LENNOX 21Z07 Float Switch Kit Instruction Manual

Contents

LENNOX 21Z07 Float Switch Kit

WARNING
Improper installation, adjustment, alteration, service or maintenance can cause property damage, personal injury or loss of life. Installation and service must be performed by a licensed professional HVAC installer or equivalent, service agency, or the gas supplier
CAUTION
As with any mechanical equipment, contact with sharp sheet metal edges can result in personal injury. Take care while handling this equipment and wear gloves and protective clothing.

Shipping and Packing List

Package 1 of 1 contains:

- 1- Overflow (float) switch (S149)
- 3- Mounting brackets
- 1- Wire harness
- 2- Screws #10-32 X 1/2”
- 2- Screws #8-32 X 1/2”
- 10- Wire ties

Application

The overflow switch is used to interrupt cooling operation when excessive condensate collects in the drain pan.
M2 Unit Controller
The N.C. overflow switch is connected to the Unit Controller (A55) through DI-3. When the switch opens, the Unit

Controller will shut off the unit. After a five-minute time out, the Unit Controller will verify the overflow switch position and restart the unit (if the switch has closed). The Unit Controller has a three-strike counter before the unit locks out. This means the Unit Controller will allow the overflow switch to open three times per thermostat demand. If the unit locks out, a reset of the Unit Controller is required after the switch has closed to restore unit operation.

M3 and M4 Unit Controller

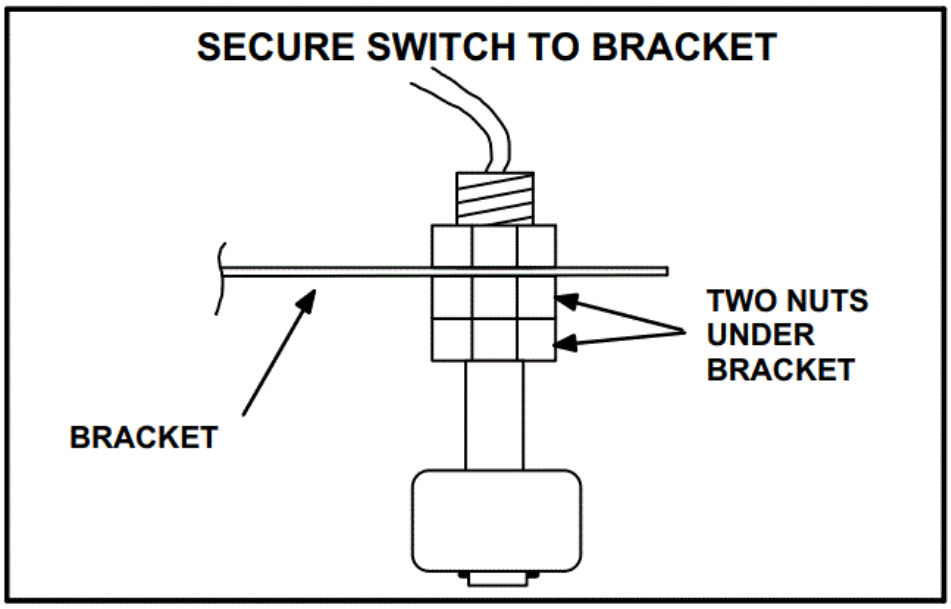
The N.C overflow switch is connected to the M3/M4 Unit Controller through DI-2 or DI-3. If the overflow switch is the only switch installed on the general purpose programmable input, then M3/M4 Unit Controller will disable compressor cooling operation when the overflow switch is detected as open. If the programmable digital input is shared with other protection switches, the M3/M4 Unit Controller will shut down the whole unit operation when the overflow switch is detected as open. After a five-minute time out, the M3/M4 Unit Controller will verify the overflow switch position and resume operation (servicing the demands) if the switch has closed. The M3/M4 Unit Controller has no 3-strike counter.

Float Assembly

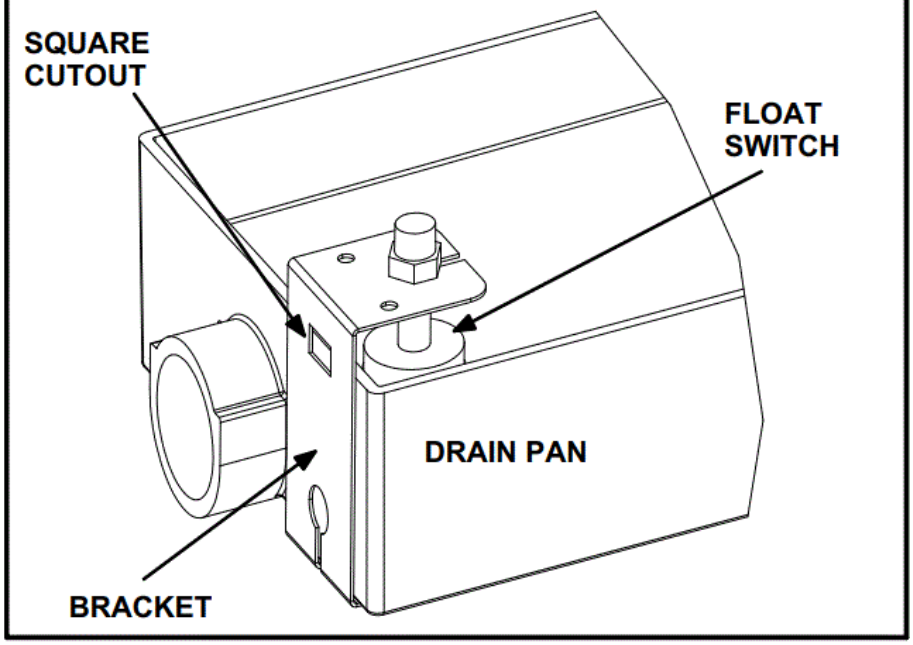
The float switch assembly is shipped for normally closed operation.

Installation

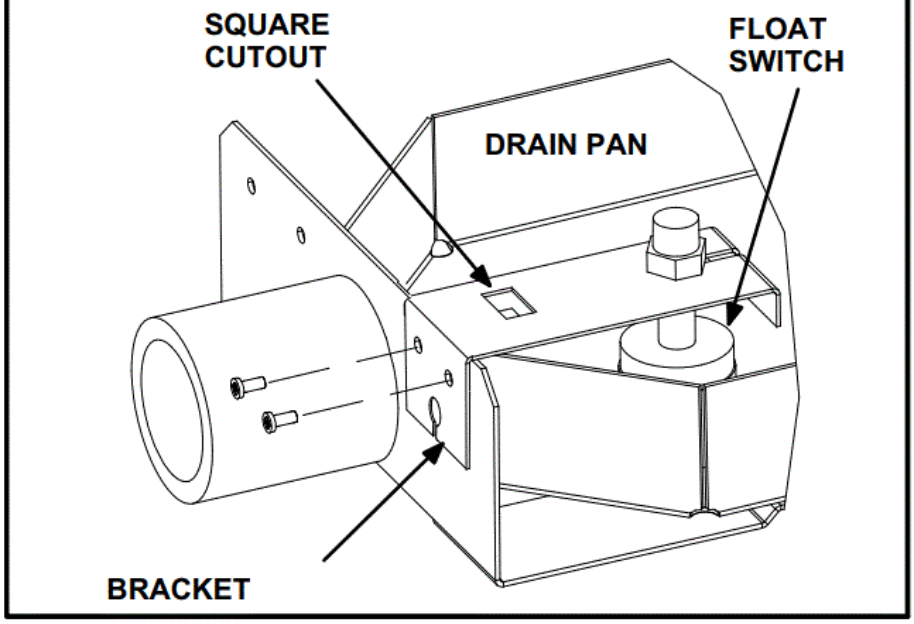
1. Disconnect all electrical power to the unit and open the control access door.
2. Remove the panel covering the condensate drain pipe.
3. **LG/LC/LH/LD Units –** Secure float switch to bracket. See figure 1. Secure bracket to drain pan. See figure 2 for plastic drain pans and figure 3 for stainless steel drain pans. Use #10 screws to secure assembly. Discard the other two brackets provided in the kit. **SC/SC Units –** Secure float switch to C-bracket which doesn't have a square cut-out; secure with locknut. Install the assembly as shown in figure 4. Make sure the square bracket is on the inside of the drain pan and the C-bracket is on the outside. Secure with #8 screws. Discard the bracket with the square cut-out.

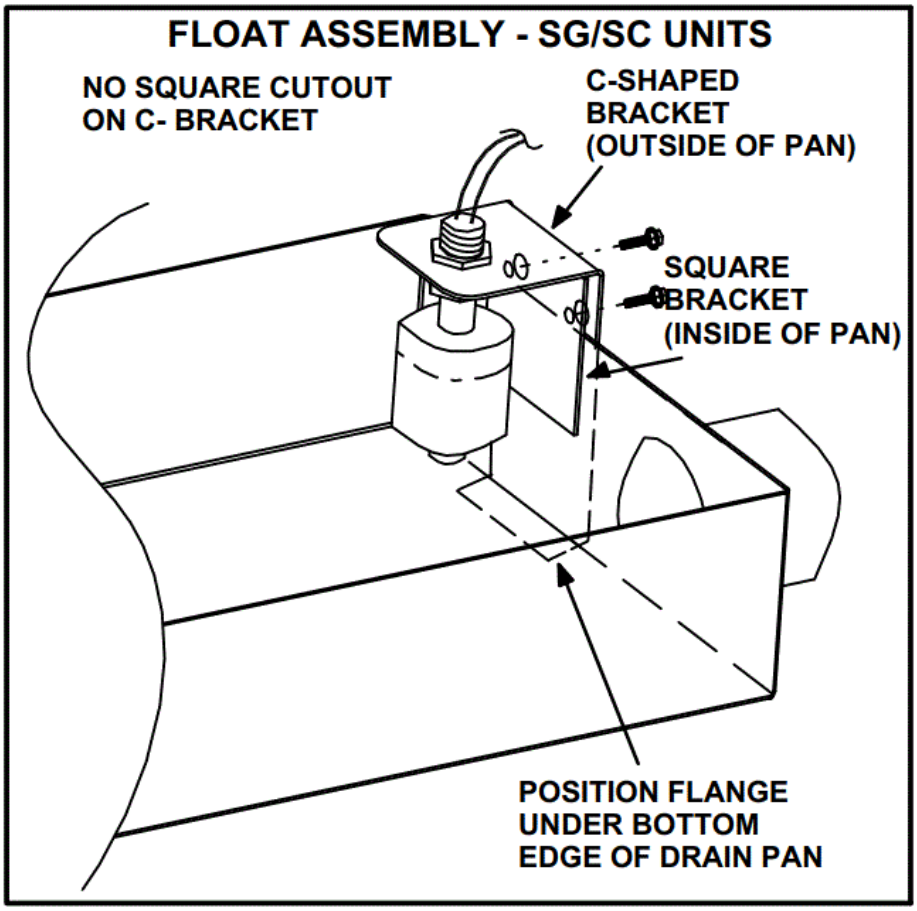


FLOAT ASSEMBLY - PLASTIC DRAIN PANS
LG/LC/LH/LD UNITS

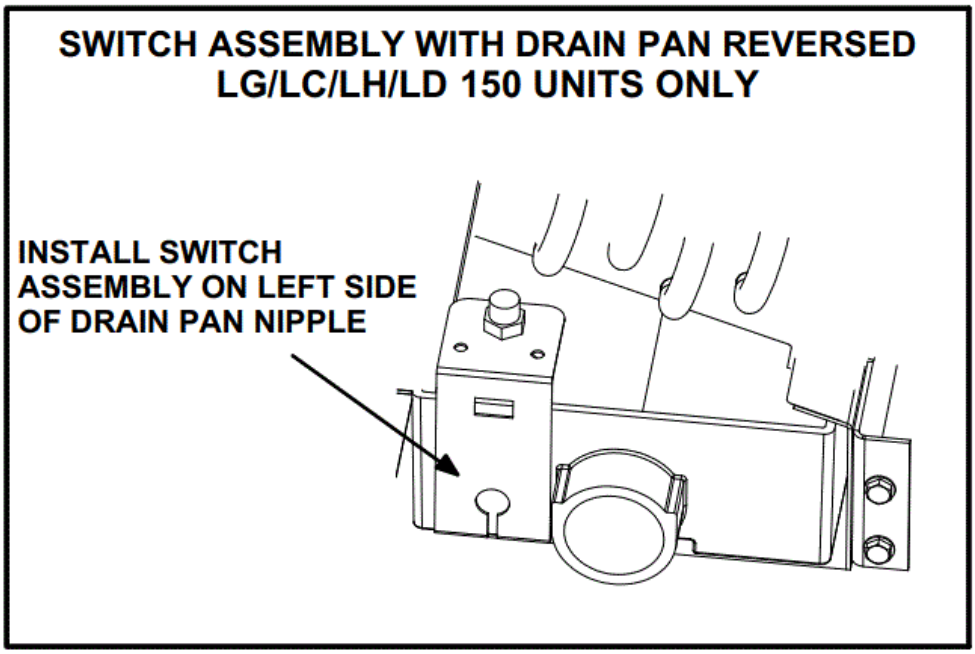


FLOAT ASSEMBLY - METAL DRAIN PANS
LG/LC/LH/LD UNITS



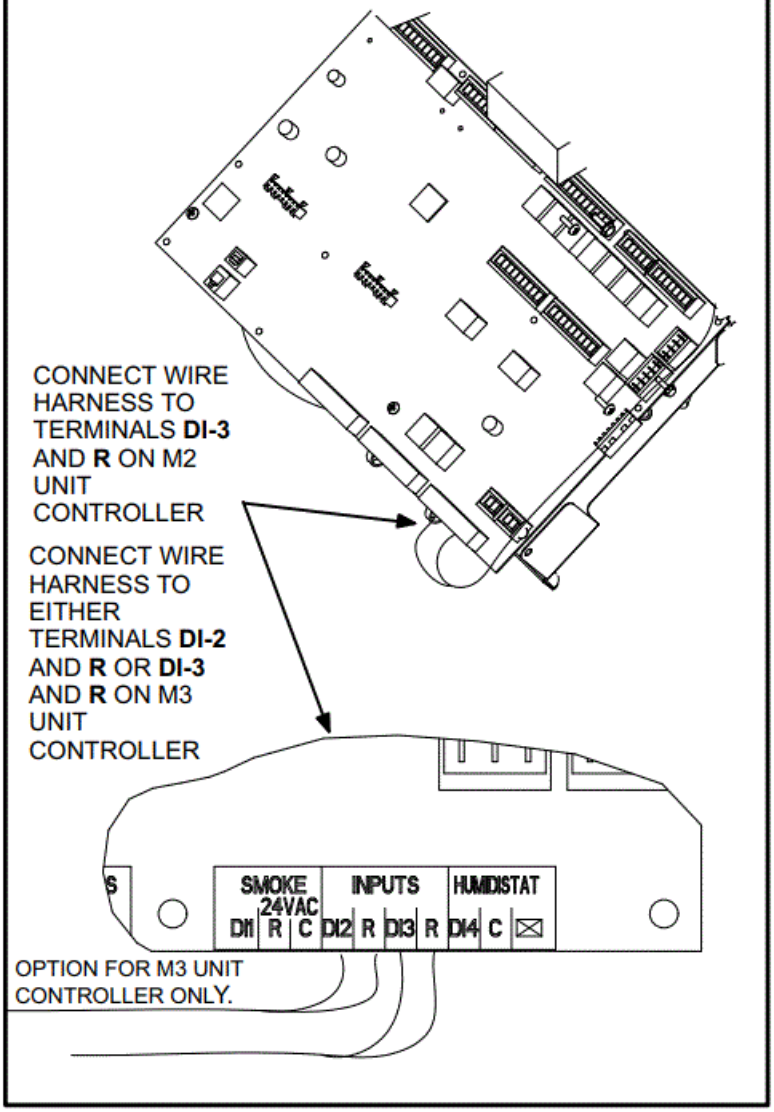


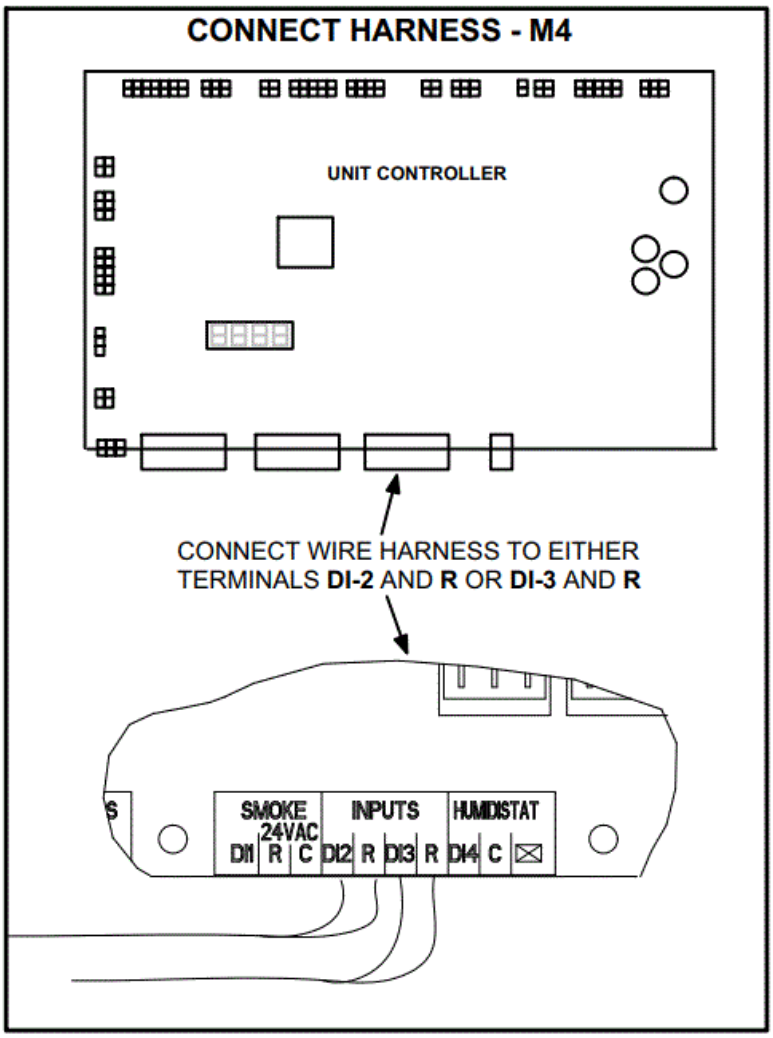
IMPORTANT – LG/LC/LH/LD 024-150 UNITS ONLY –When condensate drainage is required through the back of the unit: remove drain pan, install float switch assembly on the left side of the drain pan nipple and install with switch oriented toward the back of the unit. See figure 5. Route wire harness between the drain pan and heat section.



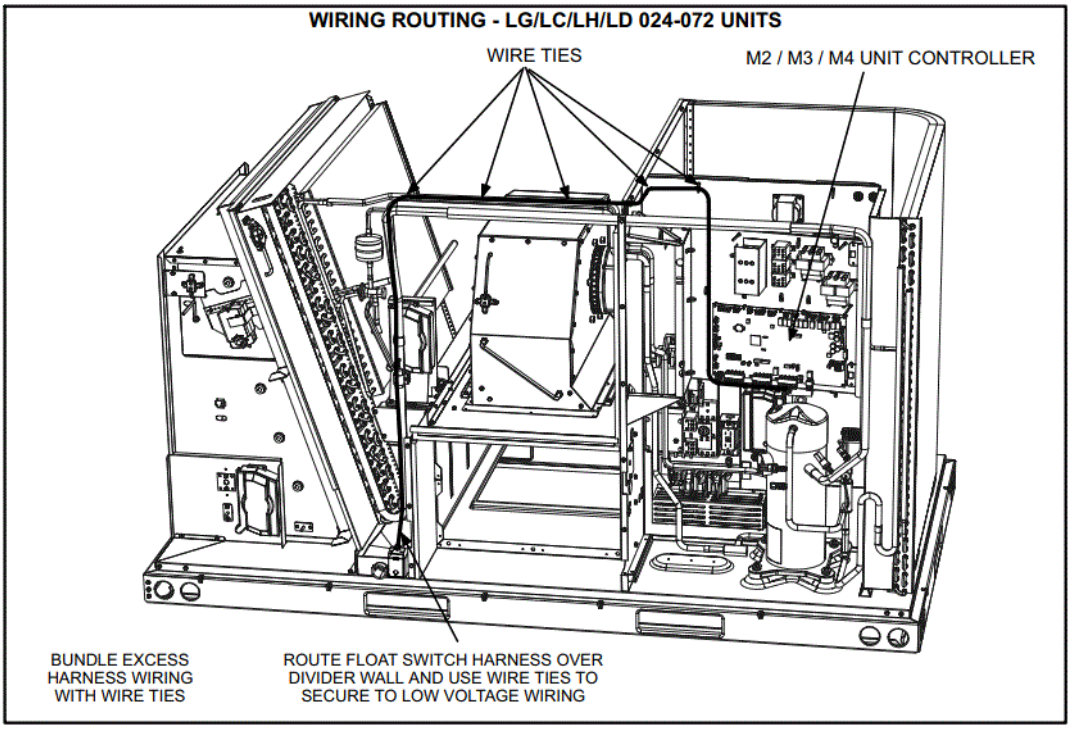
4. Connect wire harness to Unit Controller terminals DI- 2 or 3 and R. See figure 6 for M2 and M3; see figure 7 for M4.

CONNECT HARNESS - M2 & M3

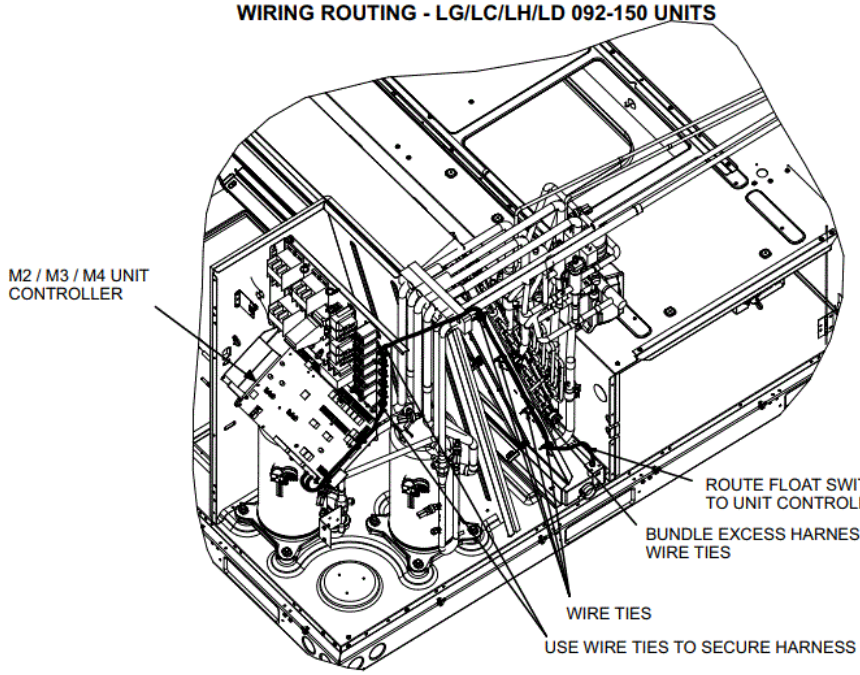




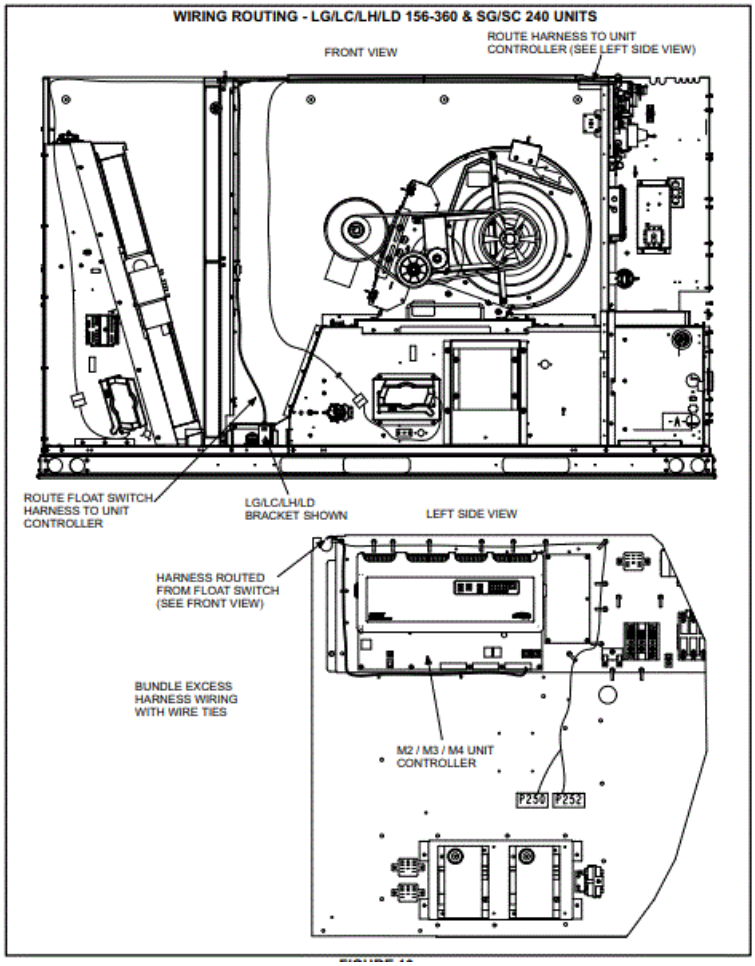
5. Route the other end of the harness to the float switch and secure with wire ties. See figure 8 for LG/LC/LH/LD 072 units, figure 9 for LG/LC/LH/LD 092- 150 units, figure 10 for LG/LC/LH/LD 156-360 & SG/SC 240, figure 11 for SG/SC 036/060 and figure 12 for SG/SC 120 units.

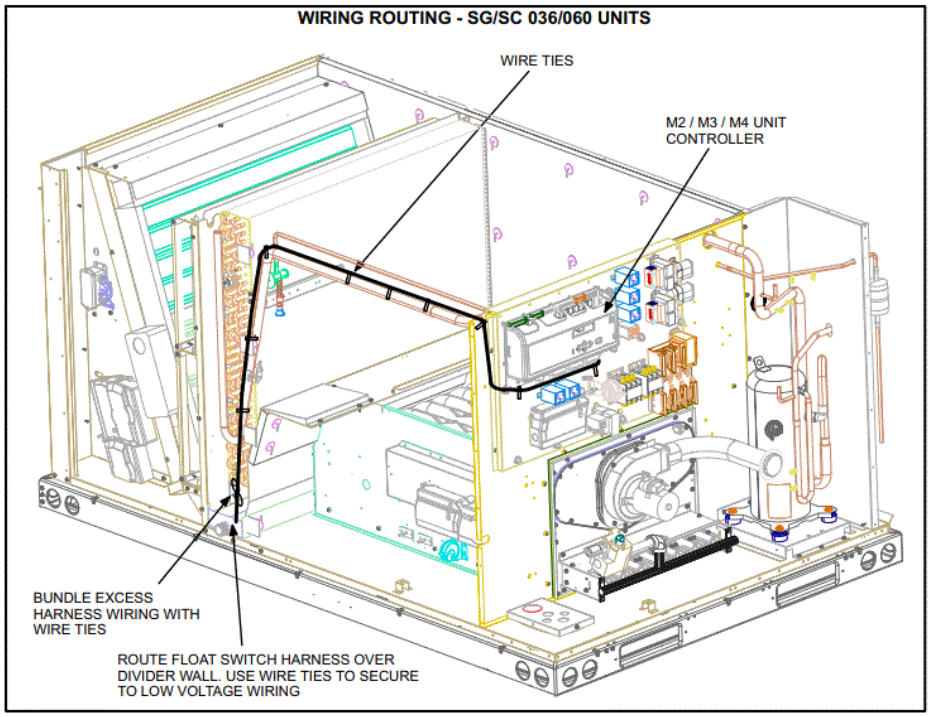


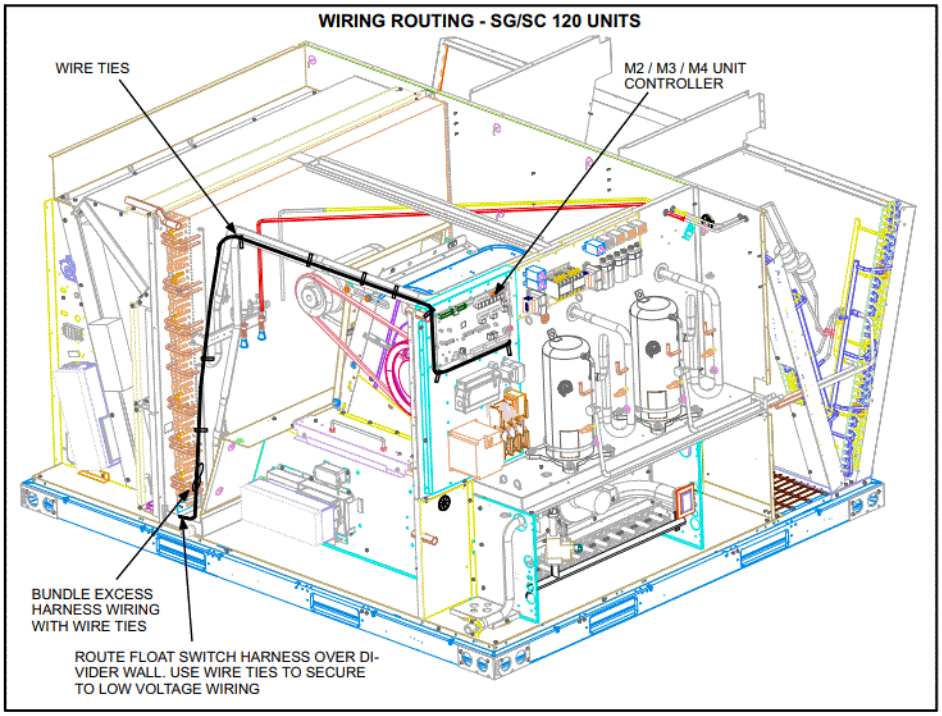
WIRING ROUTING - LG/LC/LH/LD 092-150 UNITS



WIRING ROUTING - LG/LC/LH/LD 156-360 & SG/SC 240 UNITS







6. Connect the wire harness to float switch. Bundle excess wiring using wire ties provided and secure to insulated suction line manifold above drain pan.
7. Replace panel covering condensate drain pan.
8. Restore power to the unit.

Configure Unit Controller

IMPORTANT – Make sure Unit Controller uses V7.05.01 (or later) and the display uses V1.06.05 (or later) software. Use the Unit Controller Installation and Setup Guide to update software.

1. Configure the Unit Controller for the Overflow switch as follows:
2. Close all access doors.

M2 UNIT CONTROLLER
SETTINGS>INSTALL>FLOAT SW
M3 UNIT CONTROLLER
Go to SETUP / INSTALL and navigage through the various setup questions until Configuration ID 2 appears. Position three needs to set to 2 when connected to DI-2 and 3 when connected to DI-3.
M4 UNIT CONTROLLER
Go to RTU MENU > SETUP INSTALL and navigate through the various setup questions until Configuration ID 2 appears. Position three needs to be set to 2 when connected to DI-2 and 3 when connected to DI-3.

Documents / Resources

	LENNOX 21Z07 Float Switch Kit [pdf] Instruction Manual 21Z07, Float Switch Kit, Switch Kit, Float Switch, 21Z07, Switch

References

- User Manual