## INSTALLATION INSTRUCTIONS FOR WIRELESS ANTENNA (22A67) FOR USE WITH LENNOX® CORE UNIT CONTROLLER (M4/W4)

### Overview

This instruction provides procedures on installation of the Core Unit Controller (M4/W4) wireless antenna on various roof top units. Refer to figures 3 - 7 for the applicable roof top unit (RTU) usage.

### Existing Antenna Removal

1. Disconnect all power to the roof top unit (RTU).
2. Open compressor access panel.
3. Locate the wireless control board (W4) which is located on the CORE Unit Controller (M4).
4. Disconnect the SMA male connector from the female connector on the W4 control (see “Figure 1. Antenna Connection”).

### Shipping and Packing List

Package 1 of 1 contains:

1 - Wireless antenna

### Notes

**CAUTION**

Electrostatic discharge can affect electronic components. Take precautions during unit installation and service to protect the unit’s electronic controls. Precautions will help to avoid control exposure to electrostatic discharge by putting the unit, the control and the technician at the same electrostatic potential. Neutralize electrostatic charge by touching hand and all tools on an unpainted unit surface before performing any service procedure.

**IMPORTANT**

Improper installation, adjustment, alteration, service or maintenance can cause personal injury, loss of life, or damage to property. Installation and service must be performed by a licensed professional installer (or equivalent) or a service agency.

**WARNING**

**ELECTRICAL SHOCK HAZARD**

STOP! Before you continue, make sure that power to the VFD has been off for at least 10 minutes. The capacitor in the VFD holds high voltage power for up to 10 minutes after power has been disconnected.

**WARNING**

**ELECTRICAL SHOCK HAZARD**

Can cause injury or death. Unit must be grounded in accordance with national and local codes. Line voltage is present at all components when unit is not in operation on units with single-pole contactors. Disconnect all remote electrical power supplies before opening access panel. Unit may have multiple power supplies.

**NOTE:** SMA (sub-miniature version A) connector is a semi-precision coaxial RF connector. It is a minimal connector interface for coaxial cable with a screw-type coupling mechanism. The connector has a 50 Ω impedance.

5. Cut the wire ties that secure the existing cable and remove from the unit.

**NOTE:** Note the routing path. Refer to figures 3 - 7 for the applicable RTU routing.

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**Figure 1. Antenna Connection**

ANTENNA CABLE CONNECTION (COAX)
6. Loosen the hex nut that secures the antenna to the mounting bracket and remove the antenna (see “Figure 2. Antenna Mounting Bracket”).

![Figure 2. Antenna Mounting Bracket](image)

**New Antenna Installation**

1. Secure the antenna to the mounting bracket in the same manner as the previous antenna was removed (see “Figure 2. Antenna Mounting Bracket”).

2. Route the cable along low voltage wires and separate from high voltage wires in the same manner as the previous cable was removed and routed. Refer to figures 3 - 7 for the applicable RTU routing.

   **NOTE:** Avoid tight bends when routing the antenna cable. If there is excess cable length then bundle the cable together in the same manner as the previous cable was bundled.

3. Replace the cut wire ties with new ones (field-provided) and secure the cable and any loose harnesses.

4. Reconnect the antenna SMA male connector to the far right SMA female connector on the W4 control, then ensure a secure connection (see “Figure 1. Antenna Connection” on page 1).

![Figure 3. Antenna Mounting Location and Cable Routing - LCM/LGM036-074](image)
Figure 4. Antenna Mounting Location and Cable Routing - LCM/LGM092-150

Figure 5. Antenna Mounting Location and Cable Routing - LCM/LGM092-150
Figure 6. Antenna Mounting Location and Cable Routing - LCM/LGM156-300

Figure 7. Antenna Mounting Location and Cable Routing - LCM/LGM156-300