

THORAIR®

AM190001
AM190002

LGR DEHUMIDIFIERS



Purchase Date: _____

Serial Number: _____

Purchased From: _____

The LGR2200 Dehumidifier reduces humidity in enclosed structural environments by removing water vapor from the air. With proper use, the LGR2200 can help to dry out damp structural materials,

insulation, and contents, and maintain a healthy level of humidity. Using the LGR2200 may also prevent secondary damage caused by high humidity.

WARNINGS

- **Always store, transport, and use the unit in a Vertical position. If the unit is ever placed in a horizontal position, return it to the Vertical position and let it stand for at least 30 minutes before turning it on.**
- Do not move or carry the Dehumidifier while it is operating. When the Dehumidifier is operating, the powerful airflow can cause unpredictable movement.
- NEVER allow children to play with or around the Dehumidifier.
- Do not alter or modify your Dehumidifier in any way. Use only authorized replacement parts . Modifications or use of unauthorized parts could create a hazard and will void your warranty.
- Insert three prong-plug on power cord into a matching electrically grounded outlet. Do not use adapter. Never cut off third prong.
- The Dehumidifier should never be operated near water as it will create a risk of serious injury from electrical shock.
- Handle unit with care to avoid causing damage or injury.
- The Dehumidifier should always be operated on a flat surface. Do not operate where unit could fall, or on slippery surfaces, as this could increase the chance of injury, fire, or electrical shock.
- Do not use the Dehumidifier near combustible gas, or hot air as unit could melt and cause a fire or electrical hazard.
- Do not take the Dehumidifier apart or repair it unless you are qualified to do so. Never repair or service unit while Dehumidifier is plugged in.
- Make sure the air intake and outlet are free from all materials and away from obstructions, as any restrictions may cause the Dehumidifier to overheat and cause a shock or fire hazard.
- Unplug the Dehumidifier before performing any service or changing filters
- Do not stack more than 2 units high in order to avoid a tipping hazard – falling equipment can cause bodily harm.
- Keep away from open flames and heat sources.
- Do not use or store where vapors from gasoline, solvents, thinners or other flammable materials may be present.

POSITIONING LGR2200/2500

For best results, operate your dehumidifiers in an enclosed area. Close all doors and windows that open to the outside to maximize water removal efficiency. Place your dehumidifier away from obstructions, and keep it away from anything that could block airflow into and out of the unit.

SET DRAIN HOSE

The LGR2200/2500 condensate pump connects to a plastic drainage hose. This hose is equipped with a quick-connect fitting for quick attachment to the provided 25 ft. (7.5 m) drain hose. Unwrap the entire hose and place the unattached end in a sink, drain, bucket or outdoors – anywhere that water can drain out safely. If you use a bucket or other container for water collection, check it regularly to prevent overflows.

NOTICE: Uncoil and straighten the entire drain hose. Do not leave any part of the hose coiled and do not place the end of the hose higher than 20 ft. (6 m) above the bottom of the unit. Also check for kinks or other obstructions that might restrict the flow of water. Obstructions may cause a water backup and result in overflows.

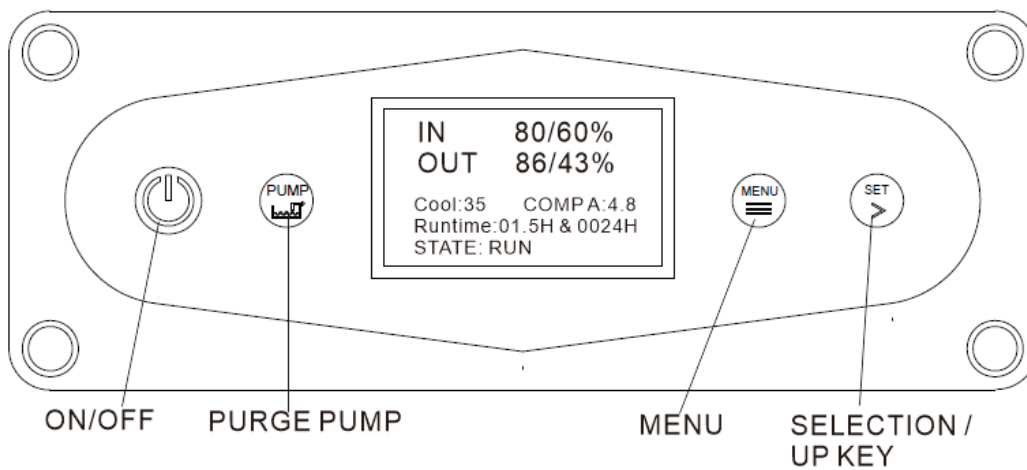
PLUG THE UNIT

The LGR2200/2500 should be plugged into a 125volt outlet rated for at least 10 amps. Always plug the cord firmly into the unit first, and then plug the other end into a suitable outlet.

Startup display and normal display modes

When unit is first plugged in to AC power, the control panel display will briefly cycle through a series of readouts. This is part of the unit’s self-diagnosis procedure and no user intervention is required.

CONTROL PANEL



| | |
|--------|--|
| ON/OFF | Press and release to turn unit on or off. |
| MENU | Press to select next item in menu. Menu item will show in display. |

| | |
|------|--|
| SET | Press to toggle or select values in menu displayed |
| PUMP | Press and release to start purge. |

| | | | |
|---------|------------------------------------|--------|-------------------------------------|
| IN | Shows Temp & humidity of the inlet | OUT | Shows Temp & humidity of the outlet |
| Cool | Shows Temp @ condenser | COMP A | Shows Current of the compressor |
| Runtime | Shows Job hours & life hours | STATE | Shows the state of the dehumidifier |

HUMIDISTAT SETTING

The default operating mode keeps the dehumidifier running at its maximum capacity. This is ideal for most restoration application. To control humidity at a specific level, described below:

1) Press **MENU** once, and screen shows as FIG A, Press **SET** until the screen shows as FIG B, an arrow point the Moisture,

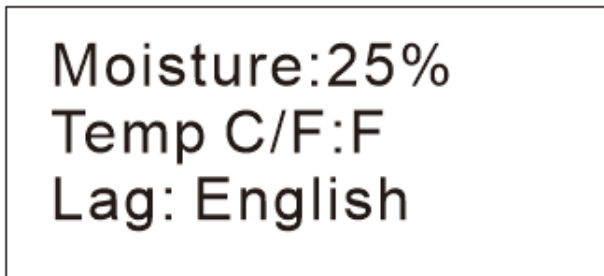


FIG A

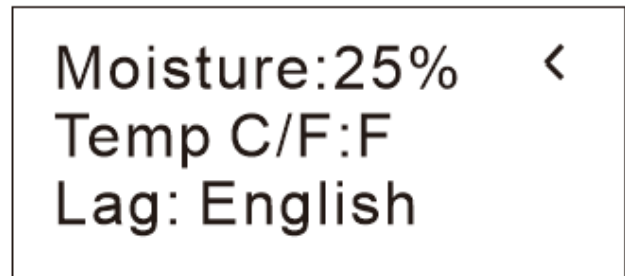


FIG B

2) Press **SET** to adjust the target Moisture, Each press of the button increases the setting by 5% increments, cycling through 90%RH and starting again at 40%RH.

3) Press **MENU** until the screen back to the main Menu.

TEMPERATURE SETTING

To change unit of temperature, described below:

1) Press **MENU** only once, and screen shows as FIG C, Press **SET** until the screen shows as FIG D, an arrow point the Moisture,

2) Press **SET** to select Fahrenheit or Centigrade scale



FIG C



FIG D

AFTER THE JOB

To reduce the possibility of drips when moving the unit, follow these additional steps to ensure that all water is removed from the unit.

NOTICE: To ensure the condensate tank empties completely while purging, make sure the unit is positioned horizontally on a flat surface.

- 1) Gently rock the machine to ensure any water remaining on interior surfaces falls into the sump area.
- 2) Press the **PUMP** key. When the purge cycle is complete, turn the unit off.
- 3) Remove the external drain hose, drain it carefully, coil it and secure it with one of the Velcro straps provided on the side of the unit.
- 4) Unplug power cord from power supply and from base of the machine, coil neatly, coil it and secure it with one of the Velcro straps provided on the side of the unit.

TRANSPORTATION AND STORAGE

NOTICE: Handle the unit carefully. Do not drop, throw, or place the unit where it could fall. Rough treatment can damage this equipment and may create a hazardous condition or void warranty.

- Do not expose the control panel to moisture, snow or rain.
- Protect from freezing.
- Store and transport securely to avoid any damaging impact to internal parts.
- Secure during transport to prevent sliding and possible injury to vehicle occupants.

MAINTENANCE SCHEDULE

WARNING! ELECTRIC SHOCK HAZARD. Unplug unit before cleaning or servicing.

WARNING: Risk of dust and contaminants exposure. Use of respirator mask and gloves is recommended. If unit has been exposed to potentially dangerous contaminant, clean thoroughly and sanitize before reuse.

NOTICE: The unit is fitted with sensitive electronic sensors. Protect the sensors and their lead wires from damage and do not expose them to water or cleaning solution.

Before each use Inspect the electrical cord for damage. Look for fraying, cuts, etc. Replace the cord if you find any damage.

Inspect, vacuum or replace filter. The LGR2200/2500 is provided with a 3M™ HAF High Air Flow .HAF filters may be vacuumed clean and reused up to three times before replacement. Use a HEPA vacuum and brush tool to remove any dust or debris. Do not use compressed air or expose the filter to any liquids, as may damage the filter.

Monthly Inspect coils. Clean when dust accumulation is visible. In normal use, dust can accumulate and can restrict airflow, reducing performance and causing the unit to overheat. Use a vacuum cleaner with a brush tool and a soft cloth to remove any debris. Take care not to damage any interior components.

To maintain appearance, wipe interior and exterior surfaces with a damp cloth. For deep cleaning and a lasting, protective shine, use an automotive interior cleaner.

Clean pump check valve and basin If the unit displays the message “STATE PUMP”, which means the pump may be blocked, check valve and pump basin may need to be cleaned. Remove grills and cover. Remove screws from pump base and lift out pump. Wipe out pump basin with a damp cloth. Inspect the pump base for build-up of debris and clean if needed. Unthread barbed fitting with check valve and rinse fitting and check valve with clean water. Reinstall check valve into barbed fitting and install the barbed fitting into pump. Do not overtighten. Reinstall pump on base. Reinstall cover and grills.

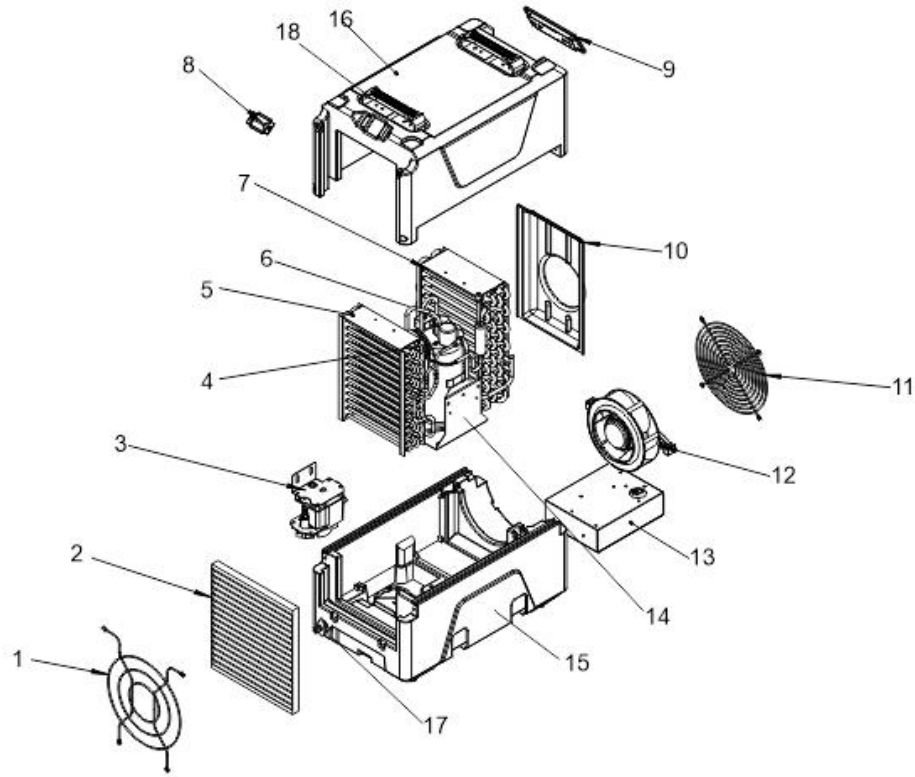
Clean coils With the cover removed, inspect both coils. If excessive dust and debris is present, vacuum thoroughly and/or clean with coil cleaner.

LGR2200/2500 SPECIFICATIONS

| MODEL | LGR2200 | LGR2500 |
|------------------|---|---|
| Power Input | 110 Volts, 60 Hz | 110 Volts, 60 Hz |
| Compressor Power | 3/4HP @Aham | 1HP @Aham |
| Motor Rating: | 1/3 hp | 1/3hp |
| Current: | 7 amps | 7.5amps |
| Water Removal | 125Pints/Day (71L) @ 90F/90% 80Pints/Day (45L) @ 80F/60% | 135Pints/Day (71L) @ 90F/90% 85Pints/Day (45L) @ 80F/60% |
| CFM: | 250-500 | 300-550CFM |
| Weight | 36.5Kg | 42Kg |
| Size | 24x14x21inch | 26*22*37inch |
| Certifications: | ETL | ETL |

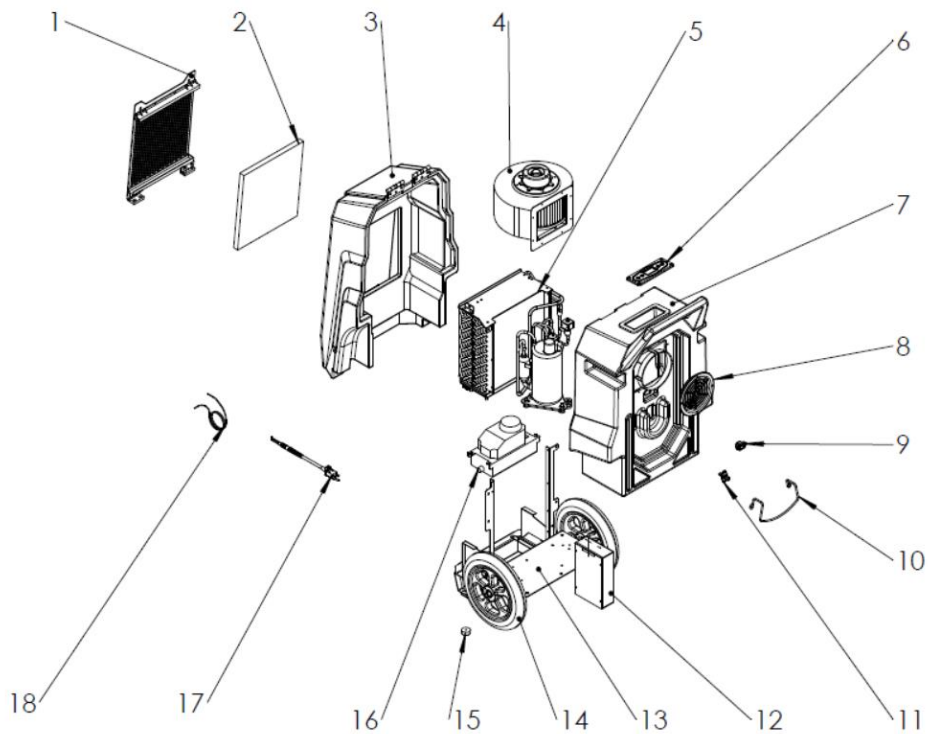
Specifications are subject to change without notice.

LGR2200/2500 PARTS LIST



| Ref | Part Number | Description | Qty Req |
|-----|-------------|----------------------|---------|
| 1 | LGR2201 | Inlet Grill | 1 |
| 2 | LGR2202 | 3M HAF Filter | 1 |
| 3 | LGR2203 | Water Pump | 1 |
| 4 | LGR2204 | Condens | 1 |
| 5 | LGR2205 | Airflow Guide | 1 |
| 6 | LGR2206 | 1/3 HP Motor | 1 |
| 7 | LGR2207 | Motor Support | 1 |
| 8 | LGR2208 | Motor Seal Panel | 1 |
| 9 | LGR2209 | Switch Panel | 1 |
| 10 | LGR2210 | Fan Inlet Cover | 1 |
| 11 | LGR2211 | Outlet Grill | 1 |
| 12 | LGR2212 | Fan | 1 |
| 13 | LGR2213 | Control Box | 1 |
| 14 | LGR2214 | Compressor Base | 1 |
| 15 | LGR2215 | Down Housing | 1 |
| 16 | LGR2216 | Up Housing | 1 |
| 16 | LGR2217 | Quick Pipe connector | 1 |
| 17 | LGR2218 | Handle | 2 |

LGR2500 PARTS LIST



| Ref | Part Number | Description | Qty Req |
|-----|-------------|-----------------|---------|
| 1 | LGR2501 | Inlet Grill | 1 |
| 2 | LGR2502 | Filter | 1 |
| 3 | LGR2503 | Inlet Housing | 1 |
| 4 | LGR2504 | Fan Motor | 1 |
| 5 | LGR2505 | Compressor | 1 |
| 6 | LGR2506 | Control Panel | 1 |
| 7 | LGR2507 | Outlet Housing | 1 |
| 8 | LGR2508 | Outlet Grill | 1 |
| 9 | LGR2509 | Cord Connector | 1 |
| 10 | LGR2510 | Bracket | 1 |
| 11 | LGR2511 | Water Connector | 1 |
| 12 | LGR2512 | Control Box | 1 |
| 13 | LGR2513 | Base | 1 |
| 14 | LGR2514 | Wheel | 2 |
| 15 | LGR2515 | Rubber | 2 |
| 16 | LGR2516 | Pump | 1 |
| 16 | LGR2517 | Cord | 1 |
| 17 | LGR2518 | Drain Hose | 1 |

SYSTEM MESSAGES

The LGR2200/2500 control system constantly monitors internal operating conditions. If the system detects a problem, it will state the ERROR code at the after the STATE row, instead RUN/OFF. If the display shows an ER message, first unplug the unit and then plug it back in. This will usually reset the electronics, and the unit will begin operating normally. If the error message reappears, refer to the explanation and solution shown below.

| | | | |
|--|--|--|--|
| IN 80/60% OUT 86/43% Cool:35 COMPA:4.8 Runtime:01.5H & 0024H STATE: COMP | IN 80/60% OUT 86/43% Cool:35 COMPA:4.8 Runtime:01.5H & 0024H STATE: MOIS | IN 80/60% OUT 86/43% Cool:35 COMPA:4.8 Runtime:01.5H & 0024H STATE: TEMP 1 | IN 80/60% OUT 86/43% Cool:35 COMPA:4.8 Runtime:01.5H & 0024H STATE: PUMP |
|--|--|--|--|

| CONTROL PANEL EXPLANATION AND SOLUTION MESSAGE | |
|--|---|
| STATE: COMP | Compressor may do not work, Check compressor cable for proper connection , if contact service center |
| STATE: MOIS | Check inlet Temp/RH sensor for proper connection. If error persists, contact service. |
| STATE: TEMP 1 | Check inlet Temp/RH sensor for proper connection. If error persists, contact service. |
| STATE: TEMP 2 | Check outlet Temp/RH sensor for proper connection. If error persists, contact service. |
| STATE: PUMP | Check for obstructions in drain hose. If clogged, remove hose from unit and blow hose out with compressed air. Inspect and clean the pump check valve and pump basin. |

TROUBLE SHOOTING

| | | |
|-----------------------------------|--|---|
| Water drips out when moving unit | Unit was unplugged before purging was complete. | Purge unit before moving. See "At the End of the Job," p. 4. |
| Unit does not operate | Unit not switched on. No power to machine. | Switch unit on. Plug in unit; check power cord connection at wall outlet and at base of unit. |
| Unit operating, but room not dry | Not enough time to dry. Poor air movement in room. Excessive moist air infiltration. | Allow more time for drying. Increase air movement with air movers. Seal off area to reduce infiltration. |
| Unit collects too little water | Room air is dry. Room temperature is too low. Filter is clogged. Coils are clogged. | Confirm humidity level with hygrometer. Increase room temperature. Check filter. Clean or replace as necessary. Check coils. Clean as necessary. |
| Unit stop working after few hours | The setted humidity is less than the environment humidity | Decrease the setted humidity according to the HUMIDISTAT SETTING process |

Thank you for purchasing this product. Please read the instructions carefully and follow all warnings. All products are manufactured to be easy to use and provide years of worry free service when the recommendations in this manual are followed.