iomabe

BUILT-IN WINE COOLER IOW51DDSS

SERVICE MANUAL

CONTENT

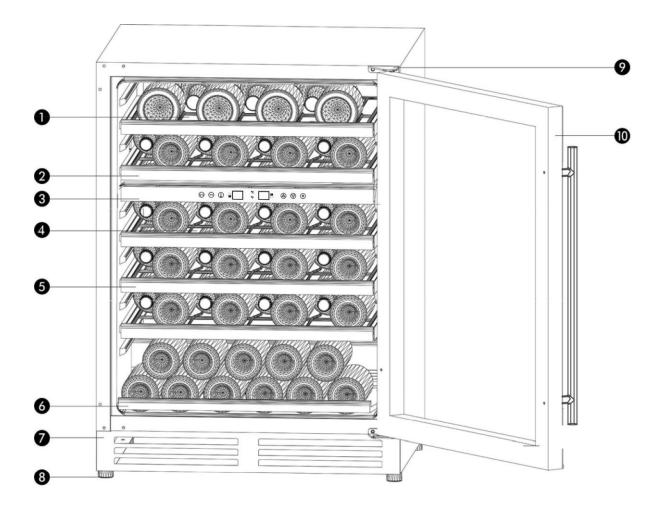
- 1. SPECIFICATIONS
- 2. NAME OF PARTS
- 3. REFRIGERANT CYCLE DIAGRAM
- 4. WIRING DIAGRAM
- 5. COMPRESSOR ROOM VIEW AND PARTS LIST
- 6. HOW TO REVERSE THE DOOR SWING
- 7. HOW TO REMOVE THE WIRE SHELVES
- 8. HOW TO REPLACE THE MAIN PARTS
- 9. TROUBLESHOOTING
- **10. EXPLOSION VIEWS & PARTS LISTS**

1. SPECIFICATIONS

Model No.	IOW51DDSS		
Туре		BUILT-IN	
Capacity			
No. of Wine Bottles		51	
Capacity	Zone One - L		
Capacity	Zone Two - L	N.A	
	Zone Two - L Zone Three - L	N.A	
	Zone Three - L	N.A	
Performance & Feature	s		
Ambient Temp. Range	°C	16 ~ 38	
Setting Temp. Range	°C/°F	5º-13ºC(40- 56ºF) /12º-18ºC (54-65ºF)	
Power Source	V/Hz	220/50	
Energy Consumption	KWh/24h	2.5	
Rated Input	W	100	
Rated Current	A	< 2	
Noise Level	dB(A)	45	
Defrost Type		Automatic	
Temp. Control		Electronic	
Blowing Agent		Cyclopentane	
Refrigerating System			
Cooling System		Air Forced Convection Type	
Compressor	Model No.	NB1080Y	
	Туре	Hermetic Type	
	LRA		
	RLA		
	Overload Protector		
	PTC Starter		
	Oil	/	
Condenser Fan Motor	Model No.	RDL1225B	
	Rating	12 V DC, 0.18 A	
Evaporator Fan Motor	Model No.	RDL1225S	
	Rating	12 V DC, 0.18 A	
Expansion device		Capillary (Ø0.6 x 2000 mm)	
Refrigerant / Charged Vo	blume	R600a / 1.52oz	
Dimensions & Weights			
Net Dimensions	Width - mm	595	
	Height - mm	820	
	Depth - mm	575	
Packing Dimensions	Width - mm	655	
	Height - mm	865	
	Depth - mm	675	
Weight	Net / Gross - KGS	/	

* Specifications are subject to change without prior notice.

2. Name of Parts

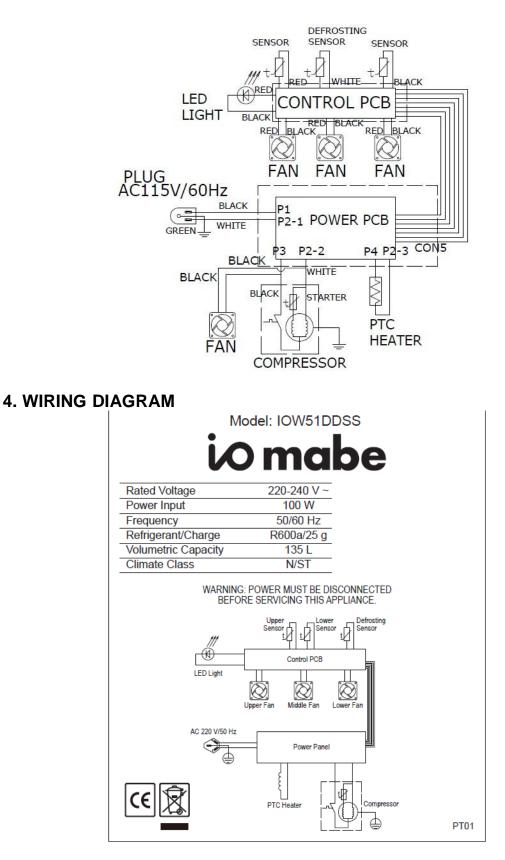


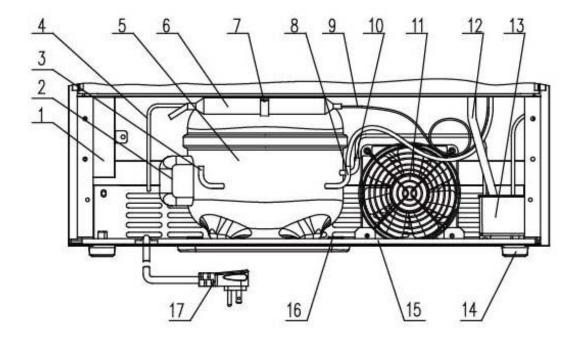
- 1 Upper Zone
- 2 Roll-Out Shelves (2)
- 3 Control Panel
- 4 Lower Zone
- 5 Roll-Out Shelves (3)
- 6 Roll-Out Shelf Small (1)
- 7 Kickplate
- 8 Leveling Legs (4)
- 9 Top Hinge
- 10 Stainless Steel Door And Handle

✓ WARNING ✓

- Before servicing, make sure to unplug the appliance.
- Replace all parts before operating the appliance.
- Failure to do so could result in death, electrical shock or personal injury.

3. REFRIGERANT CYCLE DIAGRAM





5. COMPRESSOR VIEW AND PARTS LIST

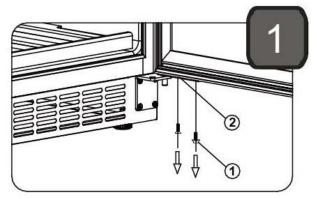
- 1. Junction Box
- 2. Electrical Box of Compressor
- 3. Process Pipe
- 4. Outlet Pipe of Condenser
- 5. Compressor
- 6. Dry Filter
- 7. Dry Filter Clamp
- 8. Suction Pipe
- 9. Capillary
- 10. Discharge Pipe
- 11. Condenser Fan Motor
- 12. Drain Pipe
- 13. Water Drip Tray
- 14. Rear Leveling Leg
- **15. Compressor Base**
- 16. Compressor Leg
- 17. Power Supply Cord with Plug

6. HOW TO REVERSE THE DOOR SWING

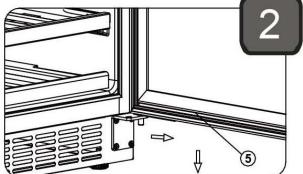
This appliance has the capability of the door opening from either the left or right side. The unit is delivered to you with the door opening from the left side. Should you desire to reverse the opening direction, please follow these instructions.

Note: All parts removed must be saved to do the reinstatement of door.

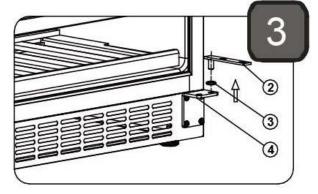
1. Open the glass door (5) and remove the two screws (1) holding the lower hinge (2) to the glass door. Be careful to hold the glass door firmly after removing the screws.



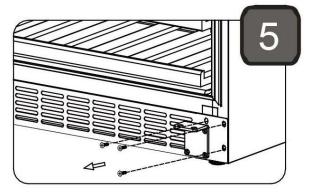
2. Pull down to remove the glass door from the right upper hinge and place the door on a padded surface to prevent scratching it.



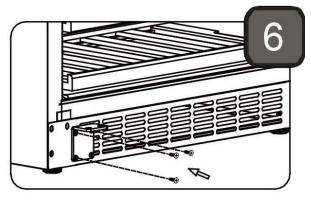
3. Remove the lower door hinge supporter and bush③.



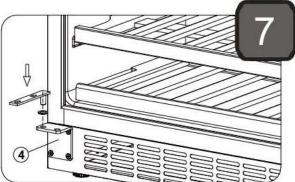
4. Remove the upper hinge pivot from the right side then install and tighten it into the left position. Remove the lower door hinge from the right side. Remove the three screws that are used to fix the bottom grille with cabinet then install the three screws at the designated position at the right side.



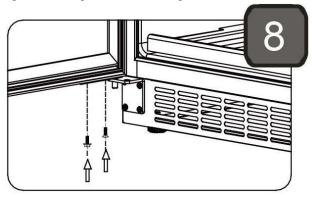
6. Install the lower door hinge to the designated position at the left side.



7. Install the lower hinge supporter together with the bush to the designated position.



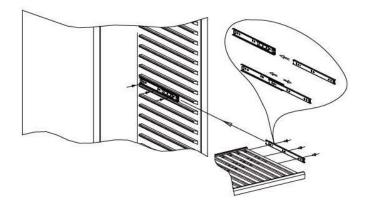
8. Locate the glass door to the designated position making sure that the door shaft enters the door hole at the left upper corner of the glass door. Install the two screws that are used to connect the left lower hinge with the glass door and tighten them before the door is leveled.



7. HOW TO REMOVE THE ROLLER SHELVES

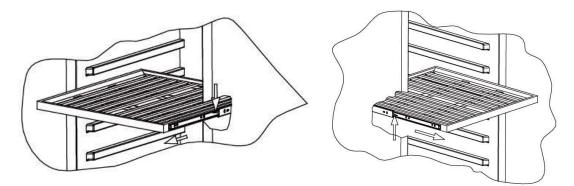
This appliance is equipped with wooden roller shelves, these allow you to slide the shelves smoothly in and out to access your wine selection (except for the bottom wooden shelf).

- To prevent damaging the door gasket, make sure to have the door all the way opened when pulling shelves out of the rail compartment.
- For easy access to the bottles, you can slide the shelves approximately 1/3 out of the rail compartment.(as indicated below)



- To remove the shelves, slide to outer position.
- Use a long flat screwdriver to press down the right plastic notch and at the same time lift the left plastic notch(as indicated below)

• Then proceed to pull out the shelf slowly.



8. HOW TO REPLACE THE MAIN PARTS

8.1 REPLACING THE DISPLAY PCB、CONTROL PCB、SENSORS、FAN MOTORS、EVAPORATOR

- 1. Remove all the shelves according to "How to remove roller the shelves".
- 2. The evaporator fan motor and charcoal filtration system are located in the following position.



3. Remove the screws that are used to fix the rear air duct with the cabinet then remove the rear air duct.



4. The evaporator and sensors are located in the following position.



5. Remove the one fixing screw.



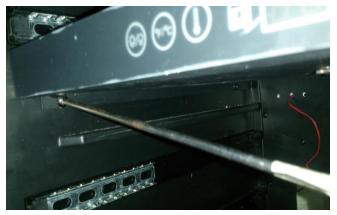
6. Disconnect the wire connector then you can replace the sensors and evaporator fan motor.



- 8.2 REPLACING MIDDLE AIR-BOARD AND THE DISPLAY PCB
- 1. Screw off the power box cover



2. Screw off



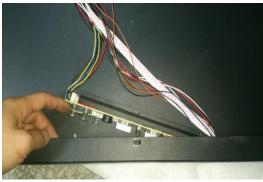
3. Pull out



4. Remo ve the screws that used to secure the control board with the cabinet.







5. Remove the inside screws to get out of the control panel board



6. Disconnect the communication cables with the display PCB and remove the screws and pull out the display PCB. Now you can replace the display PCB.



8.3 REPLACING THE LED LIGHT ASSEMBLY AND FAN

1. According to the above instruction pull out the middle air-board. And Remove the screws of LED light assembly then you can replace a new LED light assembly.



2. Screw off and replace the fan.



8.4 REPLACING THE COMPRESSOR PTC STARTER AND OVERLOAD PROTECTOR

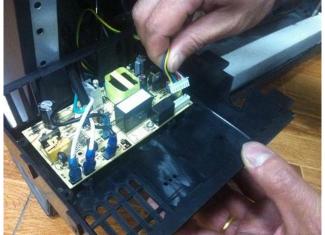
1. Remove the two screws that are used to fix the condenser fan motor with the compressor base.



2. Remove the three screws that are used to fix the junction box with the cabinet in the compressor room.



3. Take out the junction box.



4. Remove the clamp that is used to fix the compressor junction box.



5. Remove the compressor junction box.



6. Dismantle the compressor PTC starter and overload protector, which is such following figure.



8.5 REPLACING THE BOTTOM GRILLE

- 1. Remove the lower door hinge according to "HOW TO REVERSE THE DOOR SWING".
- 2. Remove the two screws that are used to fix the bottom grille with reinforced plate.



3. Remove the middle two screws that are used to fix the reinforced plate with the cabinet.



4. Remove the two screws that is used to fix the bottom grille with the cabinet and pull out the bottom grille. Now you can replace the bottom grille.



8.6 REPLACING THE DOOR GASKET

1. Open the door and detach the old door gasket from the door frame by pulling off the gasket.



2. Attach the new door gasket on the door frame. Pay attention not to damage the door and the new door gasket.



9. TROUBLESHOOTING

9.1 Troubleshooting Guide

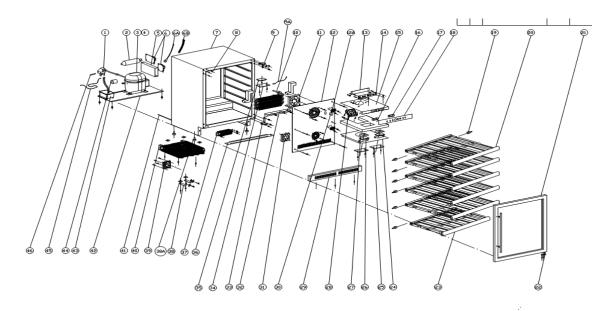
PROBLEM	POSSIBLE CAUSE
	Not plugged in.
Wine Chiller does not operate.	The appliance is turned off.
	The circuit breaker tripped or a blown fuse.
	Check the temperature control setting.
	External environment may require a higher
Wine Chiller is not cold enough.	setting.
	The door is opened too often.
	The door is not closed completely.
	The door gasket does not seal properly.
	The room temperature is hotter than normal. A large amount of contents has been added to the
	wine chiller.
Turne on and off fragmently	The door is opened too often.
Turns on and off frequently.	The door is not closed completely.
	The temperature control is not set correctly.
	The door gasket does not seal properly.
	Not plugged in. The circuit breaker tripped or a blown fuse.
The light does not work.	The bulb has burned out.
	The light button is "OFF".
Vibrations.	Check to assure that the Wine Chiller is level.
	The rattling noise may come from the flow of the
	refrigerant, which is normal.
	As each cycle ends, you may hear gurgling
	sounds caused by the flow of refrigerant in your
The Wine Chiller seems to make too much noise.	Wine Chiller.
	Contraction and expansion of the inside walls
	may cause popping and crackling noises.
	The Wine Chiller is not level.
	The Wine Chiller is not level.
	The door was reversed and not properly installed.
The door will not close properly.	
	The gasket is dirty. The shelves are out of position.
	•
	The defrost sensor is failed. This sensor is
Display error code "E2".	connected to the main control PCB in red
	color wires.
	The Air Sensor(Upper) is failed. This sensor is
Display error code "E1".	connected to the main control PCB in white color
	wires

No.	Symptom	Cause	Action
1	 The evaporator cools down and warms again. The condenser warms in proportion as the evaporator. The process repeats again. 	Moisture in the refrigerant causes the malfunction.	Replace the refrigerant.
2	 The condenser is cold. The evaporator is not cold. The temperature of compressor is high. 	Foreign substances hamper the cooling system.	Locate the disturbed section and make repairs.
3	 No difference in temperature between suction pipe and discharge pipe of compressor. The temperature of compressor is kept at room temperature level. The evaporator does not cool down. 	Failed compressor.	Replace the compressor.
4	 Frost on the suction pipe. The condenser is overheated. The refrigeration of evaporator is not efficient. 	Overcharge.	 Discharge the refrigerant. Charge refrigerant to the designated volume. Check for gas leak.
5	 The condenser is cold. The compressor surface temperature is high. The refrigeration is not cold enough. 	Short of refrigerant.	 Discharge the refrigerant. Charge refrigerant to the designated volume. Check for gas leak.

9.2 Trouble Check for Refrigerant System

10. EXPLOSION VIEWS & PARTS LISTS

10.1 Exploded View



.

10.2 Parts List

S/N	名称	Part Name	Drawing No.	QTY (pcs/unit)
3	冷凝器	Condensor	YC150A.02.15	1
4	冷凝器罩	Condensor Base	YC150A.02.04.00	1
5	回气管组件	Muffler Components	YC150A.01.07.00	1
6	压缩机	Compressor		1
7	压缩机托板	Compressor Base Board	YC150A.02.01.01	1
8	电源线	Power Cord		1
9	电源板盒	Power PCB Box	YC150A.02.01.10	1
10	电源板	Power PCB		1
11	大风扇	Evaporator Fan	YC150A.03.01.02	2
12	小风扇	PTC hearter Fan	YC150B.03.02.05	1
13	蒸发器	Evaporator	YC150A.02.03	1
14	风道板	Baffle Plate	YC150B.03.01.01	1
15	可调下门铰	Adjustable Down Hinge	YC150A.03.08.00	1
16	加热器 PTC	PTC Heater		1
	中间风道板上	Upper Baffle Plate		1
19	双温面贴	Control PCB sticker		1
20	中间风道板泡沫	Seperator Insulator		1

Service Manual for Avanti				
21	下门铰座	Door Axis	YC150A.03.07.00	1
22	大铁层架	Deep Shelf		5
	导轨	Roller		5
23	小木层架	Shallow Shelf	YC150A.03.07	1
24	层架前木饰条	Wooden stim for shelf		5
25	中间风道板下	Down Baffle Board	YC150B.03.02.03.01	1
26	灯盒	Light Box	YC-TY.LJ.02	3
27	LED灯组件	Light PCB	YC150A.01.12	3
28	灯罩	Light Cover	YC-TY.LJ.02	3
29	控制板板支架	Control PCB Bracket	YC150B.03.02.10	1
30	上门铰	Upper Hinge	YC150A.03.04.00	1
31	双温电控板	Control PCB		1
32	装饰框	Front Louver		1
33	拉手	Handle		1
34	门体	Glass Door		1