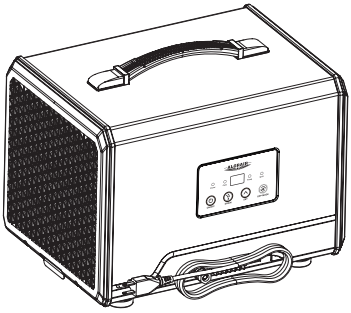
Helios MP35
Helios MP55

Installation & Operations Manual



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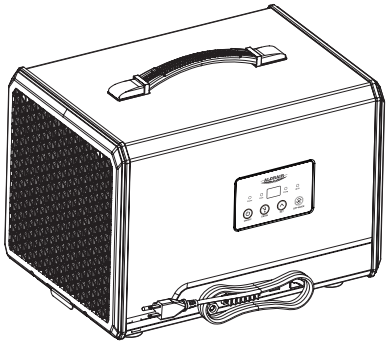

Helios MP55

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Specifications subject to change without notice.

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IMPORTANT SAFETY INSTRUCTIONS

- Always connect the dehumidifier to a grounded electrical outlet, as required for all electrical appliances. Failure to do so will void the warranty.
- Repairs must be performed only by qualified technicians.
- Ensure the dehumidifier is thoroughly dried before reconnecting the power supply if it has been exposed to flooding.
- Never insert objects or fingers into the air intake or exhaust ports.
- Do not wash the exterior with water. For cleaning, unplug the unit first and use a slightly damp cloth.
- Avoid standing or placing heavy items on the unit.
- Do not connect the unit with extension cords or plug adapters.
- Always ensure the unit is powered off before performing maintenance, unless otherwise instructed.

WARRANTY REGISTRATION

Your dehumidifier includes extensive warranty coverage.

For easy reference, record the model number, serial number, and purchase date below. These details, available on the data label on the side of your unit, will be required when seeking customer support.

Model Number: Helios MP35 / Helios MP55

Serial Number: _____ **Purchase Date: _____**

For further assistance, you can:

- Contact your original installation contractor.
- Reach out to a local authorized installer or call customer support at (888) 990-7469.

ELECTRICAL SUPPLY REQUIREMENTS

- **Power Supply:** 115 V, 60 Hz AC, Single Phase.
- **Outlet Type:** 3-Prong Grounded, GFCI Protected.
- **Recommended Circuit Protection:** 15 Amp Circuit Breaker.

WARNING: Exposure to 240 Volts AC may cause severe electric shock injuries.

To minimize the risk of electrical injury:

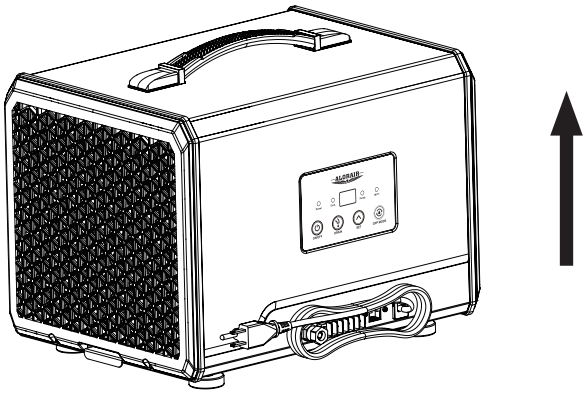
1. Disconnect the power supply before servicing.
2. Only connect the unit to a properly grounded electrical outlet.
3. Do not use extension cords.
4. Do not use plug adapters.

PRINCIPLE OF OPERATION

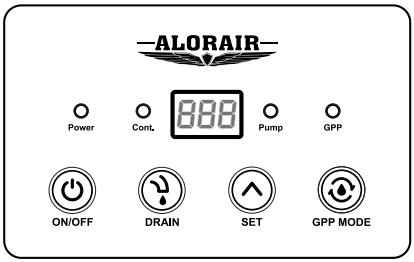
The dehumidifier features an integrated humidity sensor that monitors the enclosed space. When humidity levels exceed the set threshold, the unit activates, pulling air into the evaporator coil, which is colder than the dew point of the incoming air. Moisture condenses from the air, and the dry air is reheated through the condenser coil and circulated back into the room.

INSTALLATION REQUIREMENTS

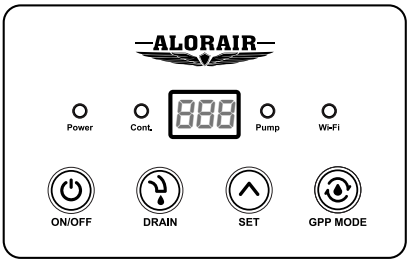
1. Position the dehumidifier in an enclosed area for optimal humidity control.
2. Ensure proper ventilation by keeping at least 6 inches of clearance around the air intake and exhaust openings, away from walls or obstructions.
3. For maximum efficiency, position the unit centrally within the room.
4. Operate the dehumidifier in an upright position near floor level as designed.
5. Connect the unit to a dedicated, grounded 15-amp circuit.
6. Before initial use:
   - Allow the unit to remain upright and out of the box for at least 24 hours before connecting to power.
   - Transportation may cause oil displacement inside the compressor. Allowing 24 hours to settle prevents potential operational issues and prolongs unit life.



INDICATOR LIGHTS AND BUTTONS DESCRIPTION



NO WIFI



WITH WIFI

Indicator Lights Description

1. Power Indicator Light

When the dehumidifier is ON, this indicator light turns GREEN.

- When the dehumidifier is running, the light remains solid.
- When the dehumidifier reaches the set humidity, is in defrost mode, or displays an error code, the light will flash.
- When the dehumidifier is turned OFF, the light will turn OFF.

2. CO Indicator Light

This is the continuous mode indicator light for the dehumidifier, and it is GREEN.

- When the humidity value or GPP value is set to **CO**, the dehumidifier enters continuous operation mode, and this light remains solid.
- Otherwise, the light turns OFF.

3. GPP Indicator Light

This is the **GPP mode** indicator light for the dehumidifier, and it is GREEN.

- When the dehumidifier enters **GPP mode**, this light turns ON.
- Otherwise, the light remains OFF.

4. Wi-Fi Light

- When the Wi-Fi is not connected, the light remains OFF.
- When the Wi-Fi is connected, the light flashes.
- When the Wi-Fi has been successfully connected and is operating normally, the light stays illuminated.

Button Description

1. Power Button

- This button is used to turn the dehumidifier ON or OFF.
- Press once to turn the dehumidifier ON.
- Press again to turn the dehumidifier OFF.

2. SET Button

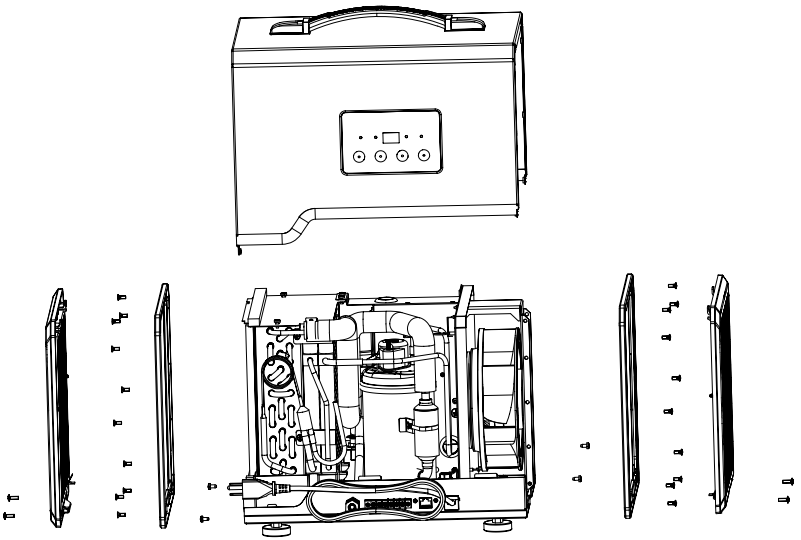
- This button is used to adjust the set humidity value or GPP value.

3. GPP Button

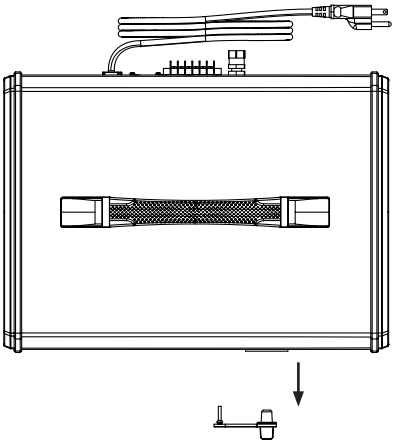
- This button switches the dehumidifier's operating mode between **%RH (Relative Humidity)** and **GPP (Grains Per Pound)**.

4. Combination Buttons

- **Check Coil Temperature** – Press and hold **"SET" + "DRAIN"** for 1 second to display the ambient temperature.
- **Check External Temperature** – Press and hold **"DRAIN" + "GPP MODE"** for 1 second to display the coil temperature.
- **Self-Test Mode** – When the machine is powered ON and all lights are illuminated, press and hold **"SET" + "ON/OFF"** for 1 second to enter self-test mode.
- **Wi-Fi Pairing Mode** – Press and hold **"SET" + "GPP MODE"** for 1 second to enter Wi-Fi pairing mode; the Wi-Fi light will flash.



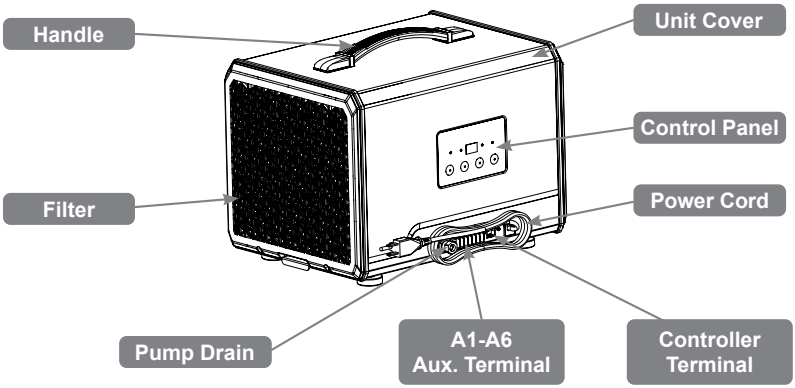
Maintenance and Disassembly Diagram



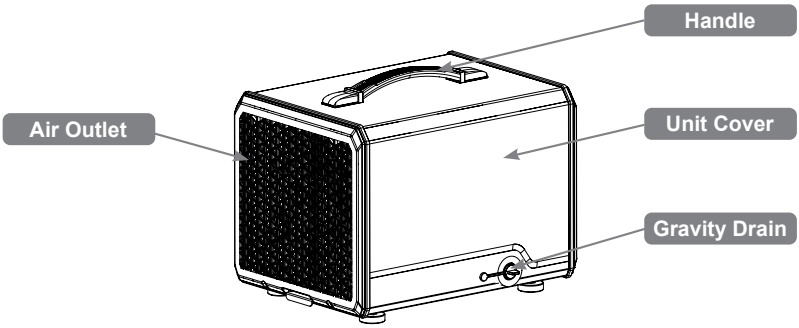
Water Plug Removal Diagram

OPERATING INSTRUCTIONS

Front View



Back View



When powered on for the first time, the dehumidifier defaults to %RH mode with a preset humidity of 50%.

- The digital display shows the real-time detected humidity by default.
- After pressing the **"SET" button** to adjust the desired humidity, if no further action is taken within 3 seconds, the display will revert to showing the real-time humidity.
- To check the set humidity, press the **"SET" button**—the display will flash the previously set value. If the **"SET" button** is pressed again within 3 seconds, the set value can be adjusted.

1. %RH Mode

When the dehumidifier is turned ON:

- Press the **"SET" button**, and the digital display will flash, showing the set humidity value.
- Each short press of the **"SET" button** increases the humidity setting by 5%.
- The available range cycles as follows: CO → 20% → 25% → ... → 75% → 80% → CO.

2. GPP Mode

When the dehumidifier is turned ON:

- Press the **"GPP" button** to enter **GPP mode**, and the digital display will switch from 2-digit to 3-digit format.
- In GPP mode, press the **"SET" button**, and the display will flash, showing the set GPP value.
- Each press of the **"SET" button** increases or decreases the value by 5, cycling through: 20 → 25 → ... → 200 → CO → 20 ...
- Press and hold the **"SET" button** for rapid adjustment.
- To exit **GPP mode**, press the **"GPP" button** again, and the display will switch back to 2-digit format.

3. Continuous Dehumidification Mode

- In %RH mode or **GPP mode**, press the **"SET" button**, and the digital display will flash.
- Adjust the set value to **CO**. If no action is taken within 3 seconds, the dehumidifier will enter **Continuous Dehumidification Mode**.
  - The **CO** indicator light will turn ON.
  - The display will show the real-time detected humidity.
- To exit Continuous Dehumidification Mode, press the **"SET" button** and adjust the humidity to the desired set value.
  - After 3 seconds, the dehumidifier will automatically exit the mode, and the **CO** indicator light will turn OFF.

4. Power-Off Memory Function

If the dehumidifier unexpectedly loses power while running and is then reconnected, it will automatically resume operation in the same mode and state as before the power loss.

- Due to the 3-minute compressor protection feature, the compressor will start running after three minutes.
- There may be a brief switching delay between the fan turning ON and OFF, which is normal.
- Stored settings include:
  - Set humidity
  - Set moisture content
  - Continuous mode
  - GPP function

5. Drainage Function

When using gravity drainage:

1. Remove the water plug first.
2. Insert the gravity drainage hose and ensure it is securely fastened.
3. Turn on the dehumidifier after securing the hose.
4. Ensure the end of the hose is not higher than the gravity drainage outlet.

MAINTENANCE

WARNING: Before performing any maintenance, always unplug the power supply.

1. Cleaning the Unit:

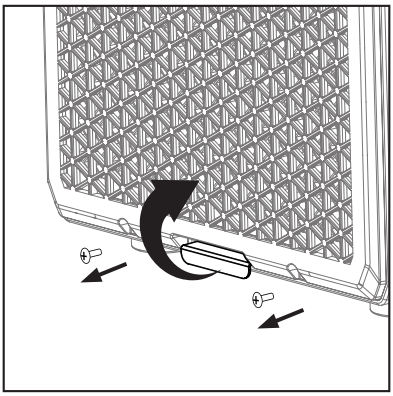
Wipe exterior with a soft, damp cloth. Do not use harsh or chemical cleaning agents.

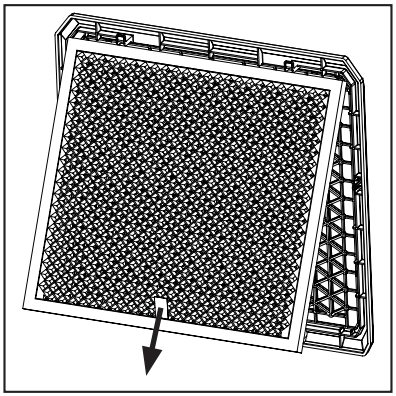
2. Coil Maintenance:

Annually clean coils with an approved, self-rinsing, foaming coil cleaner (e.g., WEB® Coil Cleaner).

3. Replacing the Filter:

1. Use a screwdriver to unscrew the 2 screws.
2. Remove the air intake grille by following the illustrated handle position.
3. Take out the filter and replace it with a new one.
4. Reattach the air intake grille to the unit.





4. Dehumidifier Storage:

If the unit will be stored for an extended period, follow these steps:

1. Turn OFF the unit and allow it to dry completely.
2. Wrap the power cord neatly and store the drainage hose properly.
3. Place the dehumidifier in a clean, dry location.

ERROR CODES

Error Codes	Issues	How to Solve
LO	When the ambient temperature is ≤2°C (35.6°F).	When the detected ambient temperature is >2°C (35.6°F), it will automatically recover.
HI	When the ambient temperature is ≥39°C (102.2°F).	When the detected ambient temperature is <39°C (102.2°F), it will automatically recover.
E1	Humidity sensor malfunction.	Replace with a new humidity sensor.
E3	Defrosting failure.	Check for any system leaks.
E5	Replace the coil temperature sensor.	Check the system for leaks. If there are no leaks, test whether the sensor is faulty.

LIMITED WARRANTY

This limited warranty starts from the date of purchase. AlorAir Solutions, Inc. Warrants to the original purchaser that this AlorAir product is free from manufacturing defects in material or workmanship for the limited warranty period of:

Six (6)-month parts and labor. This includes the shipment charges for replacement parts or unit.

One (1)-year parts and labor. This does not include the shipment charge to send the defective product back to be repaired or replaced.

Three (3)-year parts and labor on Refrigeration System ONLY (Compressor, Condenser, and evaporator). Transportation cost, not included.

Five (5)-year parts on Refrigeration System ONLY (Compressor, Condenser, and evaporator). Transportation cost, not included.

This limited warranty is valid only on products purchased from the manufacturer or an AlorAir authorized dealer and operated, installed, and maintained according to the instructions included in this user guide or furnished with the product. AlorAir Solutions, Inc. will not provide in-home service during or after the warranty period. You may be responsible for the shipping charge to bring the product to the manufacturer for service.

To receive warranty service, the purchaser must contact AlorAir Customer Support at (888) 990-7469 or *support@alorair.com*. A proof of purchase or order number is required to receive warranty service. During the applicable warranty period, a product will be repaired or replaced at the sole discretion of AlorAir.

IMPORTANT NOTICE: Keep the original product packaging in case warranty service is required. In the event that the product is sent for repair without explicit guidance from our customer service team, AlorAir shall not assume responsibility for any associated repair costs.

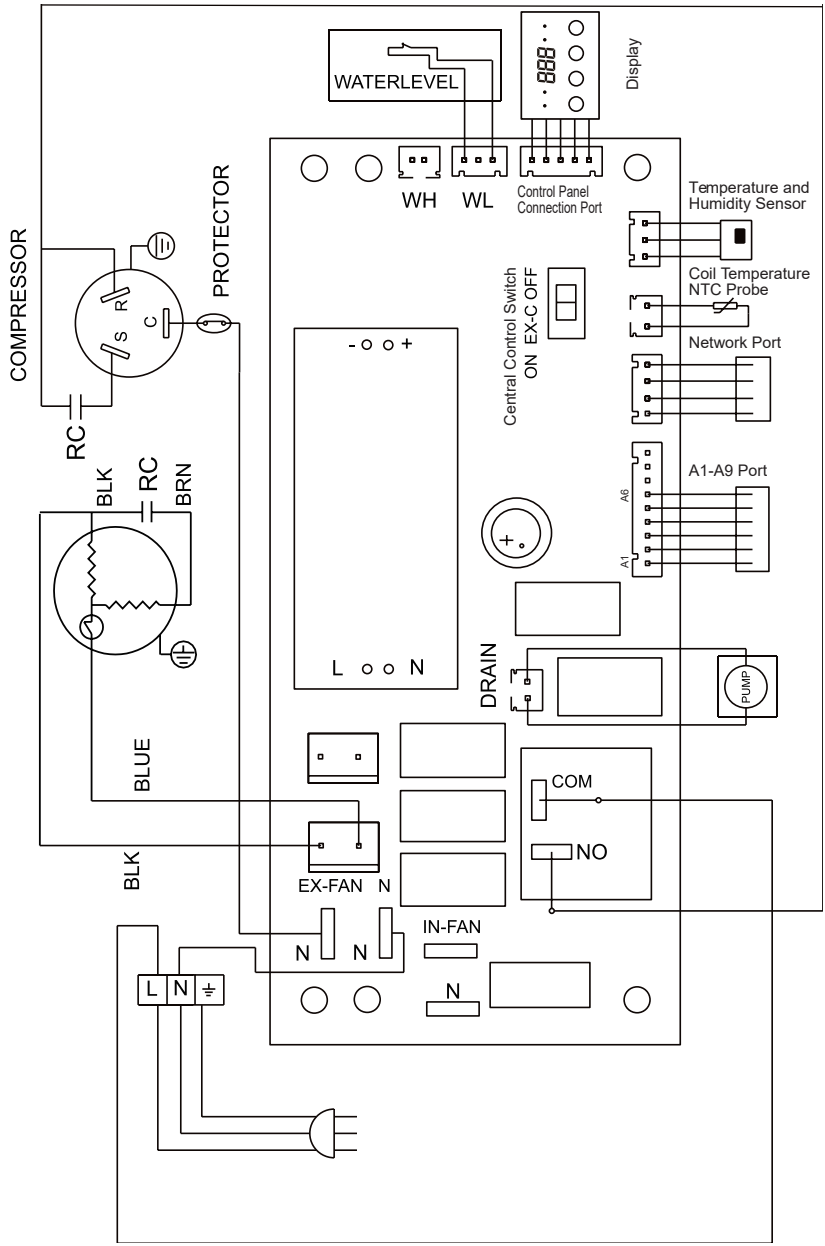
LIMITED WARRANTY EXCLUSIONS

This limited warranty covers manufacturing defects in materials or workmanship encountered in normal household, commercial or non-commercial use of this product and shall not cover the following:

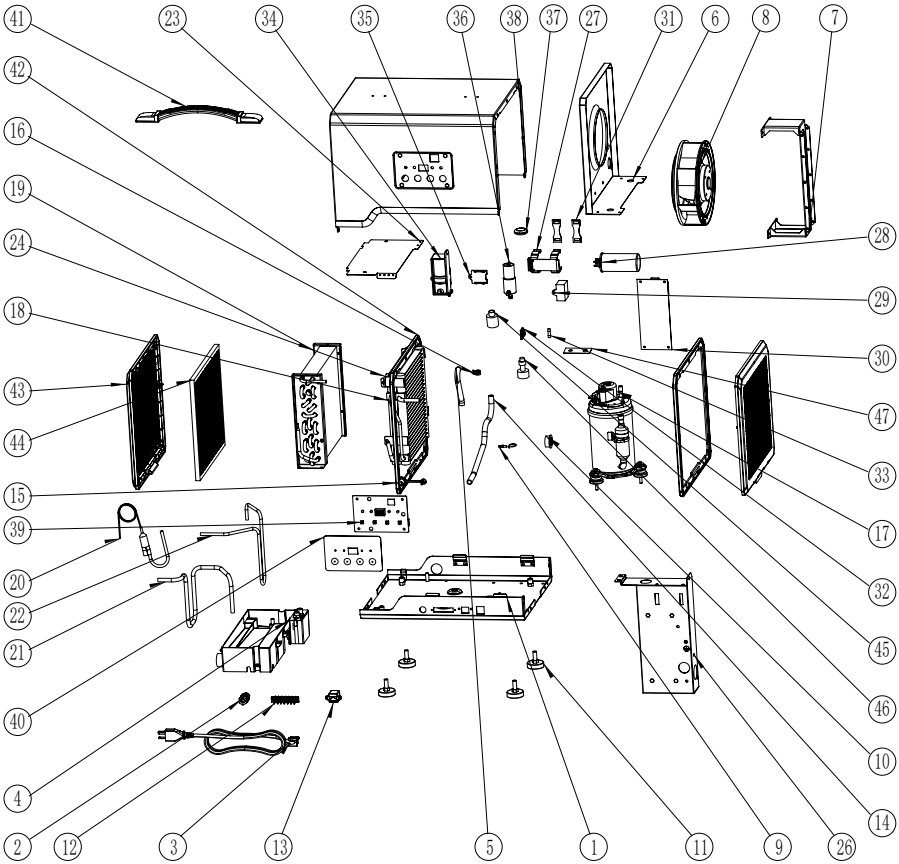
- Damage occurs in uses for which this product was not intended for.
- Damage caused by unauthorized modification or alteration of the product.
- Cosmetic damage including scratches, dents, chips, and other damage to the product's finishes.
- Damage caused by abuse, misuse, pest infestation, accident, fire, floods, or other acts of nature.
- Damage caused by incorrect electrical line current, voltage, fluctuations, and surges.
- Damage caused by failure to perform proper maintenance of the product.

The use of this product in SPA or a room with OUTDOOR POOL invalidates or voids limited warranty.

WIRING DIAGRAM



PRODUCT PARTS DIAGRAM



NO.	PART
1	Baseplate
2	Copper Drain Adapter
3	Power Cord
4	Drip Pan
5	Pump Inlet Hose
6	Air Deflector
7	Fan Bracket
8	Fan Impeller

NO.	PART
9	Cable Tie
10	Wire Feedthrough
11	Adjustable Leveling Feet
12	A1-A6 Harness Cable Assembly
13	Ethernet Port
14	Pump Drain Hose
15	Drain Plug
16	Hose Retaining Clip

NO.	PART
17	Compressor
18	Condenser
19	Evaporator
20	Refrigeration Module
21	Low-Pressure Line
22	High-Pressure Line
23	Heat Exchanger Sealing Plate
24	Adhesive Hose Clamp
25	Temperature Sensor
26	Electrical Control Box
27	Capacitor Clip
28	Main Capacitor
29	Auxiliary Capacitor
30	Main Control Board
31	Capacitor Clip Latch

NO.	PART
32	Fuse Holder
33	Fuse
34	Pump Mounting Bracket
35	Pump Bracket Support
36	Submersible Pump
37	Cable Grommet
38	Top Cover
39	Display Control Panel
40	Button Overlay
41	Carrying Handle
42	Decorative Bezel
43	Front Cover
44	Filter Screen
45	Pump Inlet Filter Screen
46	Float Ball
47	Float Ball Retainer

SAFETY WARNING

This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.

Children should be supervised to ensure that they do not play with the appliance.

The appliance shall be installed in accordance with national wiring regulations.

The installation of the appliance and the refrigerant unit must only be made by the manufacturer's service personnel or suitably qualified person.

The unit must be installed by qualified personnel with a capability certificated for handling R32 refrigerant. Refer to regulation and laws in use on installation location.

Warning:

- Do not use means to accelerate the defrosting process or to clean, other than those recommended by the manufacturer.
- The appliance shall be stored in a room without continuously operating ignition sources (for example: open flames, an operating gas appliance or an operating electric heater.
- Do not pierce or burn.
- Be aware that refrigerants may not contain an odour.

Qualification of Workers

Every working procedure that affects safety means shall only be carried out by competent persons.

Examples for such working procedures are:

- breaking into the refrigerating circuit;
- opening of sealed components;
- opening of ventilated enclosures.

Checks to The Area

Prior to beginning work on systems containing FLAMMABLE REFRIGERANTS, safety checks are necessary to ensure that the risk of ignition is minimised.

Work Procedure

Work shall be undertaken under a controlled procedure so as to minimise the risk of a flammable gas or vapour being present while the work is being performed.

General Work Area

All maintenance staff and others working in the local area shall be instructed on the nature of work being carried out. Work in confined spaces shall be avoided.

Checking for Presence of Refrigerant

The area shall be checked with an appropriate refrigerant detector prior to and during work, to ensure the technician is aware of potentially toxic or flammable atmospheres. Ensure that the leak detection equipment being used is suitable for use with all applicable refrigerants, i.e. non-sparking, adequately sealed or intrinsically safe.

Presence of Fire Extinguisher

If any hot work is to be conducted on the refrigerating equipment or any associated parts, appropriate fire extinguishing equipment shall be available to hand. Have a dry powder or CO_2 fire extinguisher adjacent to the charging area.

No Ignition Sources

No person carrying out work in relation to a REFRIGERATING SYSTEM which involves exposing any pipe work shall use any sources of ignition in such a manner that it may lead to the risk of fire or explosion. All possible ignition sources, including cigarette smoking, should be kept sufficiently far away from the site of installation, repairing, removing and disposal, during which refrigerant can possibly be released to the surrounding space. Prior to work taking place, the area around the equipment is to be surveyed to make sure that there are no flammable hazards or ignition risks. “No Smoking” signs shall be displayed.

Ventilated Area

Ensure that the area is in the open or that it is adequately ventilated before breaking into the system or conducting any hot work. A degree of ventilation shall continue during the period that the work is carried out. The ventilation should safely disperse any released refrigerant and preferably expel it externally into the atmosphere.

Checks to The Refrigerating Equipment

Where electrical components are being changed, they shall be fit for the purpose and to the correct specification. At all times the manufacturer’s maintenance and service guidelines shall be followed. If in doubt, consult the manufacturer’s technical department for assistance.

The following checks shall be applied to installations using FLAMMABLE REFRIGERANTS:

- the actual REFRIGERANT CHARGE is in accordance with the room size within which the refrigerant containing parts are installed;
- the ventilation machinery and outlets are operating adequately and are not obstructed;
- if an indirect refrigerating circuit is being used, the secondary circuit shall be checked for the presence of refrigerant;
- marking to the equipment continues to be visible and legible. Markings and signs that are illegible shall be corrected;
- refrigerating pipe or components are installed in a position where they are unlikely to be exposed to any substance which may corrode refrigerant containing components, unless the components are constructed of materials which are inherently resistant to being corroded or are suitably protected against being so corroded.

Checks to Electrical Devices

Repair and maintenance to electrical components shall include initial safety checks and component inspection procedures. If a fault exists that could compromise safety, then no electrical supply shall be connected to the circuit until it is satisfactorily dealt with. If the fault cannot be corrected immediately but it is necessary to continue operation, an adequate temporary solution shall be used. This shall be reported to the owner of the equipment so all parties are advised.

Initial safety checks shall include:

- that capacitors are discharged: this shall be done in a safe manner to avoid possibility of sparking;
- that no live electrical components and wiring are exposed while charging, recovering or purging the system;
- that there is continuity of earth bonding.

Repairs to Sealed Components

Sealed electrical components shall be replaced.

Repair to Intrinsically Safe Components

Intrinsically safe components must be replaced.

Cabling

Check that cabling will not be subject to wear, corrosion, excessive pressure, vibration, sharp edges or any other adverse environmental effects. The check shall also take into account the effects of aging or continual vibration from sources such as compressors or fans.

Detection of Flammable Refrigerants

Under no circumstances shall potential sources of ignition be used in the searching for or detection of refrigerant leaks. A halide torch (or any other detector using a naked flame) shall not be used.

The following leak detection methods are deemed acceptable for all refrigerant systems. Electronic leak detectors may be used to detect refrigerant leaks but, in the case of FLAMMABLE REFRIGERANTS, the sensitivity may not be adequate, or may need re-calibration. (Detection equipment shall be calibrated in a refrigerant-free area.) Ensure that the detector is not a potential source of ignition and is suitable for the refrigerant used. Leak detection equipment shall be set at a percentage of the LFL of the refrigerant and shall be calibrated to the refrigerant emplo yed, and the appropriate percentage of gas (25 % maximum) is confirmed.

Leak detection fluids are also suitable for use with most refrigerants but the use of detergents containing chlorine shall be avoided as the chlorine may react with the refrigerant and corrode the copper pipe-work.

If a leak is suspected, all naked flames shall be removed/extinguished.

If a leakage of refrigerant is found which requires brazing, all of the refrigerant shall be recovered from the system, or isolated (by means of shut off valves) in a part of the system remote from the leak. Removal of refrigerant shall be according to Removal and evacuation.

Removal and Evacuation

When breaking into the refrigerant circuit to make repairs – or for any other purpose – conventional procedures shall be used. However, for flammable refrigerants it is important that best practice be followed, since flammability is a consideration. The following procedure shall be adhered to:

- safely remove refrigerant following local and national regulations;
- evacuate;
- purge the circuit with inert gas (optional for A2L);
- evacuate (optional for A2L);
- continuously flush or purge with inert gas when using flame to open circuit; and
- open the circuit.

The refrigerant charge shall be recovered into the correct recovery cylinders if venting is not allowed by local and national codes. For appliances containing flammable refrigerants, the system shall be purged with oxygen-free nitrogen to render the appliance safe for flammable refrigerants. This process might need to be repeated several times. Compressed air or oxygen shall not be used for purging refrigerant systems.

For appliances containing flammable refrigerants, refrigerants purging shall be achieved by breaking the vacuum in the system with oxygen-free nitrogen and continuing to fill until the working pressure is achieved, then venting to atmosphere, and finally pulling down to a vacuum (optional for A2L). This process shall be repeated until no refrigerant is within the system (optional for A2L). When the final oxygen-free nitrogen charge is used, the system shall be vented down to atmospheric pressure to enable work to take place.

The outlet for the vacuum pump shall not be close to any potential ignition sources, and ventilation shall be available.

Charging Procedures

In addition to conventional charging procedures, the following requirements shall be followed.

- Ensure that contamination of different refrigerants does not occur when using charging equipment. Hoses or lines shall be as short as possible to minimise the amount of refrigerant contained in them.
- Cylinders shall be kept in an appropriate position according to the instructions.
- Ensure that the REFRIGERATING SYSTEM is earthed prior to charging the system with refrigerant.
- Label the system when charging is complete (if not already).
- Extreme care shall be taken not to overfill the REFRIGERATING SYSTEM.
- Prior to recharging the system, it shall be pressure-tested with the appropriate purging gas. The system shall be leak-tested on completion of charging but prior to commissioning. A follow up leak test shall be carried out prior to leaving the site.

Decommissioning

Before carrying out this procedure, it is essential that the technician is completely familiar with the equipment and all its detail. It is recommended good practice that all refrigerants are recovered safely. Prior to the task being carried out, an oil and refrigerant sample shall be taken in case analysis is required prior to re-use of recovered refrigerant. It is essential that electrical power is available before the task is commenced.

a) Become familiar with the equipment and its operation.

b) Isolate system electrically.

c) Before attempting the procedure, ensure that:

- mechanical handling equipment is available, if required, for handling refrigerant cylinders;
- all personal protective equipment is available and being used correctly;
- the recovery process is supervised at all times by a competent person;
- recovery equipment and cylinders conform to the appropriate standards.

d) Pump down refrigerant system, if possible.

e) If a vacuum is not possible, make a manifold so that refrigerant can be removed from various parts of the system.

f) Make sure that cylinder is situated on the scales before recovery takes place.

g) Start the recovery machine and operate in accordance with instructions.

h) Do not overfill cylinders (no more than 80 % volume liquid charge).

i) Do not exceed the maximum working pressure of the cylinder, even temporarily.

j) When the cylinders have been filled correctly and the process completed, make sure that the cylinders and the equipment are removed from site promptly and all isolation valves on the equipment are closed off.

k) Recovered refrigerant shall not be charged into another REFRIGERATING SYSTEM unless it has been cleaned and checked.

Labelling

Equipment shall be labelled stating that it has been de-commissioned and emptied of refrigerant. The label shall be dated and signed. For appliances containing FLAMMABLE REFRIGERANTS, ensure that there are labels on the equipment stating the equipment contains FLAMMABLE REFRIGERANT.

Recovery

When removing refrigerant from a system, either for servicing or decommissioning, it is recommended good practice that all refrigerants are removed safely.

When transferring refrigerant into cylinders, ensure that only appropriate refrigerant recovery cylinders are employed. Ensure that the correct number of cylinders for holding the total system charge is available. All cylinders to be used are designated for the recovered refrigerant and labelled for that refrigerant (i.e. special cylinders for the recovery of refrigerant). Cylinders shall be complete with pressure-relief valve and associated shut-off valves in good working order. Empty recovery cylinders are evacuated and, if possible, cooled before recovery occurs.

The recovery equipment shall be in good working order with a set of instructions concerning the equipment that is at hand and shall be suitable for the recovery of the flammable

refrigerant. If in doubt, the manufacturer should be consulted. In addition, a set of calibrated weighing scales shall be available and in good working order. Hoses shall be complete with leak-free disconnect couplings and in good condition.

The recovered refrigerant shall be processed according to local legislation in the correct recovery cylinder, and the relevant waste transfer note arranged. Do not mix refrigerants in recovery units and especially not in cylinders.

If compressors or compressor oils are to be removed, ensure that they have been evacuated to an acceptable level to make certain that flammable refrigerant does not remain within the lubricant. The compressor body shall not be heated by an open flame or other ignition sources to accelerate this process. When oil is drained from a system, it shall be carried out safely.

ALORAIR

WARRANTY REGISTRATION CARD

Return To:
AlorAir Solutions, Inc.

ORDER NUMBER: _____

MODEL: _____ **SERIAL #:** _____

INSTALLER: _____ **INSTALLATION DATE:** _____

NAME: _____

ADDRESS: _____

CITY:S _____ **TATE:Z** _____ **IP:** _____

PHONE #: _____ **EMAIL:** _____

- If you have any questions, please feel free to contact us at 888-990-7469 or visit *www.alorair.com*
- Register your unit for warranty using this link: *www.alorair.com/page/Warranty--Warranty-registration*
- Warranty Registration *https:/www.alorair.com* or scan this QR code to direct you to the waranty registration website.

AlorAir® Solutions, Inc.

Add: 14752 Yorba Ct, Chino, CA 91710

Tel: (888) 990-7469

E-mail: support@alorair.com

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