

WMBC175/220/350 WMBCF175/220/350

SINGLE CART ROLL-IN BLAST CHILLER

SITE ASSEMBLY INSTRUCTIONS

PLEASE RETAIN THIS MANUAL FOR FUTURE REFERENCE

SPECIFICATION

As part of our policy of continuing product development Williams Refrigeration reserve the right to change product specifications and appearance without notice

NOTICE

Please read this entire manual carefully before installation. If recommended procedures are not followed, warranty claims may be denied

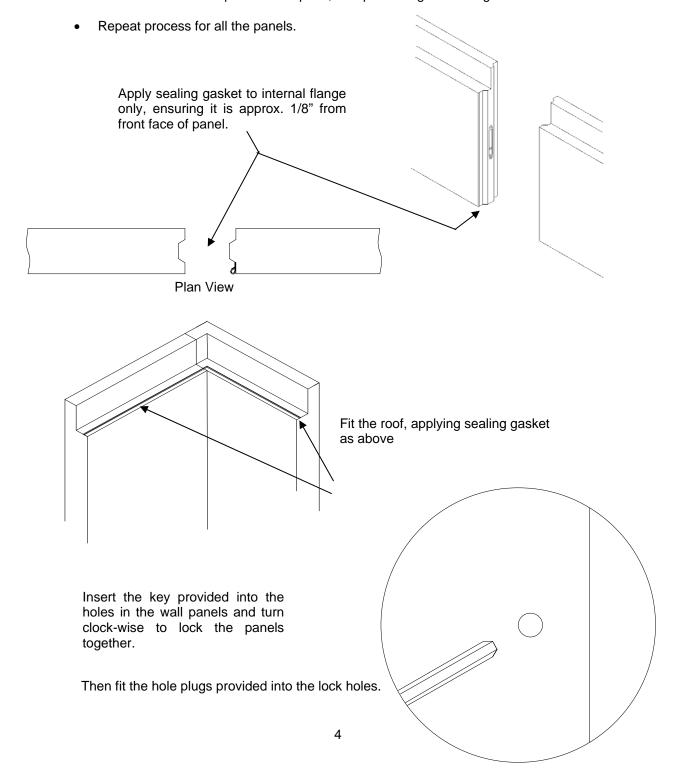
Machine (Cabinet) Serial Number:	
,	
nstallation Date:	

Contents:

Instruction:	Page
Panel Assembly	4
WMBC 175/220/350 General Assembly	5
WMBCF 175/220/350 General Assembly	8
Completing Installation	12
Service Requirements	13 14 16 17 18
	Panel Assembly WMBC 175/220/350 General Assembly WMBCF 175/220/350 General Assembly Completing Installation Service Requirements Drain Position Door Heater Wires Floor Heater Wires Position of Probes

Section 1: Panel Assembly Instructions

- Ensure that the panel edge is free from panel protection film and dirt
- Cut sealing gasket to required length of panel and remove 2 inches approx. of backing and attach to the top of the panel.
- Pull off the backing gradually whilst attaching the gasket to the edge of the panel.
- Once one side of the panel is complete, lock panels together using the cam-locks.



Section 2: WMBC 175/220/350 General Assembly

- 1. Ensure that the floor area is clean and level.
- 2. Erect the unit compartment. (Fig. 1)

CAUTION THIS COMPARTMENT IS HEAVY.

MAKING ADEQUATE ARRANGEMENTS FOR MOVING THE COMPARTMENT INTO POSITION AND LIFTING INTO THE VERTICAL POSITION IS RECOMMENDED.

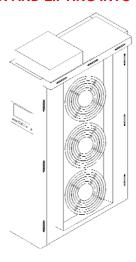
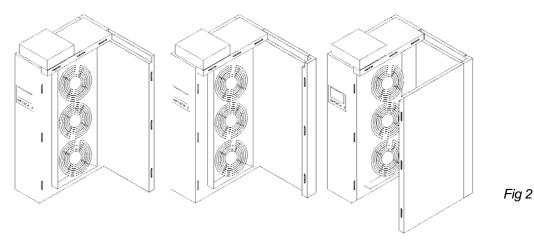


Fig 1

- 3. If the floor is uneven adjust the frame's levelling feet. To do this
 - a) Loosen evaporator frame screws
 - b) Adjust the levelling feet with a ½ inch spanner
 - c) Tighten evaporator frame screws
- 4. Assemble the remaining wall panels. (Fig. 2) Lock and seal each panel into place as per the 'Panel Assembly Instructions'. (Refer to page 4)



- 5. Remove the door from the doorjamb. To do this:
 - a) Remove transit bracket
 - b) Open the door fully
 - c) Lift door vertically off its hinges
- 6. Assemble the doorjamb to the panels. (Fig. 3) Lock and seal the doorjamb into place as per the 'Panel Assembly Instructions'. (Refer to page 4)

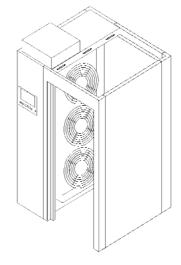


Fig 3

7. Assemble the compartment roof. Locate the cam locks in the grooves on the compartment roof and lower into place. When fitting the roof panel above a door jamb, make sure that the door heater leads exit through the roof panel. (Fig. 4) Lock and seal the roof into place as per the 'Panel Assembly Instructions'. (Refer to page 4)

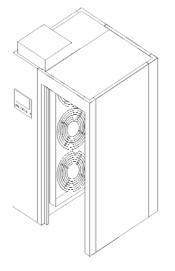
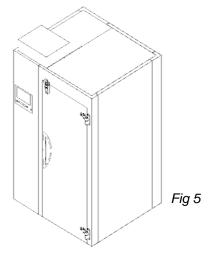


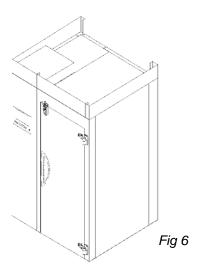
Fig 4

8. Re-hang the door on the doorjamb. (Reverse the procedure of removal but do not replace the transit bracket.) (Fig. 5)



9. Assemble the probe holder bumper bar and standard bumper bar. For positioning refer to the 'Bumper Bar Positions' (Refer to page 18).

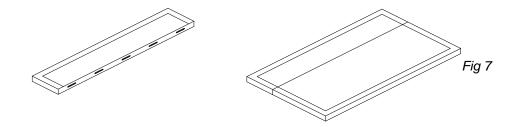
10. Assemble the top surrounds with the screws provided. (Fig. 6)



- 11. Connect the low voltage door heater wires into the transformer box on the roof. (Refer to pages 14-15).
- 12. Fit the isolator handle to the top of the electrical control unit. For assembly instructions please refer to the information supplied with the isolator.
- 13. Check the main (three phase) evaporator fans for correct rotation which should be anticlockwise. Airflow must be drawn into the fans with air blowing out either side. If running clockwise, correct reversing any two leads of the three phase power supply.
- 14. Fit the floor angle. Secure to the floor and walls with the screws provided.

Section 3: WMBCF 175/220/350 General Assembly

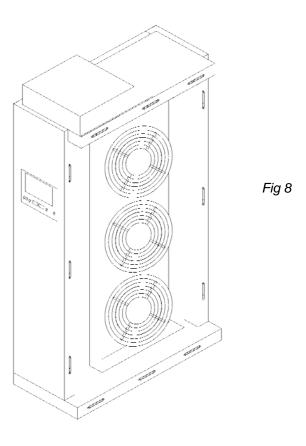
- 1. Ensure that the floor area is clean and level.
- 2. Position the floor panels. (Fig. 7) Lock and seal the floor sections together as per the 'Panel Assembly Instructions'. (Refer to page 4)



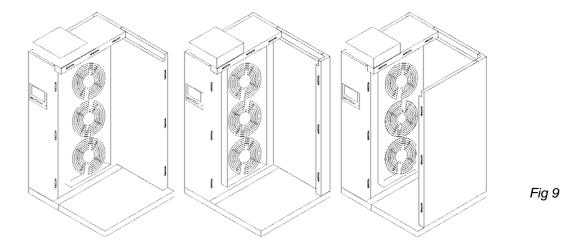
3. Erect the unit compartment. (Fig.8)

CAUTION THIS COMPARTMENT IS HEAVY.

MAKING ADEQUATE ARRANGEMENTS FOR MOVING THE COMPARTMENT INTO POSITION AND LIFTING INTO THE VERTICAL POSITION IS RECCOMMENDED.

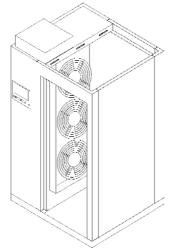


- 4. If the floor is uneven adjust the frame's levelling feet. To do this
 - Loosen evaporator frame screws
 - Adjust the levelling feet with a ½ inch spanner
 - Tighten evaporator frame screws
- 5. Assemble the remaining wall panels. *(Fig. 9)* Lock and seal each panel into place as per the 'Panel Assembly Instructions'. (Refer to page 4)



- 6. Remove the door from the doorjamb. To do this:
 - Open the door fully
 - Lift door vertically off its hinges

7. Assemble the doorjamb to the panels. (Fig. 10) Lock and seal the doorjamb into place as per the 'Panel Assembly Instructions'. (Refer to page 4)



8. Assemble the compartment roof. Locate the cam locks in the grooves on the compartment roof and lower into place. When fitting the roof panel above a door jamb, make sure that the door heater leads exit through the roof panel. (Fig. 11 Lock and seal the roof into place as per the 'Panel Assembly Instructions'. (Refer to page 4)

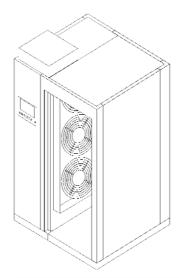


Fig 11

9. Re-hang the door on the doorjamb. (Reverse the procedure of removal) (Fig. 12)

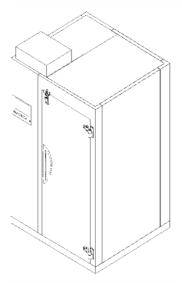


Fig 12

10. Assemble the bumper bar. For positioning refer to the 'Bumper Bar Positions' (Refer to page 18)

11. Assemble the top surrounds with the screws provided. (Fig. 13)

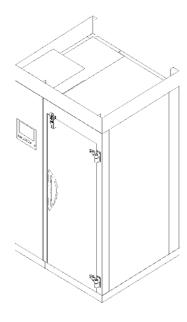


Fig 13

- 12. Fit the isolator handle to the top of the electrical control unit. For assembly instructions please refer to the information supplied with the isolator.
- 13. Check the main (three phase) evaporator fans for correct rotation which should be anticlockwise. Airflow must be drawn into the fans with air blowing out either side. If running clockwise, correct by reversing any two leads of the three phase power supply.

Section 4: Completing Installation

If the machine is fitted with a roof mounted POD system follow the same assembly procedure as roof without POD

NOTE: Take care when lifting; roof with POD will be heavy.

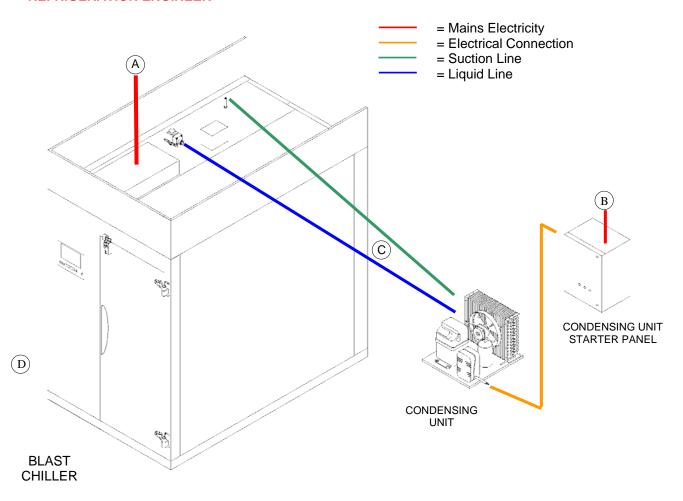
The POD should only be connected by a qualified engineer.

4.1 Service Requirements:

ALL ELECTRICAL WORK MUST BE CARRIED OUT BY A QUALIFIED ELECTRICAL ENGINEER

IMPORTANT! ENSURE THAT THE MACHINE IS ISOLATED FROM THE MAINS SUPPLY BEFORE CARRYING OUT ANY ELECTRICAL WORK

ALL REFRIGERATION INSTALLTION WORK SHOULD BE CARRIED OUT BY A QUALIFIED REFRIGERATION ENGINEER



NOTE: There is no electrical connection required between the machine and the condensing unit. The appearance of the condensing unit and starter panel may differ from that shown.

(A) **Control Panel Electrical Supply:** 208V / 60Hz / 3ph supply

Supply Amps:

The state of the s	Amps
WMBCF 480 / 660	25 (minimum)

B Condensing Unit Starter Panel Supply: 208V / 60Hz / 3ph supply

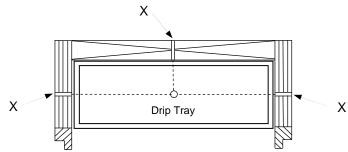
Supply Amps:

To be determined by condensing unit manufacturer

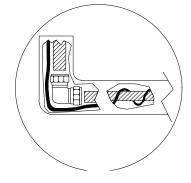
- © Refrigeration:
 Suction Line 1 1/8 "
 Liquid Line 1/2 "
- D Drain:
 1x 22mm Stainless Steel pipe to suitable drain c/w trap (for further information see section 4.2, Page 13).

4.2 Drain Position:

1. Select a suitable position for the drain pipes to exit the machine. For recommended exit positions (**X**) see the diagrams below. (*Fig. 14*)



Plan View



- 2. Drill a suitable size hole through the wall panel.
- 3. Connect the pipe work up through the wall using an **elbow** connector.

Fig 14

- 4. Coil **heater wire** round the pipes to prevent freezing.
- 5. Place **insulation tube** over the pipe and the heater.

NOTE: Items in **bold** are not supplied by Williams.

• Connect the door heater wires to the RCD (circuit breaker) on the roof. (See page 14)

•

- Fit the isolator handle (disconnect switch handle) to the front of the electrical control unit on the roof. For assembly instructions please refer to the information supplied with the isolator (disconnect switch).
- Fit the floor angle (floor anchors). Secure to the floor and walls with the screws provided.

4.3 Door Heater Wires:

Junction boxes will be supplied and the heaters should be wired into these. For front entry rooms see (Fig. 14) and for pass-through models see (Fig. 15).

Front Entry Blast Chiller

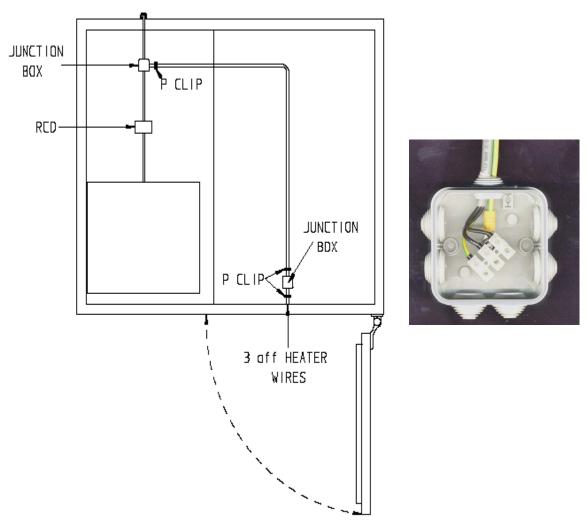
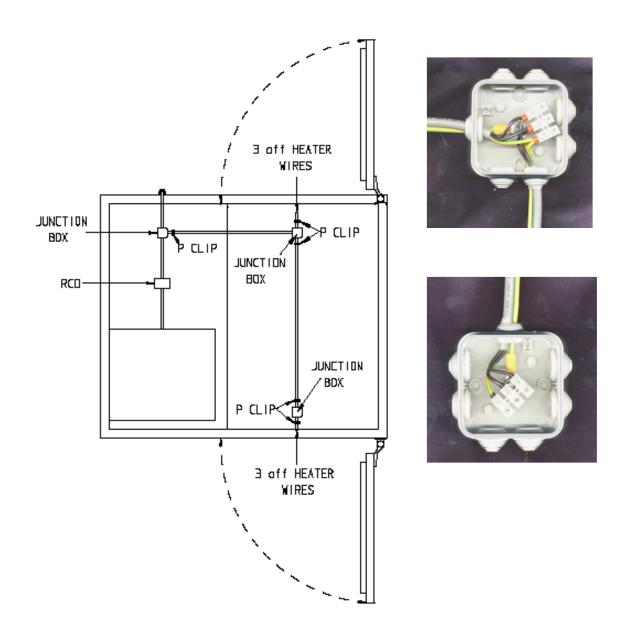


Fig 14

RCD = Circuit Breaker

Pass-Through Blast Chiller



(Fig 15)

RCD = Circuit Breaker

4.4 Floor Heater Wires:

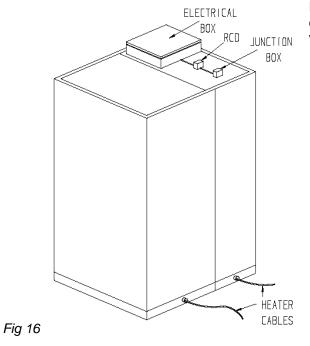


Figure 16:

Rear view of the blast chiller showing the exit points of the floor heater electrical wires.

NOTE:

17AWG 3 core cable is recommended for any additional wiring that is required.

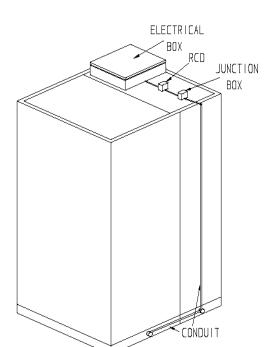


Fig 17

Figure 17:

Rear view showing the heater wires run thru conduit (not provided) to connect to the junction box on the roof panel. Note: Door Frame Heater Cables are also routed thru this junction box. (See section 3.3).

4.5 Positioning of the Probes

Uncoil the probes and pass them through the back of the control panel.

Feed the probe marked 'AIR' thru the grommet in the coil end plate and cable tie into position on the bracket, push the probe marked 'FIN' into the rear of evaporator coil ensuring it is away from the defrost heaters. (see *Fig. 18 & Fig 19* for positioning)



Fig 18



Fig 19

4.6 The Expansion Valve Phial

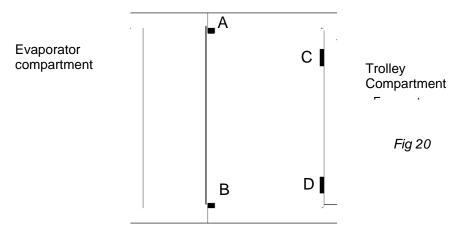
The equalising pipe should be connected into the suction pipe. (Fig. 19)

The phial from the expansion valve should be passed through the roof and clipped to the suction pipe. (Fig 19)



4.7 Bumper Bar Positions

Screw the brackets into positions A and B. (Holes are pre-drilled in the back wall and the back of the jamb). (Fig.20)



Then secure the Bumper Bar using screws provided. (Fig. 21)

Bumper Bar and Brackets



Screw the Bumper Bar (Fig. 22) into positions C and D (See Fig. 20, Holes are pre-drilled in the wall).

Bumper Bar





BEVERAGE-AIR

3779 Champion Blvd
Winston-Salem
NC 27105
Tel: (336) 245-6400 Fax: (336) 245-6453
Email: sales@bevair.com
Website: www.beverage-air.com

WILLIAMS REFRIGERATION

Bryggen Road
North Lynn Industrial Estate
King's Lynn, Norfolk PE30 2HZ UK
Tel: +44 (0) 1553 817000 Fax: +44 (0) 1553 817111
Email: info@williams-refrigeration.co.uk
Website: www.williams-refrigeration.co.uk









