



MULTI V TM **5**

DRAIN PAN HEATER INSTALLATION MANUAL



ZPLT1A51A

ZPLT1A52A

ZPLT2A51A

ZPLT2A52A

Drain Pan Heater for Multi V 5 6.0 - 20.0 Ton Outdoor Units

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Please read carefully and store in a safe place for future reference.

Content familiarity required for proper installation.

The instructions included in this manual must be followed to prevent product malfunction, property damage, injury, or death to the user or other people. Incorrect operation due to ignoring any instructions will cause harm or damage. The level of seriousness is classified by the symbols described below.

A summary list of safety precautions begins on page 3.

IM_MV5_ODU_Drain_Pan_Heater_06_18

For more technical materials such as submittals, engineering databooks, service manuals, and catalogs, visit www.lghvac.com.





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TABLE OF SYMBOLS


 DANGER	<i>This symbol indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.</i>
 WARNING	<i>This symbol indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.</i>
 CAUTION	<i>This symbol indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury.</i>
Note:	<i>This symbol indicates situations that may result in equipment or property damage accidents only.</i>
	<i>This symbol indicates an action that must not be completed.</i>

INSTALLATION


 **DANGER**


 **Don't store or use flammable gas / combustibles near the unit.**
There is risk of fire, explosion, and physical injury or death.

 **WARNING**

 **Do not install or remove the unit by yourself (end user). Ask the dealer or an LG trained service provider to install the unit.**
Improper installation by the user may result in water leakage, fire, explosion, electric shock, physical injury or death.

For replacement of an installed unit, always contact an LG trained service provider.
There is risk of fire, electric shock, explosion, and physical injury or death.

The unit is shipped with refrigerant and the service valves closed.  **Do not open service valves on the unit until all non-condensibles have been removed from the piping system and authorization to do so has been obtained from the commissioning agent.**
There is a risk of physical injury or death.

 **Do not operate the compressor with the service valves closed.**
There is a risk of explosion, physical injury, or death.

Periodically check that the outdoor frame is not damaged.
There is a risk of explosion, physical injury, or death.

Confirm all control box and panel covers are secure and intact.
If cover panels are not installed securely, dust, water and animals may enter the unit, causing fire, electric shock, and physical injury or death.

Always check for system refrigerant leaks after the unit has been installed or serviced.

Exposure to high concentration levels of refrigerant gas may lead to illness or death.

Wear protective gloves and safety goggles when handling equipment. Sharp edges may cause personal injury.

Dispose of the packing materials safely.

- *Packing materials, such as nails and other metal or wooden parts, may cause puncture wounds or other injuries.*
- *Tear apart and throw away plastic packaging bags so that children may not play with them and risk suffocation and death.*

Install the unit considering the potential for strong winds or earthquakes.

Improper installation may cause the unit to fall over, resulting in physical injury or death.

 **Do not change the settings of the protection devices.**

If the pressure switch, thermal switch, or other protection device is shorted and forced to operate improperly, or parts other than those specified by LG are used, there is risk of fire, electric shock, explosion, and physical injury or death.

 **Do not install the unit on a defective stand.**

There is a risk of physical injury.

INSTALLATION - CONTINUED

⚠ WARNING

If the air conditioner is installed in a small space, take measures to prevent the refrigerant concentration from exceeding safety limits in the event of a refrigerant leak. Consult the latest edition of ASHRAE (American Society of Heating, Refrigerating, and Air Conditioning Engineers) Standard 15. If the refrigerant leaks and safety limits are exceeded, it could result in personal injuries or death from oxygen depletion.

Install the unit in a safe location where nobody can step on or fall onto it.

There is risk of physical injury or death.

Properly insulate all cold surfaces to prevent "sweating."
Cold surfaces such as uninsulated piping can generate condensate that could drip, causing a slippery surface that creates a risk of slipping, falling, and personal injury.

⚠ CAUTION

Be very careful when transporting the product.

- ⓧ Do not attempt to carry the product without assistance.
- Some products use polypropylene bands for packaging. ⓧ Do not use polypropylene bands to lift the unit.
- Suspend the unit from the base at specified positions.
- Support the unit a minimum of four points to avoid slippage from rigging apparatus.

Note:

ⓧ **Don't install the unit where it's directly exposed to ocean winds.**

Ocean winds may cause corrosion, particularly on the condenser and evaporator fins, which, in turn could cause product malfunction or inefficient performance.

When installing the unit in a low-lying area, or a location that is not level, use a raised concrete pad or concrete blocks to provide a solid, level foundation.

This may prevent water damage and reduce abnormal vibration.

Properly insulate all cold surfaces to prevent "sweating."
Cold surfaces such as uninsulated piping can generate condensate that may drip and cause a slippery surface condition and/or water damage to walls.

When installing the unit in a hospital, mechanical room, or similar electromagnetic field (EMF) sensitive environment, provide sufficient protection against electrical noise.
Inverter equipment, power generators, high-frequency medical equipment, or radio communication equipment may cause the air conditioner to operate improperly. The unit may also affect such equipment by creating electrical noise that disturbs medical treatment or image broadcasting.

ⓧ **Do not use the product for special purposes such as preserving foods, works of art, wine coolers, or other precision air conditioning applications. The equipment is designed to provide comfort cooling and heating.**
There is risk of property damage.

ⓧ **Do not make refrigerant substitutions. Use R410A only.**
If a different refrigerant is used, or air mixes with original refrigerant, the unit will malfunction and be damaged.

Keep the unit upright during installation to avoid vibration or water leakage.

ⓧ **Do not install the unit in a noise sensitive area.**
When connecting refrigerant tubing, remember to allow for pipe expansion.
Improper piping may cause refrigerant leaks and system malfunction.

Take appropriate actions at the end of HVAC equipment life to recover, recycle, reclaim or destroy R410A refrigerant according to applicable U.S. Environmental Protection Agency (EPA) rules.

Periodically check that the outdoor frame is not damaged.
There is a risk of equipment damage.

Install the unit in a safe location where nobody can step on or fall onto it. ⓧ **Do not install the unit on a defective stand.**
There is risk of unit and property damage.

Install the drain hose to ensure adequate drainage.
There is a risk of water leakage and property damage.

ⓧ **Don't store or use flammable gas / combustibles near the unit.**
There is risk of product failure.

Always check for system refrigerant leaks after the unit has been installed or serviced.
Low refrigerant levels may cause product failure.

The unit is shipped with refrigerant and the service valves closed. ⓧ **Do not open service valves on the unit until all non-condensibles have been removed from the piping system and authorization to do so has been obtained from the commissioning agent.**
There is a risk of refrigerant contamination, refrigerant loss and equipment damage.

ⓧ **Do not run the compressor with the service valves closed.**
There is a risk of equipment damage.

WIRING

⚠ DANGER

High voltage electricity is required to operate this system. Adhere to the National Electrical Codes and these instructions when wiring.

Improper connections and inadequate grounding can cause accidental injury or death.

Always ground the unit following local, state, and National Electrical Codes.

Turn the power off at the nearest disconnect before servicing the equipment.

Electrical shock can cause physical injury or death.

Properly size all circuit breakers or fuses.

There is risk of fire, electric shock, explosion, physical injury or death.

⚠ WARNING

The information contained in this manual is intended for use by an industry-qualified, experienced, certified electrician familiar with the U.S. National Electric Code (NEC) who is equipped with the proper tools and test instruments.

Failure to carefully read and follow all instructions in this manual can result in equipment malfunction, property damage, personal injury or death.

All electric work must be performed by a licensed electrician and conform to local building codes or, in the absence of local codes, with the National Electrical Code, and the instructions given in this manual.

If the power source capacity is inadequate or the electric work is not performed properly, it may result in fire, electric shock, physical injury or death.

Refer to local, state, and federal codes, and use power wires of sufficient current capacity and rating.

Wires that are too small may generate heat and cause a fire.

Secure all field wiring connections with appropriate wire strain relief.

Improperly securing wires will create undue stress on equipment power lugs. Inadequate connections may generate heat, cause a fire and physical injury or death.

OPERATION

⚠ DANGER

⊘ Do not provide power to or operate the unit if it is flooded or submerged.

There is risk of fire, electric shock, physical injury or death.

Use a dedicated power source for this product.

There is risk of fire, electric shock, physical injury or death.

⚠ WARNING

⊘ Do not allow water, dirt, or animals to enter the unit.

There is risk of fire, electric shock, physical injury or death.

Avoid excessive cooling and periodically perform ventilation to the unit.

Inadequate ventilation is a health hazard.

⊘ Do not touch the refrigerant piping during or after operation.

It can cause burns or frostbite.

⊘ Do not operate the unit with the panel(s) or protective cover(s) removed; keep fingers and clothing away from moving parts.

The rotating, hot, cold, and high-voltage parts of the unit can cause physical injury or death.

Periodically verify the equipment mounts have not deteriorated.

If the base collapses, the unit could fall and cause physical injury or death.

⚠ CAUTION

To avoid physical injury, use caution when cleaning or servicing the air conditioner.

Note:

Clean up the site after installation is finished, and check that no metal scraps, screws, or bits of wiring have been left inside or surrounding the unit.

⊘ Do not use this equipment in mission critical or special-purpose applications such as preserving foods, works of art, wine coolers or refrigeration. The equipment is designed to provide comfort cooling and heating.

Oil, steam, sulfuric smoke, etc., can significantly reduce the performance of the unit, or damage its parts.

⊘ Do not block the inlet or outlet.

Unit may malfunction.

⊘ Do not operate the disconnect switch with wet hands.

There is risk of fire, electric shock, physical injury or death.

If gas leaks out, ventilate the area before operating the unit.

If the unit is mounted in an enclosed, low-lying, or poorly ventilated area, and the system develops a refrigerant leak, it may cause fire, electric shock, explosion, physical injury, or death.

Periodically check power wiring for damage.

Power wiring must be replaced by the manufacturer, its service agent, or similar qualified persons in order to avoid physical injury and/or electric shock.

⊘ Do not open the inlet grille of the unit during operation.
⊘ Do not operate the unit with the panels or guards removed. ⊘ Do not insert hands or other objects through the inlet or outlet when the unit has power applied to it. ⊘ Do not touch the electrostatic filter, if the unit includes one.
The unit contains sharp, rotating, hot, and high voltage parts that can cause personal injury and/or electric shock.

Securely attach the electrical part cover to the indoor unit and the service panel to the outdoor unit.

Non-secured covers can result in burns or electric shock due to dust or water in the service panel.

Securely attach the electrical part cover to the indoor unit and the service panel to the outdoor unit.

Non-secured covers can result in malfunction due to dust or water in the service panel.

Periodically verify the equipment mounts have not deteriorated.

If the base collapses, the unit could fall and cause property damage or product failure.

⊘ Do not allow water, dirt, or animals to enter the unit.

There is risk of unit failure.

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Drain pan heater is an optional accessory (sold separately) for Multi V™ 5 Outdoor Units (ODUs). The heater is for use on both heat pump and heat recovery systems. Drain pan heater is available in the following configurations:

6.0 Ton Multi V 5 ODU

- 208/240V - 498W
- 460V—633W

8.0 - 20.0 Ton Multi V 5 ODU

- 208/240V - 599W
- 460V - 761W

Control sequence for the drain pan heater function

Function (Fn23) informs the master outdoor unit microprocessor that an optional drain pan heater is installed in the outdoor unit. Selecting to engage this option can only be done if a properly sized heater is in place to keep the bottom surface of the outdoor unit >32°F.

The microprocessor will power outdoor unit PCB terminal “CN25_Basepan Heater” when at least one (1) compressor in the frame is operating, the outdoor air temperature is <39°F, and either the following conditions occur:

1. Outdoor unit is operating in heating.
2. Outdoor unit is in defrost.

The controller will shut off drain pan heating operation when the outdoor air temperature rises >39°F, or when all compressors stop operating.

Heater element paths for 6.0 Ton and 8.0 - 20.0 Ton ODUs

Figure 1: Heater Element path for 6 Ton ODU.

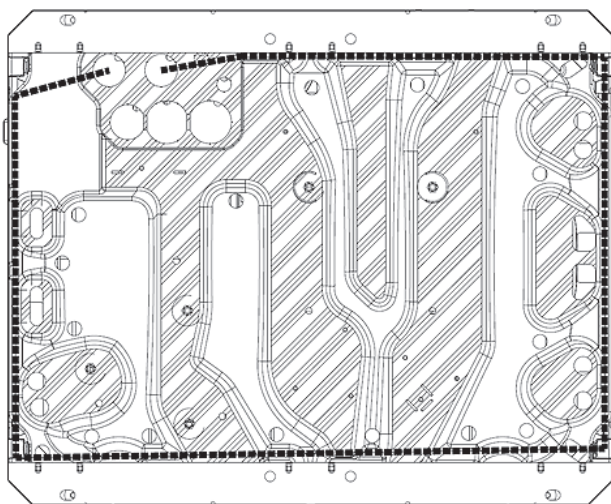
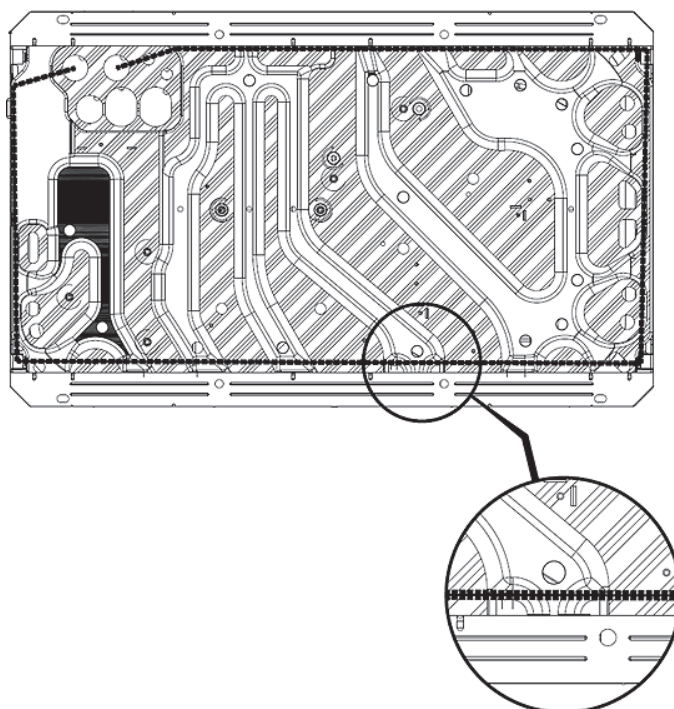


Figure 2: Heater Element path for 8 - 20 Ton ODU.



Heater Element path.
(ODU Bottom View)

Drain pan heater options

Table 1 lists the drain pan heater models and the corresponding Multi V 5 Outdoor Unit model numbers.

Table 1: Drain Pan Heater options and corresponding Multi V 5 ODU models.

Model Number	Multi V 5 ODU Model	Tonnage	Wattage	Voltage	Amps	Fuse
ZPLT1A51A	ARUM072BTE5	6	498	208/230	2.39	KTK-3
ZPLT2A51A	ARUM072DTE5	6	633	460	1.38	KTK-1 1/2
ZPLT1A52A	ARUM096BTE5	8	599	208/230	2.88	KTK-3
ZPLT2A52A	ARUM096DTE5	8	761	460	1.65	KTK-2
ZPLT1A52A	ARUM121BTE5	10	599	208/230	2.88	KTK-3
ZPLT2A52A	ARUM121DTE5	10	761	460	1.65	KTK-2
ZPLT1A52A	ARUM144BTE5	12	599	208/230	2.88	KTK-3
ZPLT2A52A	ARUM144DTE5	12	761	460	1.65	KTK-2
ZPLT1A52A	ARUM168BTE5	14	599	208/230	2.88	KTK-3
ZPLT2A52A	ARUM168DTE5	14	761	460	1.65	KTK-2
ZPLT1A52A	ARUM192BTE5	16	599	208/230	2.88	KTK-3
ZPLT2A52A	ARUM192DTE5	16	761	460	1.65	KTK-2
ZPLT1A52A	ARUM216BTE5	18	599	208/230	2.88	KTK-3
ZPLT2A52A	ARUM216DTE5	18	761	460	1.65	KTK-2
ZPLT1A52A	ARUM241BTE5	20	599	208/230	2.88	KTK-3
ZPLT2A52A	ARUM241DTE5	20	761	460	1.65	KTK-2

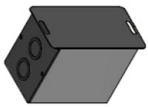








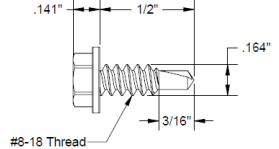
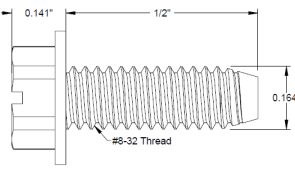
DRAIN PAN HEATER COMPONENTS

MULTI V™ 5

ZPLT1A51A: Drain pan heater for Multi V 5 6.0 Ton ODU

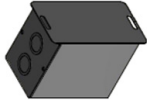








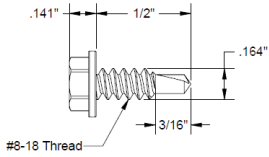
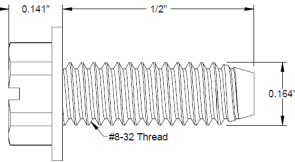
208-230V/ 60Hz/ 1Ø, 498W

MULTI V 5 Outdoor Unit Drain Pan Heater Installation Manual

Part	Quantity	Image
Control Box Assembly	1	
Control Signal Harness	1	
Heater Contactor	1	
Rubber Fuseholder covers	4	
Incoming Power Fuseholder	2	
Incoming Power Fuse (KTK-3)	2	
Tubular Heater Element 498W (126 inches) (CSA Listed)	1	
1/4" Attachment Clamps	10	
Control Box Grommets	2	
Self-drilling Screws	12	
Slot Screws	2	

ZPLT1A52A: Drain pan heater for Multi V 5 8.0 - 20.0 Ton ODU

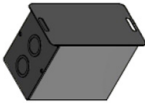








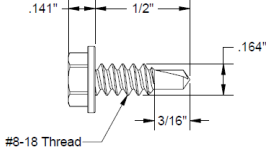
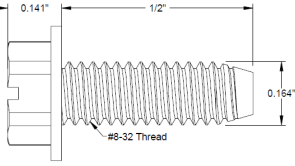
208-230V/ 60Hz/ 1Ø, 599W

Part	Quantity	Image
Control Box Assembly	1	
Control Signal Harness	1	
Heater Contactor	1	
Rubber Fuseholder covers	4	
Incoming Power Fuseholder	2	
Incoming Power Fuse (KTK-3)	2	
Tubular Heater Element 599W (149 inches) (CSA Listed)	1	
1/4" Attachment Clamps	10	
Control Box Grommets	2	
Self-drilling Screws	12	
Slot Screws	2	

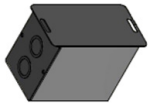








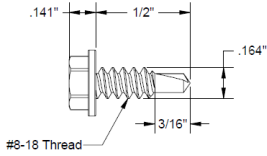
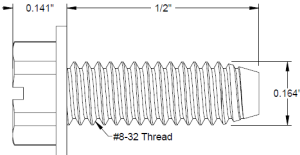
Installation

ZPLT2A51A: Drain pan heater for Multi V 5 6.0 Ton ODU

460V/ 60Hz/ 1Ø, 633W

Part	Quantity	Image
Control Box Assembly	1	
Control Signal Harness	1	
Heater Contactor	1	
Rubber Fuseholder covers	4	
Incoming Power Fuseholder	2	
Incoming Power Fuse (KTK- 1 1/2)	2	
Tubular Heater Element 633W (126 inches) (CSA Listed)	1	
1/4" Attachment Clamps	10	
Control Box Grommets	2	
Self-drilling Screws	12	
Slot Screws	2	

ZPLT2A52A: Drain pan heater for Multi V 5 8.0 - 20.0 Ton ODU
 460V/ 60Hz/ 1Ø, 761W

Part	Quantity	Image
Control Box Assembly	1	
Control Signal Harness	1	
Heater Contactor	1	
Rubber Fuseholder covers	4	
Incoming Power Fuseholder	2	
Incoming Power Fuse (KTK-2)	2	
Tubular Heater Element 599W (149 inches) (CSA Listed)	1	
1/4" Attachment Clamps	10	
Control Box Grommets	2	
Self-drilling Screws	12	
Slot Screws	2	

Installation

Unit Label for Drain Pan Heater

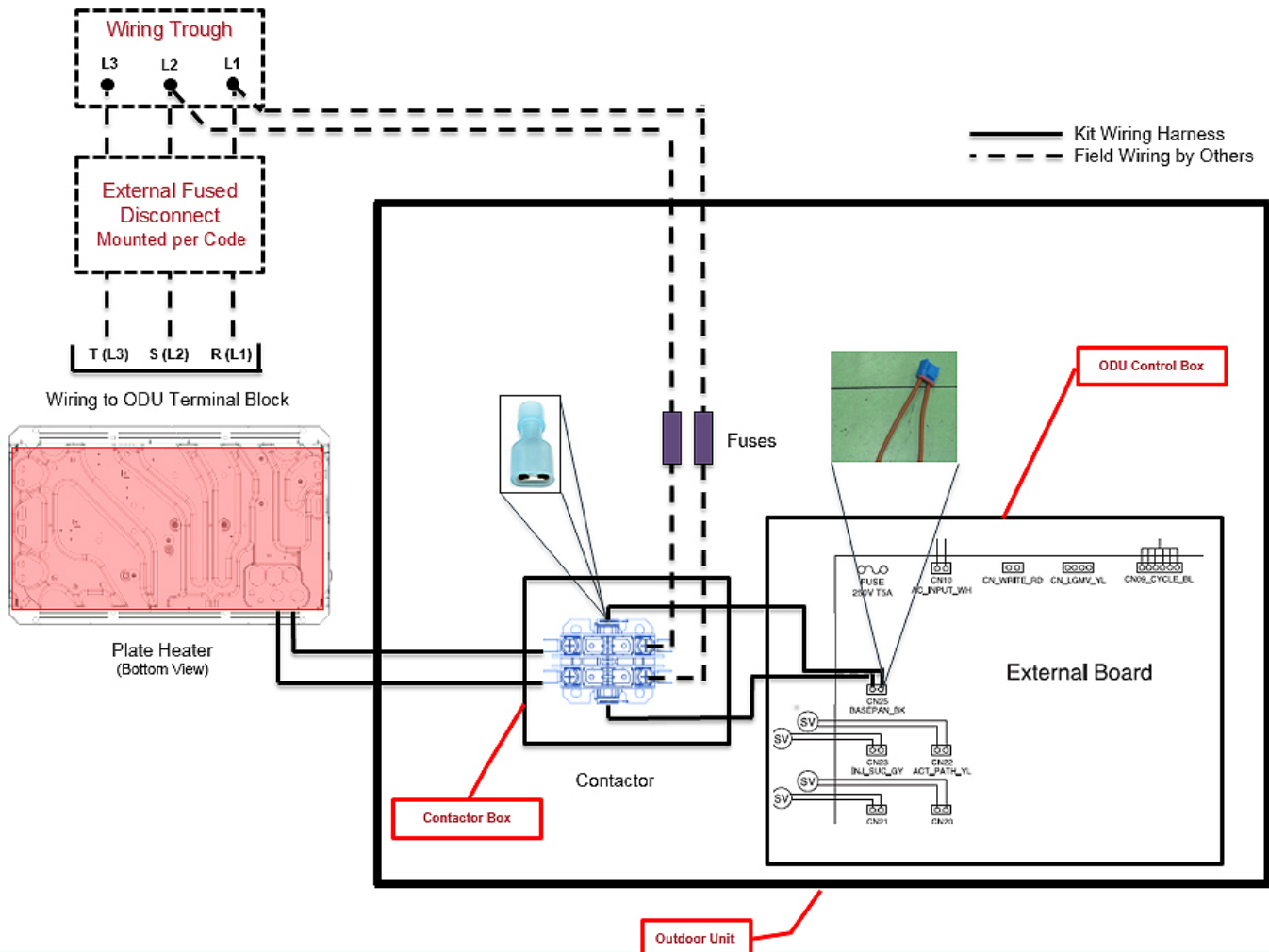
Each drain pan heater model has 1 unit label.

Figure 3: Additional Unit Label for Drain Pan Heater.

208-230V Heat Pump/ Recovery Units.								
Model Number	Accessory	Unit Model Number	Tonnage	Wattage	Voltage	AMPS	Fuse	
ZPLT1A51A	Base Pan Heater	ARUM072BTE5	6	498	208	2.39	KTK-3	
ZPLT1A52A	Base Pan Heater	ARUM096BTE5-ARUM241BTE5	8-20	599	208	2.88	KTK-3	

460V Heat Pump/ Recovery Units.								
Model Number	Accessory	Unit Model Number	Tonnage	Wattage	Voltage	AMPS	Fuse	
ZPLT2A51A	Base Pan Heater	ARUM072DTE5	6	633	460	1.38	KTK-1 1/2	
ZPLT2A52A	Base Pan Heater	ARUM096DTE5-ARUM241DTE5	8-20	761	460	1.65	KTK-2	

Figure 4: Drain pan heater wiring diagram.



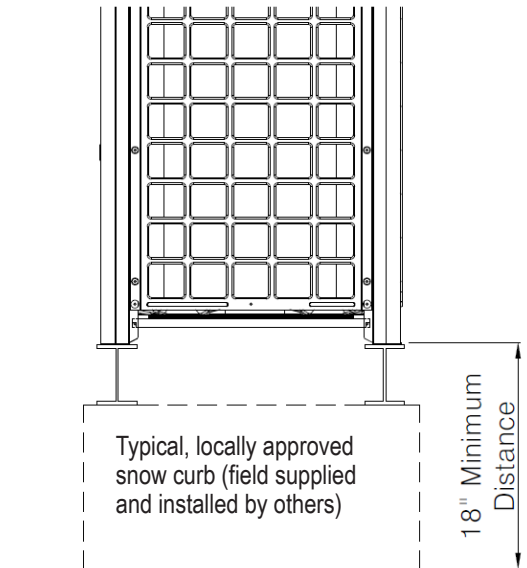
Step 1

It is recommended to install the drain pan heater prior to final installation of the outdoor unit. However, if the heater is to be added post installation then sufficient space under the unit must be available to properly install the element.

Note:

Minimum distance above the roof surface for post outdoor unit installation of the drain pan heater element is 18 inches.

Figure 5: Minimum space requirements if installing drain pan heater after ODU installation.



⚠ WARNING

Turn off power to outdoor unit before installation.

Electric shock can cause physical injury or death.

Depending on the area of installation, add a Ground Fault Interrupt (GFI) circuit breaking device to prevent potential electric shock.

Electric shock can cause physical injury or death.

Properly ground all outdoor units. Ground wiring must always be installed by a qualified technician. Ground wiring is required to prevent accidental electrical shock.

Electric shock can cause physical injury or death.

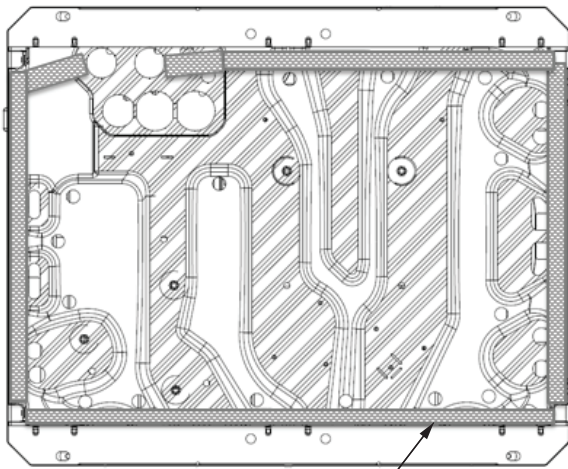
Steps 2 and 3

2. Clean the bottom of the outdoor unit. Verify that it is free from dirt and debris to ensure proper adhesion of the foil tape to drain pan surface.
3. Apply foil tape to the bottom of the ODU as shown below, along the path that the heater element will follow.

Note:

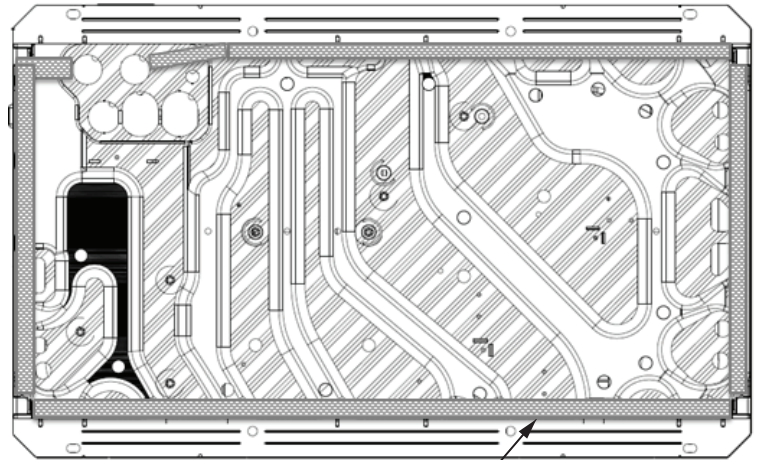
- Use only UL181 listed aluminum foil tape.
- ⊘ Do not allow direct contact between the element and the painted drain pan surface.

Figure 6: Apply tape to bottom of ODU (6.0Ton).



Apply UL181 listed aluminum foil tape to bottom of the outdoor unit along the path of heater element. Prior to applying tape, verify that the surface is free of dirt and debris.

Figure 7: Apply tape to bottom of ODU (8.0 - 20 Ton).



Apply UL181 listed aluminum foil tape to bottom of the outdoor unit along the path of heater element. Prior to applying tape, verify that the surface is free of dirt and debris.

⚠ WARNING

Turn off power to outdoor unit before installation.
Electric shock can cause physical injury or death.

Depending on the area of installation, add a Ground Fault Interrupt (GFI) circuit breaking device to prevent potential electric shock.

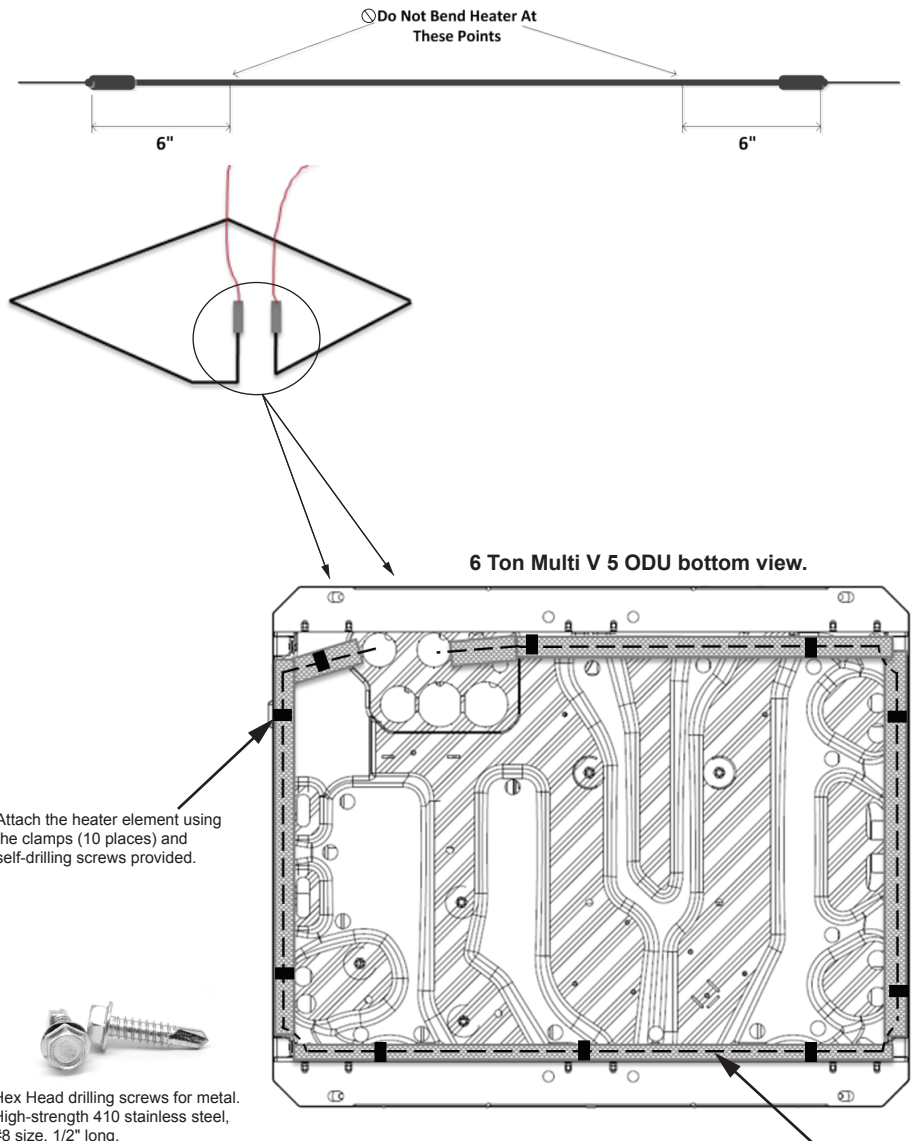
Electric shock can cause physical injury or death.

Step 4

4. Unroll the flexible heater element and form it to the geometric shape shown in the figure below. Heater must be formed and the ends extended through the bottom knockouts to the inside of the outdoor unit.

- Six inches from each end of the element are not heated.
- Minimum heater bend radii are 1 inch.

Figure 8: Form heater element and extend ends through the knockouts at bottom of ODU (6.0 Ton).



Installation

⚠ WARNING

Turn off power to outdoor unit before installation.

Electric shock can cause physical injury or death.

⊘ **Do not puncture the outdoor unit coil or other interior components when drilling holes for the screws.**

If there is a hole in the outdoor unit coil, there is a risk of refrigerant leak. Exposure to high concentration levels of refrigerant gas may lead to illness or death.

Step 4, continued

Figure 9: Form heater element and extend ends through the knockouts at bottom of ODU (8 - 20 Ton).

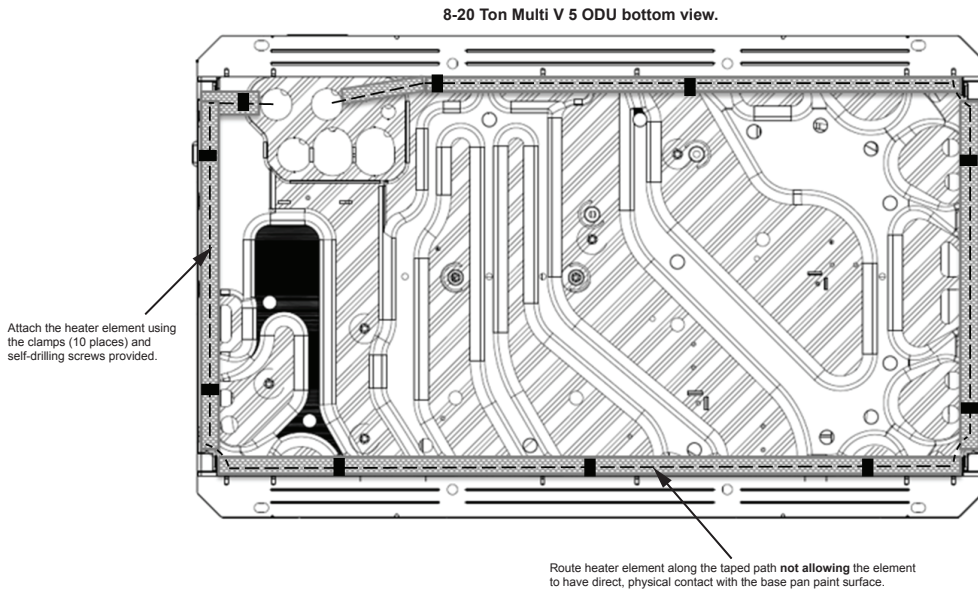
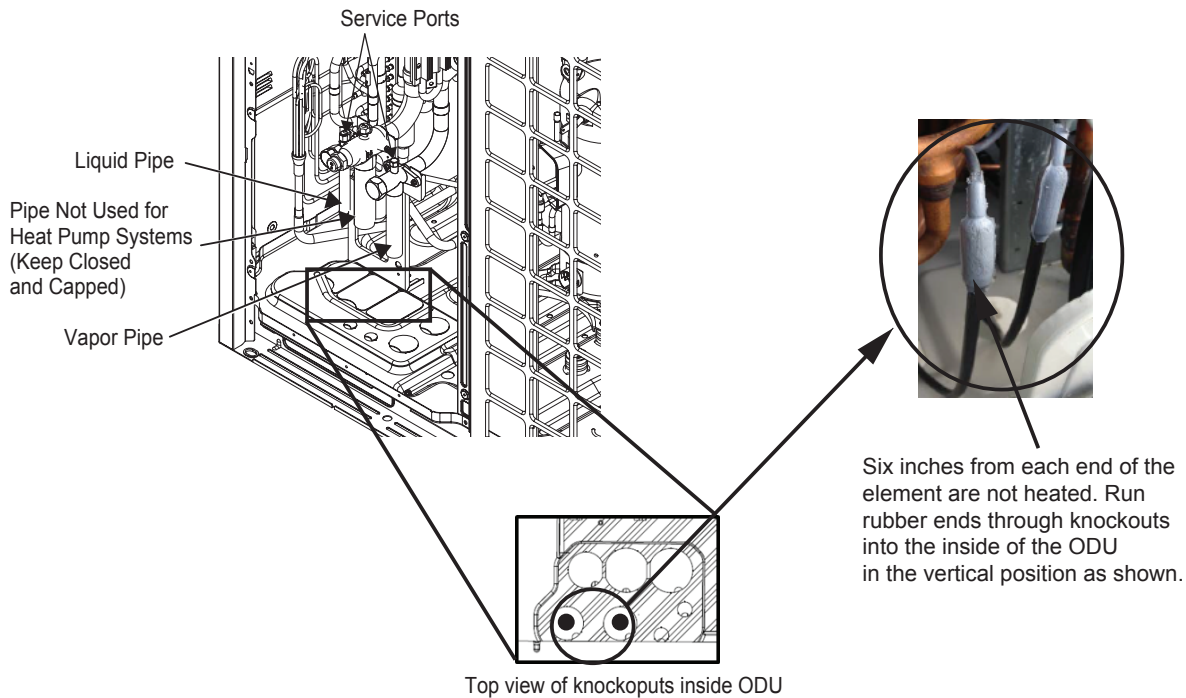


Figure 10: Multi V 5 ODU Service Ports.



⚠ WARNING

Turn off power to outdoor unit before installation.

Electric shock can cause physical injury or death.

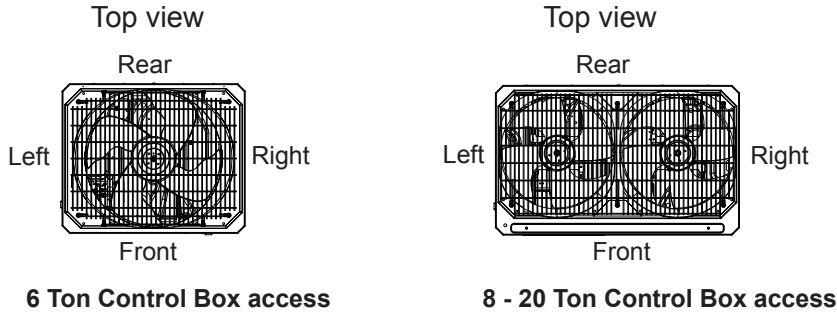
⊘ **Do not puncture the outdoor unit coil or other interior components when drilling holes for the screws.**

If there is a hole in the outdoor unit coil, there is a risk of refrigerant leak. Exposure to high concentration levels of refrigerant gas may lead to illness or death.

Step 5

5. Remove outdoor unit front panel to access internal components.

Figure 11: Multi V 5 ODU Front Panel.



Step 6

6. After removing the outdoor unit front panel to access internal components, attach the Contact Box Cover as shown below to the outdoor unit control box.

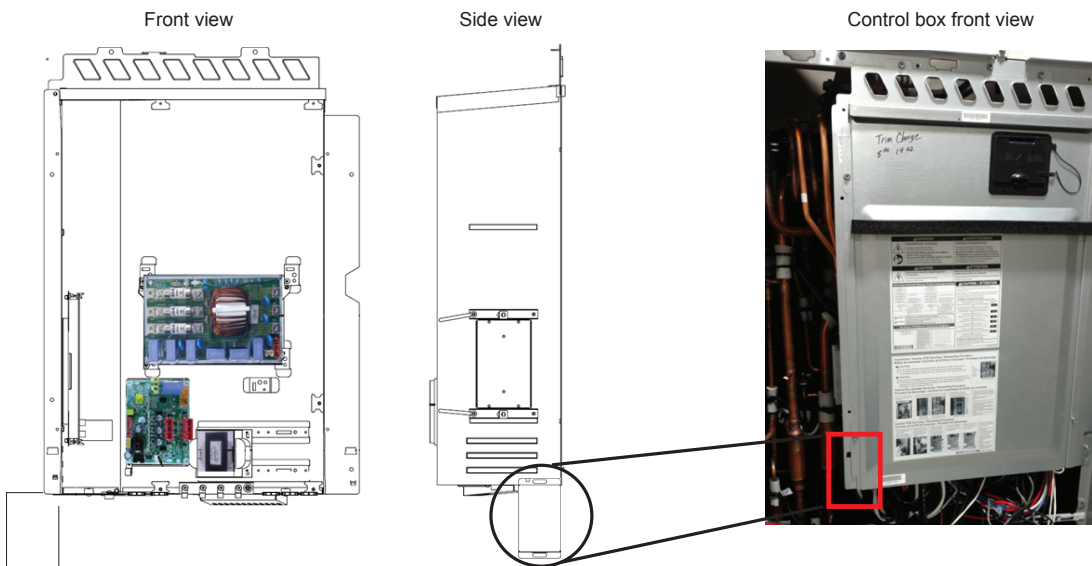
- Attach on the right hand side of the unit control box for the 6 Ton ODU.
- Attach on the left hand side of the control box for 8 - 20 Ton ODU.
- Use two of the self-drilling #8, 1/2" screws in the installation kit.

Note:

Remove the Contactor Mounting Plate Subassembly from the Contactor Box Cover first.

Figure 12: Attach contact box cover for 6.0 Ton Multi V 5 ODU unit.

6 Ton Multi V 5 Outdoor Unit



⚠ DANGER
 Verify the wires are routed such that they do not get pinched, placed in tension or rub against any sharp, metal edge prior to securing.
 Damaged wiring runs the risk of fire, electric shock, and physical injury or death.

⚠ DANGER
 ⚠ Do not damage the electrical components inside the outdoor unit control box when drilling screws.
 Damaged wiring runs the risk of fire, electric shock, and physical injury or death.

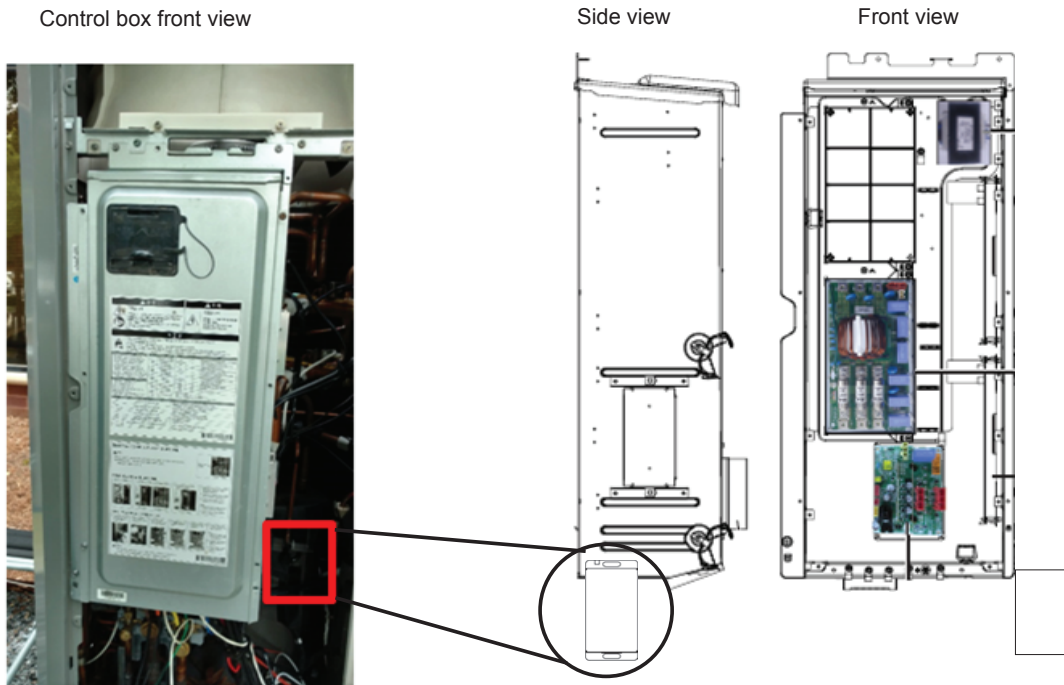
⚠ WARNING
 Turn off power to outdoor unit before installation.
 Electric shock can cause physical injury or death.

Step 6, continued

Attach on the left hand side of the control box for 8.0 - 20.0 Ton ODU.

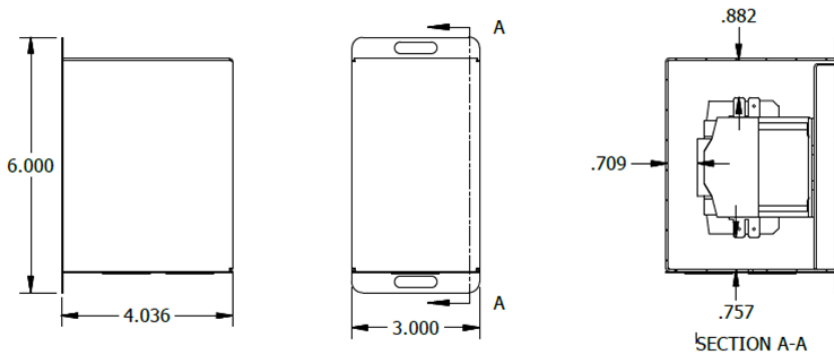
Figure 13: Attach contact box cover for 8 - 20 Ton Multi V 5 ODU unit.

8 - 20 Ton Multi V 5 Outdoor Unit



Contactor Box Cover

Figure 14: Contactor box cover.



⚠ DANGER

⚡ Do not damage the electrical components inside the outdoor unit control box when drilling screws.
 Damaged wiring runs the risk of fire, electric shock, and physical injury or death.

Verify the wires are routed such that they do not get pinched, placed in tension or rub against any sharp, metal edge prior to securing.

Damaged wiring runs the risk of fire, electric shock, and physical injury or death.

⚠ WARNING

Turn off power to outdoor unit before installation.

Electric shock can cause physical injury or death.

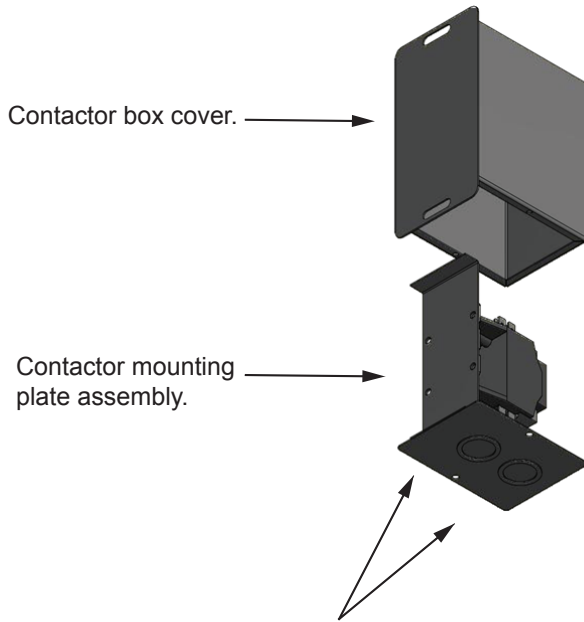
Step 7

7. Insert the plastic bushings (field supplied) into the holes in the bottom of the Contactor Mounting Plate Subassembly and run all power and control wiring through the knockouts. See figure below.

Note:

Contactor mounting plate subassembly is only removable at the bottom. Contactor box mounting cover is designed to prevent water from reaching the electrical components inside.

Figure 15: Contactor box cover and mounting plate subassembly



ALL wiring to the contactor MUST come out of the bottom 5/8" diameter holes. Use plastic bushings supplied with the drain pan heater kit to protect wiring from sharp metal edges.

⚠ DANGER

Verify the wires are routed such that they do not get pinched, placed in tension or rub against any sharp, metal edge prior to securing.

Damaged wiring runs the risk of fire, electric shock, and physical injury or death.

⚠ WARNING

Turn off power to outdoor unit before installation.

Electric shock can cause physical injury or death.

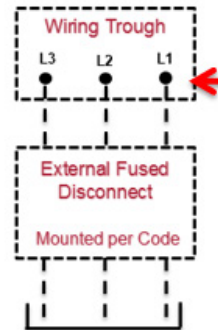
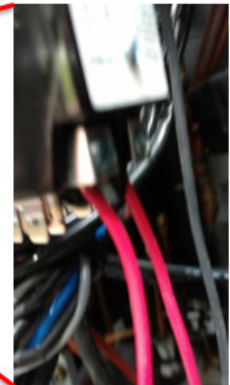
Step 7, continued

Figure 16: Contactor with heaters connected.

Contactor w/Heaters Connected
Contactor Top View



Heater Line Voltage Wiring



Attach wires from contactor to the "Wiring Trough" (field supplied and installed by others)

Wiring to ODU Terminal Block

⚠ DANGER

Verify the wires are routed such that they do not get pinched, placed in tension or rub against any sharp, metal edge prior to securing.

Damaged wiring runs the risk of fire, electric shock, and physical injury or death.

⚠ WARNING

Turn off power to outdoor unit before installation.

Electric shock can cause physical injury or death.

Step 8

8. Turn on Function Code “Fn23” to activate the outdoor internal logic to operate the drain pan heater element.

The Function Code “Fn23” informs the master outdoor unit microprocessor that the optional drain pan heater is installed in the outdoor unit. The microprocessor will power outdoor unit PCB terminal “CN25_Basepan Heater” when at least one (1) compressor in the frame is operating, the outdoor air temperature is <39°F, and either the following conditions occur:

- Outdoor unit is operating in heating.
- Outdoor unit is in defrost.

The controller will shut off drain pan heating operation when the outdoor air temperature rises >39°F, or when all compressors stop operating.

Table 2: Setting the drain pan heater function.

Settings	Drain Pan Heater Kit Installed
oFF (Default)	No
on	Yes

Figure 17: Setting the Drain Pan Heater Function.

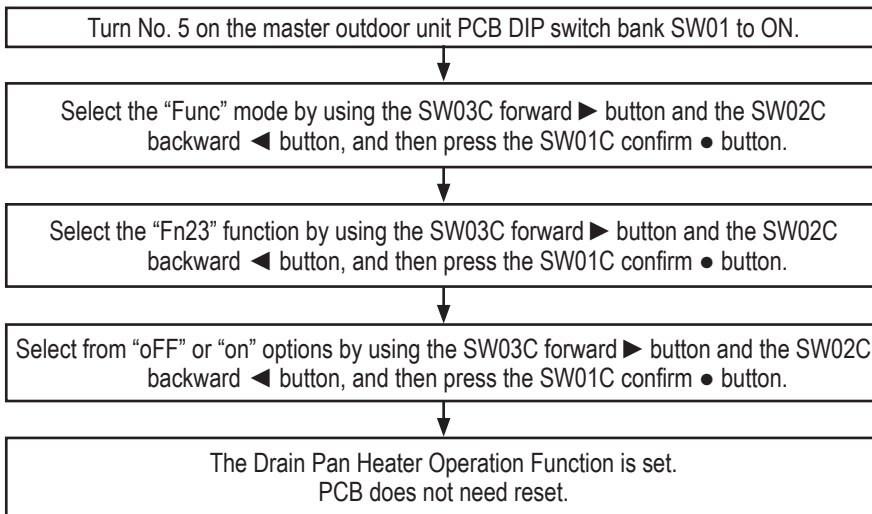
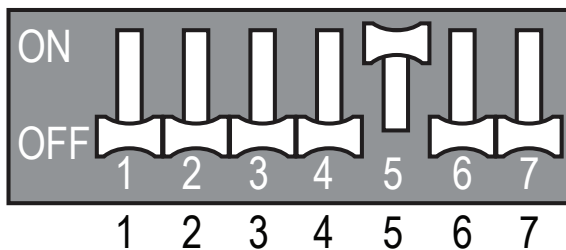


Figure 18: No. 5 on DIP Switch Bank SW01 ON.

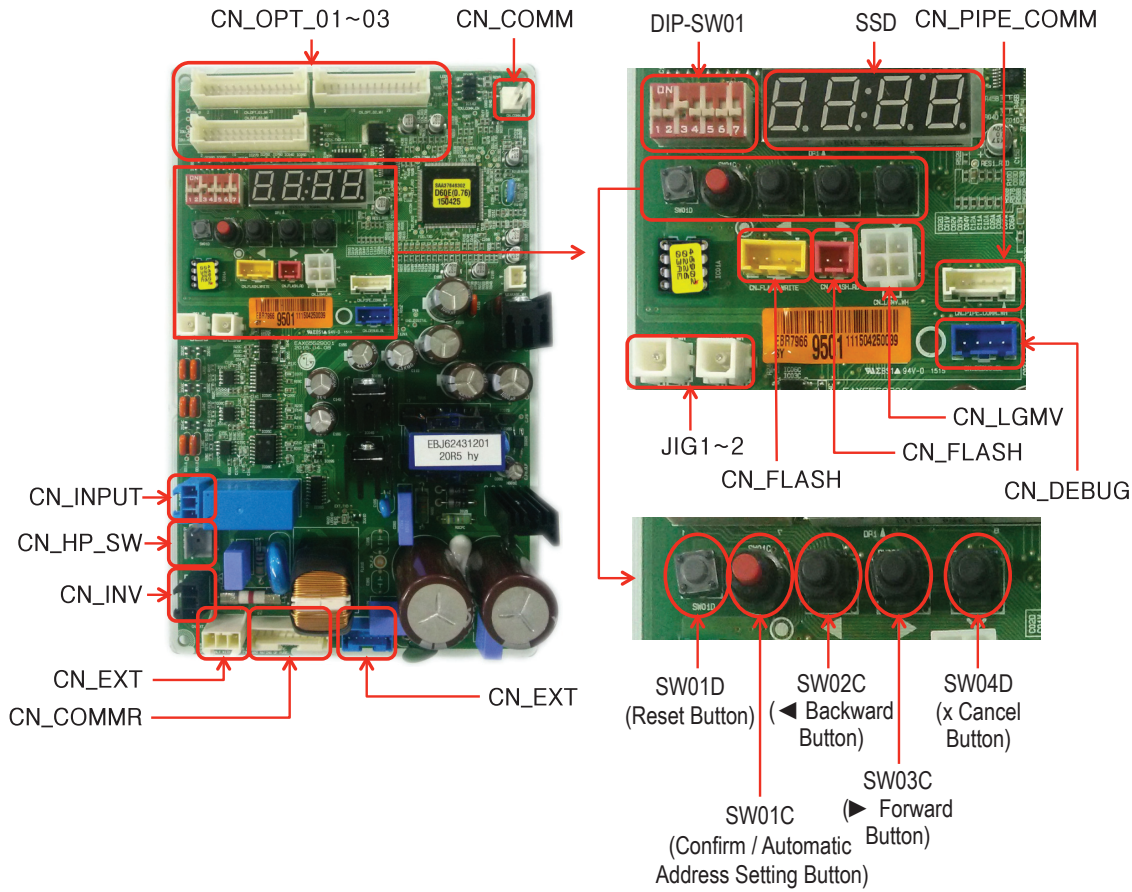


Note:

- To set this optional mode / functions, all indoor units must be OFF. Mode / function settings won't save, nor will operate unless all indoor units are OFF.
- If system power was reset, some modes / function settings will be automatically saved in the EPROM. Other modes / functions will reset when power is cycled off.

Step 8, continued.

Figure 19: Location of DIP Switches and Setting Buttons on the Multi V 5 Outdoor Unit PCB.



⚠ DANGER

Verify the wires are routed such that they do not get pinched, placed in tension or rub against any sharp, metal edge prior to securing.

Damaged wiring runs the risk of fire, electric shock, and physical injury or death.

⚠ WARNING

Turn off power to outdoor unit before installation.

Electric shock can cause physical injury or death.



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IM_MV5_ODU_Drain_Pan_Heater_06_18
Supersedes: IM_MV5_ODU_Drain_Pan_Heater_02_18