

Installation Instructions

Required Tools for Installation

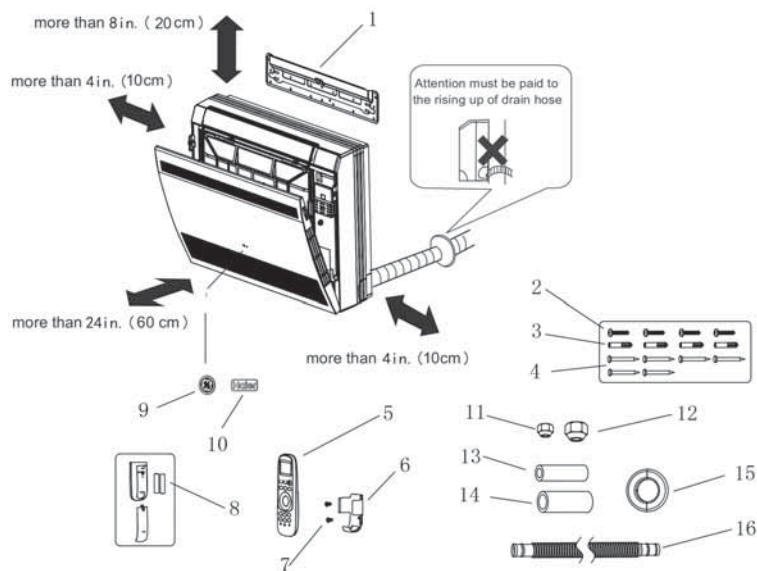
- 14/4 AWG SOOW Non-Shielded Stranded Copper Cable
- 16/2 AWG Shielded SOOW Cable for high speed communication
- 5/8" (16mm), 7/8" (22mm), 1" (25mm) or adjustable wrench
- R454B refrigerant*
- Adhesive tape
- Conduit cable clamp 1/2"
- Copper line set
- #2 phillips screwdriver
- Drill
- R454B flaring tool
- Hex wrench
- Hole saw 2 1/4"
- Insulation*
- Refrigerant scale
- Level
- Manifold gauge set
- Measuring tape
- Micron gauge
- Mini-split adapter (5/16"F to 1/4"M)
- Nitrogen*
- Pipe cutter
- PVC pipe (optional)
- Razor knife
- Reamer
- Saddle clamp (L.S.) with screws
- Sealant, non-expanding (for lineset hole)
- Soap/water solution* or gas leakage detector
- Stud finder
- Torque wrench
- Vacuum pump
- Wire strippers
- All usual and customary HVAC hand and power tools, meters, and testing devices

*consumable

Installation Preparation

Accessories

1	Mounting wall bracket	1
2	Screws for (1) 4x25 mm	4
3	Plastic sleeve for (2)	4
4	Nail	6
5	Remote Controller	1
6	Remote controller holder	1
7	Screws for (8) 4x12 mm	2
8	Battery for (7)	2
9	GE badge	1
10	Haier Badge	1
11	Flare nut for liquid tube	1
12	Flare nut for gas tube	1
13	Insulated tube (liquid line)	1
14	Insulated tube (suction Line)	1
15	Trim Ring	1
16	Drain hose	1



Installation Instructions

Installation Preparation

A. Before installing the indoor unit, determine minimum room size.

Refer to the outdoor unit installation instructions for calculating the total refrigerant charge. Measure the area of the space that will be conditioned by the indoor unit, and refer to the below table :

Console with Refrigerant Leak Sensor Factory-Installed													
Maximum Charge	lbs	≤3.9	4.0	4.5	5.0	5.5	6.0	6.5	7.0	7.5	8.0	8.5	9.0
	oz	≤62.4	64	72	80	88	96	104	112	120	128	136	144
Minimum Room Size - Single Zone Outdoor Unit	ft²	No restriction	220	248	275	303	330	358	385	413	440	468	495
Minimum Room Size - Multi Zone Outdoor Unit	ft²	No restriction	60	68	75	83	90	98	105	113	120	128	135

Installation in rooms smaller than the minimum sizes listed above are not allowed based on the standard of UL60335-2-40 Edition 4¹.

1: UL60335-2-40 Edition 4 has been adopted by majority of state and local codes. A limited number of local and state codes may require compliance to UL 60335-2-40 Edition 3. Please refer to our website at **GEAppliancesAirandWater.com** for guidance on installations in those localities.

Note: Additional room area may be needed for different installation altitudes. Please use **Altitude Adjustment Factor** table below by multiplying minimum room size by the altitude adjustment factor based on install altitude.

Altitude Adjustment Factor

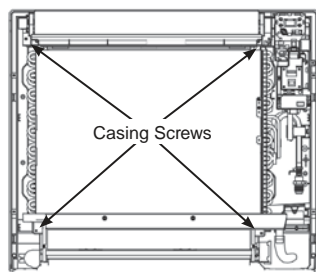
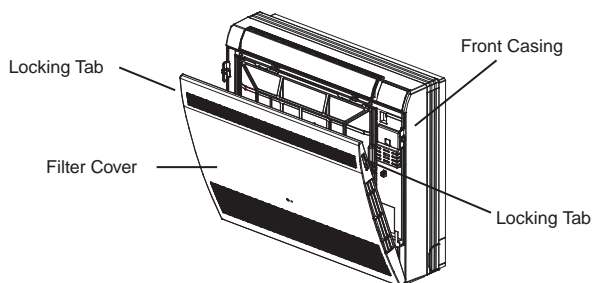
Altitude (m)	0	200	400	600	800	1000	1200	1400	1600
Altitude (ft)	0	660	1310	1970	2620	3280	3940	4590	5250
Adj. Factor	1	1	1	1	1.02	1.05	1.04	1.1	1.12
Altitude (m)	1600	1800	2000	2200	2400	2600	2800	3000	3200
Altitude (ft)	5250	5910	6560	7220	7870	8530	9190	9810	10500
Adj. Factor	1.12	1.15	1.18	1.21	1.25	1.28	1.32	1.36	1.4

Installation Instructions

Installation Preparation

Step 2. Remove the Front Casing

1. Push down the filter cover locking tabs located at the upper right and left sides of the filter cover to release.
2. Pull the filter cover towards you to remove it.
3. Locate and remove the 4 casing screws as shown in the figure below.
4. The front casing will be free to remove. From the bottom of the front panel, pull up and away from the chassis and unhinge from the top to remove.

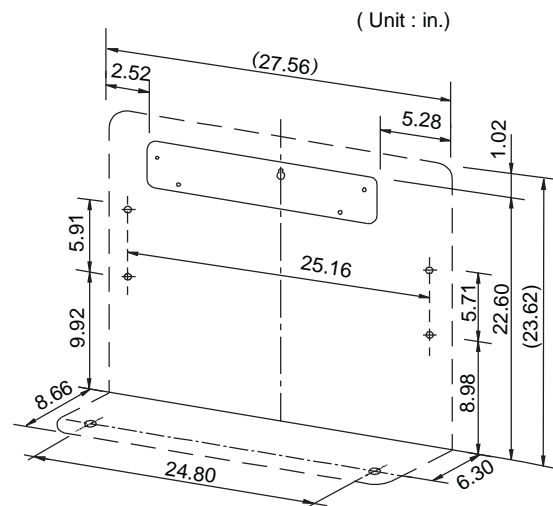


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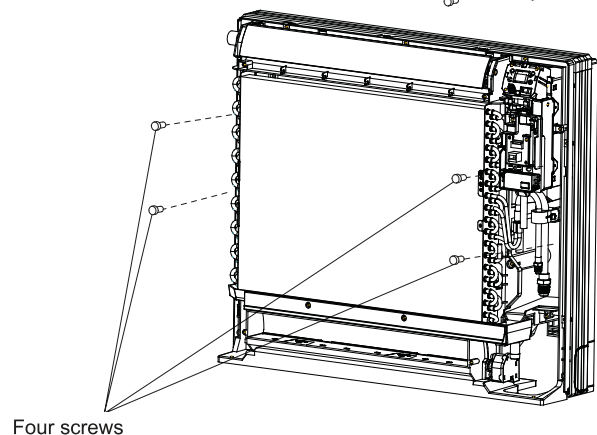
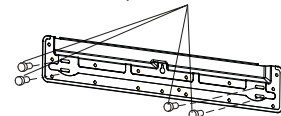
Step 3. Mounting Bracket (Low Wall Mount Only)

If the unit is to wall mounted, the wall mount bracket is required.

1. Affix the wall bracket to the wall, ensuring it is horizontally level and vertically plumb.
2. Securely fasten the wall bracket to the wall using the four supplied screws.



Expandable screw



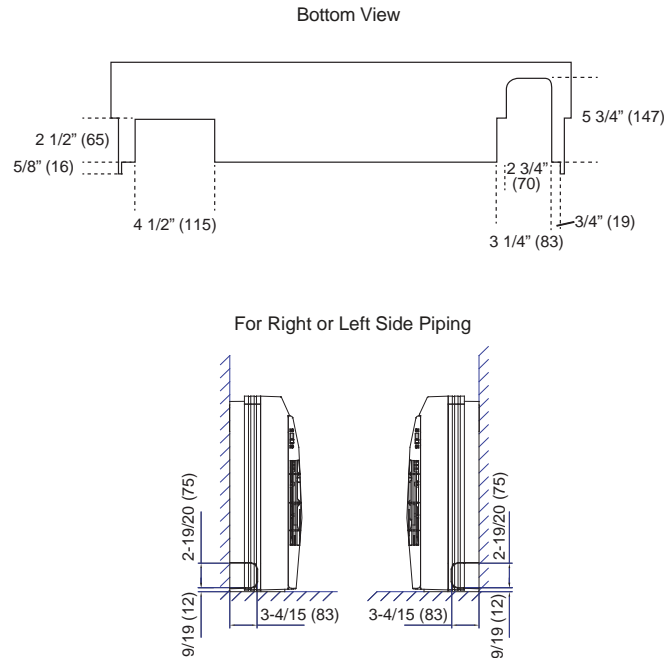
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Console Installation

Step 4: Piping Bundle Hole

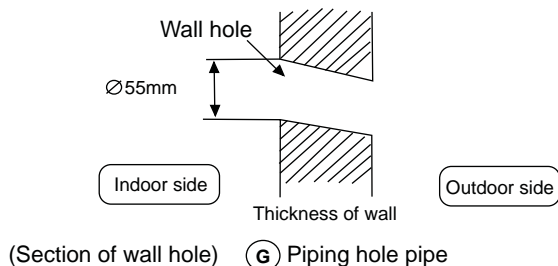
A. Determine Hole Position

1. Determine the hole position based on desired piping configuration.



B. Drill Hole

1. Drill a 2-3/8" downward-pitched hole for the refrigerant line/condensate drain/wiring bundle.
2. Once bundle is installed, seal the hole.



Console Installation

Step 5: Piping Configuration and Installation

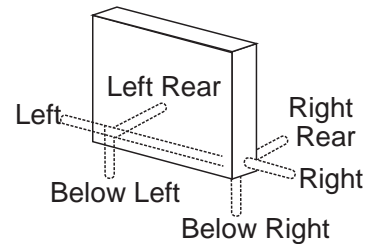
A. Piping Configuration

Rear Piping: NOTE: Rear piping may exit at any position at the back of the unit.

Route the line set and drain hose through the rear opening.

Left & Rear-Left Piping: When routing left or rear-left piping, carefully bend the line set and drain hose to keep flush with the piping cavity in the rear of the unit. Removed the left side knock-out if routing out of the left side.

Other: Remove the appropriate piping knockout (if required) according to the desired piping direction, and carefully route the piping to the wall hole.



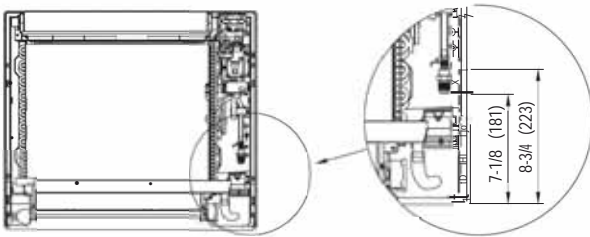
Installation Instructions

Console Installation

Step 5. Piping Configuration and Installation

B. Line sets

- The standard line set length is 25 feet. If the installation length is different, adjust the refrigerant charge by 0.2 oz/ft if the liquid line is 1/4", or 0.5 oz/ft if the liquid line is 3/8".
- Make sure the line sets are fully insulated, including the flare connection.
- Coat the outside of the flare with refrigerant oil and connect pipes.
- To join the line set, directly align the tubing flare to the fitting on the other pipe. Slide the nut onto the fitting and hand tighten.



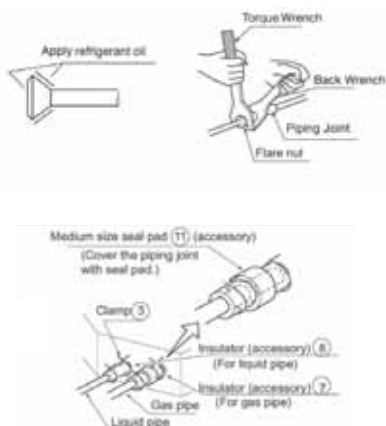
NOTE: Follow standard practices for creating pipe flares. When cutting and reaming the tubing, use caution to prevent dirt or debris from entering the tubing. Remember to place nut over the tubing before flaring.

Torque Specifications

Torque the fittings according to the specifications shown in the torque chart below.

Pipe Diameter Ø	Fastening torque
Liquid side 6.35mm (1/4")	18N.m/13.3Ft.lbs
Liquid/Gas side 9.52mm (3/8")	42 N.m/30.1Ft.lbs
Gas Side 12.7mm (1/2")	55N.m/40.6Ft.lbs
Gas side 15.88mm (5/8")	60 N.m/44.3Ft.lbs

- Two wrenches are required to join the flare connection; one standard wrench and one torque wrench adjusted to the proper settings.
- Repeat the process for attaching the other end of the line set.

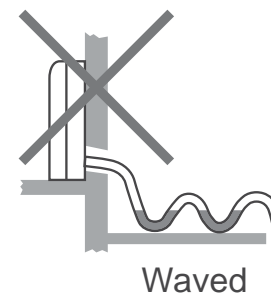
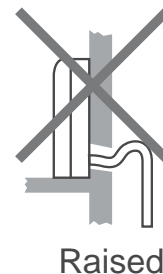


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Step 5. Piping Configuration and Installation

C. Condensate Piping

1. If the condensate drain hose passes through an interior space, ensure it is properly insulated.
2. The drain hose should have a downward slope to allow for proper condensate flow. The use of a condensate pump will be required if a downward slope can not be achieved.
3. Drain hose diameter should be equal to, or larger than that of the factory piping (Ø 5/8" [16.5mm]).



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NOTE: Be sure to keep all piping and electrical wrapped as tight as possible to ensure the unit will sit flush against the wall.

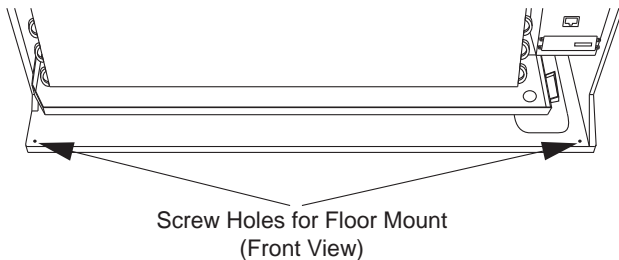
Allow slight slack in the piping to allow for easier positioning and serviceability.



Step 6: Indoor Unit Placement

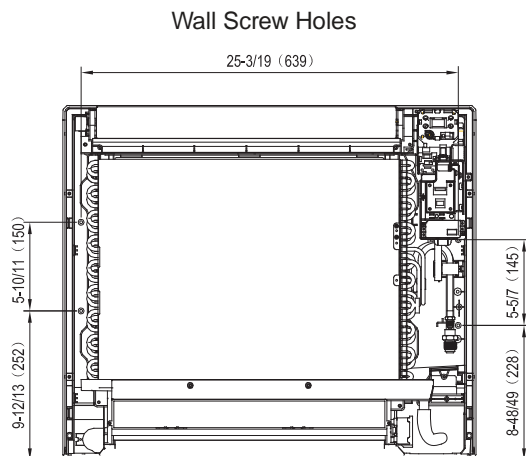
A. Floor Mount

1. Fasten the unit to the floor through the 2 floor mounting screw holes located in the front of the base of the chassis.
2. Fasten the console unit to the wall through the 4 wall screw holes at the rear of the chassis. Tighten the screws securely.



B. Mounting the Indoor Unit on the Wall

1. Hook the top of the console unit onto the wall mounting bracket.
2. Fasten the console unit to the wall through the 4 wall screw holes at the rear of the chassis. Tighten the screws securely.



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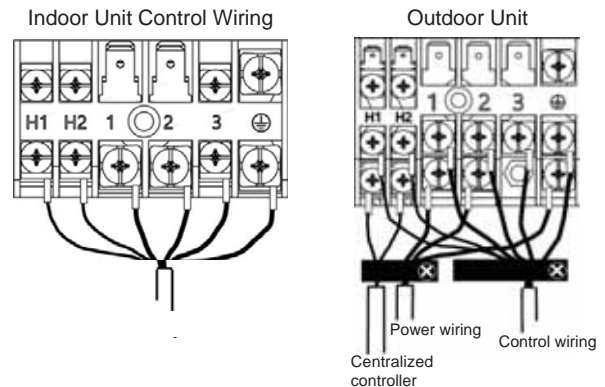
Step 7. Wiring Connections

NOTE: The unit should be installed by a licensed contractor/electrician. If required by applicable national, state and local codes; a disconnect switch will need to be installed when the indoor unit is powered from the outdoor unit.

1. Lift the panel containing the WiFi module and diagnostic port.
2. Remove the screw on the right side of the cover and remove the cover.
3. Make wiring connections at each terminal according to wiring diagram (take note of the color of the wire at each terminal and ensure the wires are connected to the outdoor unit in the same sequence).
4. Secure the cable to the indoor unit using the strain relief strap.
5. Replace the board cover and lower the panel.

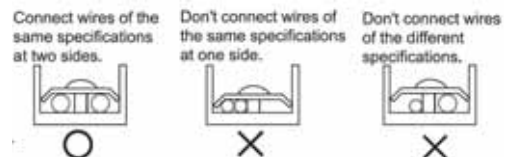
CAUTION

Be sure to route all the wiring along the right side of the unit to prevent wires from touching the refrigerant tubing.



WARNING

When making power supply connections, connect wires of the same specification and wire size (as described below)



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Step 8. Front Casing Installation

1. See Step 2. Perform steps in reverse.

Console Installation

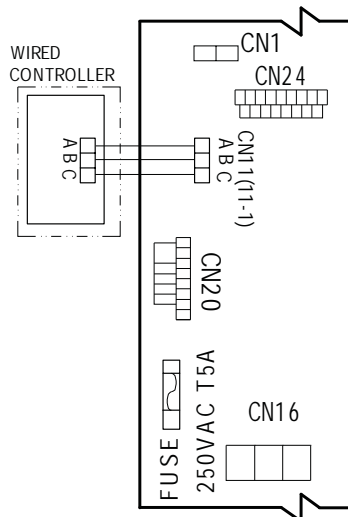
Step 9. Controller Connections

A. Wired Controller (Optional)

- Do not splice or extend cable without first reading the control installation manual.

- Route controller cable where it is inaccessible to occupants.

1. Follow instructions in Step 2 to remove console unit front panel.
2. Lift the panel containing the WiFi and diagnostic boards.
3. Pull cover off the control box.
4. Unplug the wire connectors for the upper louver, fan motor, coil sensor, and lower damper.
5. Remove ground screw from evaporator.
6. Remove screw securing the control box to the cabinet.
7. Remove the control box from the cabinet.
8. Remove the cover screw from the bottom of the control box.
9. Remove the control box cover.
10. Using the end of the wall control cable with ground wire, route the cable through the bottom of the box next to the ground screw.
11. Plug in the cable to CN11-1 on the board.
12. Connect ground wire to ground terminal of the terminal block.
13. Reverse steps 1-9 to reassemble the unit.



⚠ WARNING

Incorrect controller wiring installation may cause electric shock, fire, and/or malfunction

Wi-Fi Pairing

1. Download the "SmarthQ" app from Google Play (Android) or the Apple app store (IOS).

After downloading the App:

2. Open the app.
3. Select "Sign In".
4. Sign into your account or register as a new user.
5. Select the "+" icon to add a new device and follow the directions in the app.



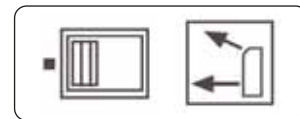
Software Notice

To ensure product is functioning optimally and with the latest feature set, connect AC unit to WiFi and update with latest software. Refer to Owner's Manual on how to connect WiFi.

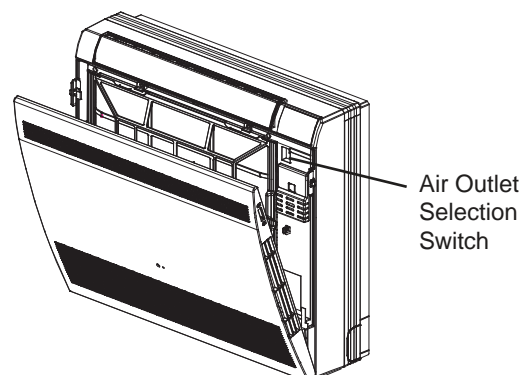
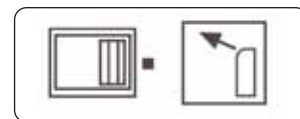
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Step 10. Airflow Configuration Setting

When the Air Outlet Selection Switch (found behind the filter cover, see illustration) is set in the left position, the airflow outlet is determined by the mode of operation (heating or cooling). This is the factory default setting.



When the Air Outlet Selection Switch set in the right position, airflow will be supplied only out of the upper outlet. This setting must be made manually.



Installation Instructions

Final Check

Start Up Checklist

- | | |
|---|--|
| <input type="checkbox"/> Refrigerant charge is verified and system has been leak tested | <input type="checkbox"/> The outdoor to indoor wires free of splices |
| <input type="checkbox"/> Line sets have been insulated
Electrical connections are secure | <input type="checkbox"/> Condensate drain has correct pitch and has been leak tested |
| <input type="checkbox"/> Has the electrical ground been checked and verified | <input type="checkbox"/> Indoor and outdoor units match |
| <input type="checkbox"/> Electrical wiring terminals match at indoor and outdoor unit | <input type="checkbox"/> Indoor and outdoor units are firmly mounted |
| <input type="checkbox"/> Wire between outdoor and indoor must be 14/4 AWG SOOW Non-Shielded Stranded Copper Cable for power and main communication cable | <input type="checkbox"/> Power source voltage is within tolerances |
| <input type="checkbox"/> Wire between outdoor and indoor must be 16/2 AWG Shielded SOOW Cable for high speed communication if unit is primary indoor unit | <input type="checkbox"/> The indoor and outdoor sections are quiet and free of vibration |
| | <input type="checkbox"/> All functions of the controller have been verified |
| | <input type="checkbox"/> Operation in cooling or heating modes is normal |
| | <input type="checkbox"/> Operation of the system has been explained to the owner |

Verify Refrigerant Leak Sensor Function

When a refrigerant leak or other leak sensor related error is detected, the indoor fan will turn on at high speed, and the compressor on the outdoor unit will turn off. These functions can be verified by temporarily disconnecting the leak sensor from the indoor unit and waiting up to 30 seconds for the system response. The leak sensor connects to connector CN3 on the indoor PCB (see section C for reference). When the system is powered on and the leak sensor is disconnected, the indoor unit should display "Ac," turn on the fan at high speed, and turn the compressor in the outdoor unit off. When the system is powered off, the leak sensor is disconnected, and the system is powered on, the indoor unit should display "bA," turn on the fan at high speed, and turn the compressor on the outdoor unit off.

Explaining Operation to the End User

- ☐ Using the User Manual, explain to the user how to use the air conditioner/heat pump:
 - the wired controller
 - adding/removing the air filters
 - placing or removing the wired controller from the wired control holder
 - cleaning methods
 - precautions for operation, etc
- ☐ Review precautions for operation.
- ☐ Recommend that the user read the Operating Instructions carefully.
- ☐ Leave this manual with the end user - that way future service techs can verify these steps were completed if they have problems

Service Tech:_____	Phone number:_____	Date:_____
Service Tech:_____	Phone number:_____	Date:_____
Service Tech:_____	Phone number:_____	Date:_____
Service Tech:_____	Phone number:_____	Date:_____

Installation Instructions

Refrigerant Leak Sensor Replacement Instructions

1. Open the front housing and grille.



2. Detach the refrigerant leak sensor from the metal enclosure via the two screws.



3. Repeat Steps 1 and 2 in reverse order to close the unit with the new refrigerant leak sensor.

GE Appliances Ductless HVAC Limited Warranty

GEAppliances.com. Please save your receipt showing the date of original purchase and the date of installation.

For the product models listed on Attachment 1 (the "Product"), this Standard Limited Warranty is provided to the Original Owner of the Product:

For The Period Of:	GE Appliances Will Replace:
1 Year <u>Remote Controller Warranty</u> From the date of the original installation	If the Remote Controller proves to be defective due to improper workmanship and/or material for a period of one (1) year from the date of installation , GE Appliances, A Haier Company ("Haier") will provide a new or refurbished controller, at Haier's sole discretion.
5 year <u>Limited Parts Warranty</u> From the date of the original installation	If any parts should prove to be defective due to improper workmanship and/or material for a period of five (5) years from the date of installation , Haier will replace any defective parts without charge for the part. Parts used for replacement may be new or refurbished parts, determined at Haier's sole discretion, and provided to your licensed HVAC technician installer.
10 Year <u>Registered Limited Parts Warranty</u> From the date of the original installation (ONLINE REGISTRATION REQUIRED at GEAppliances.com) MUST BE A RESIDENTIAL SINGLE-FAMILY HOME	If any of the parts should prove defective due to improper workmanship and/or material for a period of ten (10) years from the date of installation , Haier will replace any defective parts without charge for the part. The replacement part is warranted for the remainder of the original ten (10) year warranty period. Parts used for replacement may be new or refurbished parts, determined at Haier's sole discretion, and provided to your licensed HVAC technician installer. This Registered Limited Parts Warranty requires online registration within sixty (60) days from the original date of installation or occupancy. NON-RESIDENTIAL/COMMERCIAL APPLICATIONS ARE NOT ELIGIBLE FOR THIS REGISTERED LIMITED PARTS WARRANTY.

LABOR NOT COVERED:

These limited warranties **DO NOT** include labor or any other costs incurred for service, maintenance, repair, removing, replacing, installing, complying with local building or electrical codes, shipping or handling, replacement of the system, compressors or other parts.

EXCLUDED COMPONENTS:

The following components are not covered by this warranty: cabinets, cabinet pieces, air filters, driers, refrigerant, refrigerant line sets, belts, wiring, fuses, oil nozzles, unit accessories and any parts not affecting unit operation.

WHAT IS THE DATE OF PURCHASE:

The "Date of Purchase" is the date the Product is purchased by the Original Owner. The "Date of Installation" is the date that the original installation was completed and all Product start-up procedures were properly completed and verified by the installer's invoice. If the installation date cannot be verified, then the Date of Installation will either be sixty (60) days after the manufacture date, as determined by the Product's serial number or thirty (30) days from the Date of Purchase. You should keep and be able to provide your original sales receipt from the installer as proof of the Date of Purchase and the Date of Installation. For new construction, the Date of Purchase will be the date of purchase of the residence by the Owner from the builder.

WHO IS COVERED:

Owner occupied: The "Original Owner" means the original owner (and his or her spouse) of a residential single family where the Product was originally installed.

Non-Owner occupied: The "Non-Owner occupied" is defined as a) single family or multi-family residential buildings that are not Owner Occupied, or b) light commercial applications, (such as office buildings, retail establishments, hotels/motels).

For Non-owner occupied, this limited warranty requires that the Product be installed and maintained annually by a licensed HVAC technician (proof of annual maintenance is required).

HOW CAN YOU GET SERVICE:

Contact your licensed HVAC technician installer. All installation and service must be performed by a licensed HVAC technician. Failure to use a licensed HVAC technician for installation of this Product voids all warranty on this Product.

GE Appliances Ductless HVAC Limited Warranty

WHAT GE APPLIANCES WILL NOT COVER:

- Improper service or installation.
- Damage in shipping.
- Defects other than manufacturing defects (i.e., other than workmanship or materials).
- Damage from misuse, abuse, accident, alteration, lack of proper care and/or regular maintenance.
- Damage resulting from floods, fires, wind, lightning, accidents or similar conditions.
- Product that was not installed or serviced by a licensed HVAC technician.
- Labor and related services for repair or installation of the Product.
- A product purchased from an unauthorized online retailer.
- Damage as a result of subjecting Product to an atmosphere with corrosives or high levels of particulates (such as soot, aerosols, fumes, grease).
- Modification, change or alteration of the equipment, except as directed in writing by Haier.
- Use of contaminated or refrigerant not compatible with the unit.
- Operation with system components (indoor unit, outdoor unit, and refrigerant control devices) which are not an AHRI match or meet the specifications recommended by Haier.
- A Product sold and/or installed outside of the 50 United States, the District of Columbia, or Canada.
- Batteries for the controller and other accessories provided with the Product for installation (e.g., plastic hose).
- Normal maintenance, such as cleaning of coils, cleaning filters, and lubrication.
- For Product installed in non-owner occupied applications, Product that has not been maintained annually by a licensed HVAC technician (proof required).
- Damage caused by a used or unapproved component or part by Haier (e.g., a used and/or unapproved condenser / air handler).
- Component or parts not provided by Haier.
- Product that has been moved from its original installation to a new residence or building.
- Accident, or neglect or unreasonable use or operation of the equipment including operation of electrical equipment at voltages other than the range specified on the unit nameplate (includes damages caused by brownouts).
- Damage to the product caused by accident, fire, floods or acts of God.
- Incidental or consequential damage caused by possible defects with this product.

LEGAL RIGHTS:

Some states and provinces do not allow warranty terms to be subject to registration. In those states and provinces, the 10 year Registered Limited Parts Warranty applies. In addition, if allowed by the law of the state or province where the Product is installed, the subsequent owners of the residence or building may have additional rights or longer warranty terms.

REGISTERED LIMITED PARTS WARRANTY COVERAGE REQUIREMENTS:

- The unit is a GE Appliances or a Haier branded unit.
- The unit is installed in a residential application.
- The unit is properly registered at **GEAppliances.com** within 60 days after the original date of installation or occupancy.
- The unit is part of a complete AHRI matched system and installed by a state certified or licensed contractor in accordance with the unit installation, operation, and maintenance instructions provided with the unit.
- Indoor and outdoor ductless units are covered only when they are branded GE Appliances and are purchased and installed as a system along with a qualifying unit. (Third party coils are not covered).
- Installation is in compliance with applicable laws, regulations, codes, and ordinances.
- Unit was not ordered via the internet. Proof of purchase may be required.

GE Appliances Ductless HVAC Limited Warranty

EXCLUSION OF IMPLIED WARRANTIES:

EXCEPT TO THE EXTENT PROHIBITED BY APPLICABLE LAW, THIS LIMITED WARRANTY IS EXCLUSIVE AND GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO ANY IMPLIED WARRANTY OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

UNDER NO CIRCUMSTANCES SHALL HAIER BE LIABLE FOR ANY INDIRECT, INCIDENTAL, SPECIAL OR CONSEQUENTIAL DAMAGES INCLUDING, WITHOUT LIMITATION, LOST GOODWILL, LOST REVENUE OR PROFITS, WORK STOPPAGE, SYSTEM FAILURE, IMPAIRMENT OF OR DAMAGE TO OTHER EQUIPMENT OR GOODS, COST OF REMOVAL AND REINSTALLATION OF THE SYSTEM, LOSS OF USE, INJURY TO PERSONS OR PROPERTY ARISING OUT OF OR RELATED TO THE SYSTEM. HAIER'S TOTAL LIABILITY, IF ANY, UNDER THIS LIMITED WARRANTY SHALL NOT EXCEED THE INVOICE VALUE PAID BY THE CUSTOMER FOR THE SYSTEM WHICH IS THE SUBJECT OF A CLAIM OR DISPUTE.

SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, OR ALLOW DISCLAIMERS OF IMPLIED WARRANTIES, SO THE ABOVE LIMITATIONS OR EXCLUSIONS MAY NOT APPLY TO THE CUSTOMER. THIS LIMITED WARRANTY GIVES THE CUSTOMER SPECIFIC LEGAL RIGHTS. CUSTOMERS MAY ALSO HAVE OTHER RIGHTS THAT VARY FROM STATE TO STATE.

The remedy provided in this warranty is exclusive and is granted in lieu of all other remedies. This warranty does not cover incidental or consequential damages. Some states and provinces do not allow the exclusion of incidental or consequential damages, so this limitation may not apply to you. Some states and provinces do not allow limitations on how long an implied warranty lasts, so this limitation may not apply to you. This warranty gives you specific legal rights and you may also have other rights which vary by state and province. This warranty covers Products within the 50 United States, the District of Columbia and Canada.

This warranty is provided by:

**GE Appliances, a Haier company
Louisville, KY 40225**

For US Customers: This limited warranty is extended to the original purchaser for products purchased for home use within the USA. In Alaska and Hawaii, the limited warranty does not include the costs of shipping units.

Some states do not allow the exclusion or limitation of incidental or consequential damages. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state. To know what your legal rights are, consult your local or state consumer affairs office or your state's Attorney General.

**Warrantor: GE Appliances, a Haier company
Louisville, KY 40225**

ATTACHMENT 1:

Product is defined as GE Appliances or Haier branded Ductless Split Units. The Product contains 2 sub-categories of goods: "Indoor and Outdoor Products" and "Selected Installation Products," which are further defined below: "Indoor and Outdoor Products" can further be identified by the following model number descriptions: 1Q*, 2Q*, 3Q*, 4Q*, 5Q*, 1G*, 2G*, 3G*, 4G*, 5G*, QS*, QA*, GA*, GS*, US*.