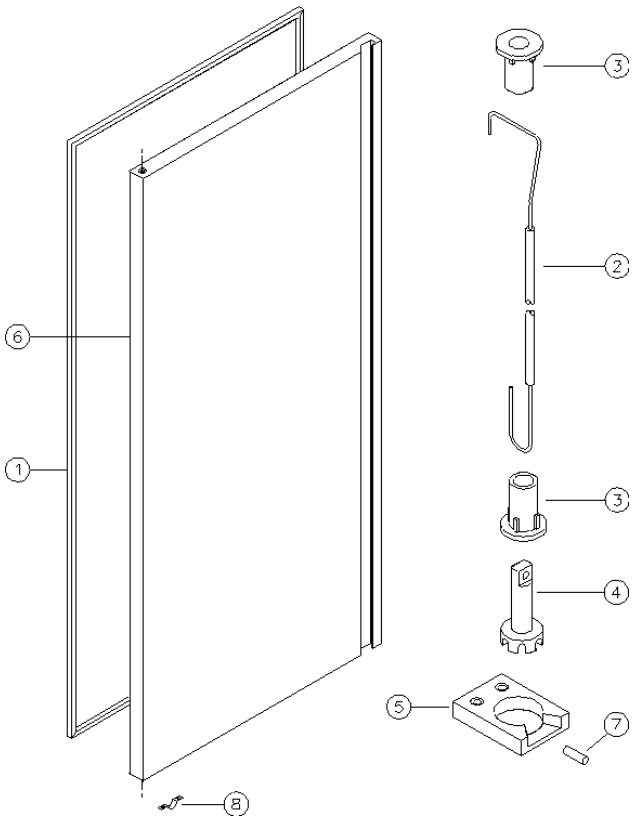


CABINET ASSEMBLY

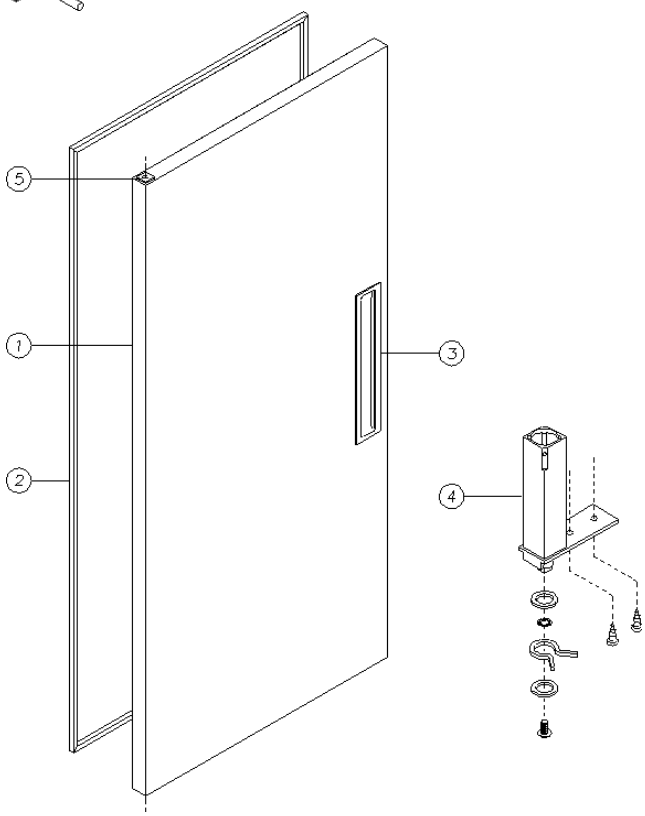
Item	Description	Part No.	Qty
1	Cabinet with Ducts and Shelf Support Strips	V1200/291	1
2	Plain Facia Panel (glass doors)	C1200/373	1
	Plain Facia Panel (solid doors)	C1200/295	1
3	5ft Centre Pillar Light Assembly	V1200/L40	1
	Switched Centre Pillar - Light Assembly	C1200/673	1
	Switched Centre Pillar - 3 Terminal Switch	ELS6560	1
	Switched Centre Pillar - Anti-Sweat Wire	ELE2611	1
4	Control Panel for SAE Thermometer	R1200/789	1
5	Control Panel for Solid Doors	C1200/791	1
6	Solid Door Assembly (R/H)	V6500/D40	1
	Solid Door Assembly (L/H)	V6500/D41	1
7	Solid Door Top Hinge Assembly (R/H)	V7301/388N-99	1
	Solid Door Top Hinge Assembly (L/H)	V7301/389N-99	1
8	Solid Door Bottom Hinge (R/H)	C1300/D55R	1
	Solid Door Bottom Hinge (L/H)	C1300/D55L	1
9	Solid Door Bottom Stay	V7000.044	2
10	Deep Shelf for Solid Doors	R1200/161-99	5
11	Passivated Evaporator Coil	CLS4801P-99	1
	'Rotorua' SKOPE Cyclone® Refrigeration Unit	V8020R-102EZ	1
12	Front Locking Castor	SXX4539	2
	Adjustable Castor*	SXX6181	6
	Adjustable Front Locking Castor*	SXX6182	2
13	Castor Plate*	SXX6180	6
14	Adjustable Foot*	V5000/314	6
15	Adjustable Castor Kick Panel Kit	C1200/127	1
	Adjustable Foot Kick Panel Kit	C1200/128	1

* Castor Plate is required for mounting of Adjustable Foot and Adjustable Castors.

SOLID DOOR ASSEMBLY



Mk. 1 & Mk. 2
Full Length Handle



Mk. 3
Plastic Handle

SOLID DOOR ASSEMBLY

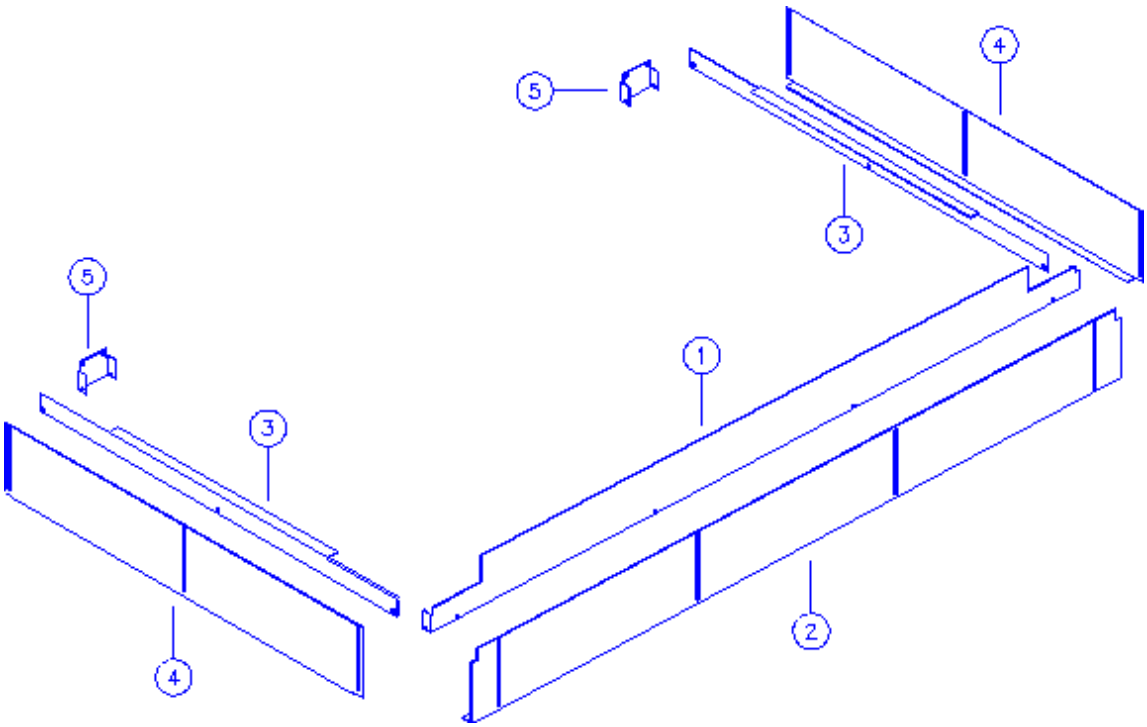
Mk. 1 & Mk. 2 - Full Length Handle

Item	Description	Part No.	Qty
1	Magnetic Door Gasket	GKT4775	1
2	Torsion Bar Set (items: 2, 3 & 4)	REF4273	1
3	Bush	PLM3289	2
4	Capstan	REF1446	1
5	Captive Plate	REF1447	1
6	Solid Door Foamed	V6502D	1
7	Capstan Pin	REF1448	1
8	Solid Door Top Stay	V7000/45	1

Mk. 3 - Plastic Handle

Item	Description	Part No.	Qty
	Solid Door Assembly (R/H)	V6500/D40-32	1
	Solid Door Assembly (L/H)	V6500/D41-32	1
1	Solid Door Foamed - includes handle and gasket retainers	V6500/D42	1
2	Magnetic Door Gasket	GKT7883	1
3	Plastic Handle	PLM7823	1
4	Hinge Mechanism - includes spring & fastenings	HIN5780	1
5	Mount Bush	C1300/D56	1

ADJUSTABLE KICK PANEL



ADJUSTABLE KICK PANEL

Adjustable Castor Kick Panel Kit

Item	Description	Part No.	Qty
	Adjustable Castor Kick Panel Kit	C1200/127	1
1	Fixed Kick Panel	C1200/A54	1
2	Adjustable Kick Panel	C1200/A56	1
3	Fixed Side Panel	V5000/A57	2
4	Adjustable Castor Side Panel	V5000/A60	2
5	Side Panel Fixing Bracket	V5000/A58	2

Note: Diagram on following page, shows Kick Panel for Adjustable Castors.

Adjustable Foot Kick Panel Kit

Item	Description	Part No.	Qty
	Adjustable Foot Kick Panel Kit	C1200/128	1
1	Fixed Kick Panel	C1200/A54	1
2	Adjustable Kick Panel	C1200/A55	1
3	Fixed Side Panel	V5000/A57	2
4	Adjustable Foot Side Panel	V5000/A59	2
5	Side Panel Fixing Bracket	V5000/A58	2

CABINET ASSEMBLY

Part Description	YA850
CABINET	
Control Panel Assembly	Y1100/797
Top Hinge Blank (R/H)	V5301/390A
Top Hinge Assembly (L/H)	n.a.
Top Hinge Assembly (L/H)	V5301/389
Top Hinge Blanking Bracket	n.a.
Door Adjuster Assembly	A1100/A42-49 (1)
Door Bottom Hinge Shim	V5000/115B
Bottom Hinge (R/H)	A1100/393-49
Bottom Hinge (L/H)	A1100/394-49
Wire Shelf	Y1100/162
Adjustable Shelf Bracket (R/H)	R1101/598L
Adjustable Shelf Bracket (L/H)	R1101/598R
Cabinet Wiring Junction Box Ass'y	Y1100/G29 (1)
SKOPE Name Badge	NAM8016-GY/SV
Neon/Switch Encapsulated Label	LAB0088
Swivel Castor - Mounting Plate	SXX6180 (4)
Adjustable Swivel Castor - Standard	SXX6181 (2)
Adjustable Swivel Castor - Locking	SXX6182 (2)
Adjustable Stability Foot	Y1100/314-49 (4)

When ordering spare parts: please specify colour (white, black etc.), finish (anodised or painted), and sign panel artwork (if applicable).

CABINET ASSEMBLY

Part Description	YA850
GLASS DOOR	
Glass Door Assembly (R/H)	Y2100/740R
Glass Door Assembly (L/H)	Y2100/740L
Glass Door Gasket	GKT9653
Door Adjuster Assembly	A1100/A42-49
Torsion Bar	REF0092
Capstan	TUR7635
Bush	PLM5075 (2)
INTERIOR LIGHTS	
Side Light Assembly (R/H)	Y1100/670R-32
Side Light Assembly (L/H)	Y1100/670L-32
Centre Pillar Light Assembly	n.a.
Centre Pillar Channel Assemly (R/H)	n.a.
Centre Pillar Channel Assemly (L/H)	n.a.
Light Diffuser	Y1100/E71
58 Watt Fluorescent Tube (5ft):	
L58W/21-840 4000K ‘Coolwhite’	ELL6267
L58W/11-860 6000K ‘Daylight’	ELL9390
Starter	ELZ2840
Lamp Holder	ELZ6270
Starter Holder	ELZ6271

OPTIONAL PARTS

Part Description	YA850
LIGHTED SIGN BOX	
Sign Assembly (packed)	Y1100/S01
Curved Sign Panel - Clear	PLY0118
Curved Sign Panel - Opal	PLY0120
58 Watt Fluorescent Tube (5ft)	n.a.
58/65 Watt Ballast	n.a.
Starter	ELZ2840
20 Watt Ballast	ELZ1039
18 Watt Fluorescent Tube	ELL5065
3 Amp Ceramic Fuse	ELZ6467
Fused Connector Block	ELZ6461
Fuse Holder	ELZ6462NC
SHELVING	
Shelf Frame	Y1101/162/1
Shelf Divider	Spares available on request.
Acrylic Front	Spares available on request.
'Speedfeed' Matts	Spares available on request.

REFRIGERATION UNIT

Part Description	SKOPE P/No.
COOLER UNIT	
Refrigeration Unit Assembly	YC1120R-128Z2
Unit Junction Box Assembly	YC1100/R86
Control Box Assembly	YC1100/E50X2
Condenser Motor Assembly	YC1100/501
Suction Line Assembly	YC1100/378
Compressor DANFOSS SC15G	CPR7344P
Evaporator Coil	CLS8839
Condenser Coil	CLS8841
Start Capacitor	ELC2369NC
Relay	ELR2367NC
High Pressure Switch	ELS8505
Unit Handle	HAN0000
Drier - Production	DRY8783
Drier - Service	DRY6110
Condenser Fan Blade	FAN4100
Evaporator Fan Assembly	YC2100/484Z
Condenser Fan Motor	YC1100/404B
Evaporator Fan Capacitor	YC2100/X27
R.F.I. Suppression Capacitor	B3100/E65
Unit Wiring Diagram Label (Type 1 Controller)	LAB0054
Unit Wiring Diagram Label (Type 2 Controller)	LAB0056