## Manual-WEG-LVZ-1750 External Circuit Box c/w WEG Variable Speed Drive Installation



For the Installation of:

| Part Name Description |  |  | Part Number |
| :---: | :---: | :---: | :---: |
| LV-Z Electrical Box w/ 110v WEG Controller | Upgrade for LV-E-1750 Air Handlers (110v power) | WEG Zoning-Ready Controller, PSB Circuit Board, Transformer in Powder Coated Box | 40120100003 |
| Part Name | Description |  | Part Number |
| LV-Z Electrical Box w/ 220v WEG Controller | Upgrade for LV-E-1750 Air Handlers (220v power) | WEG Zoning-Ready Controller, PSB Circuit Board, Transformer in Powder Coated Box | 40120100002 |


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## LV-Z-1750 Circuit Box Installation

IMPORTANT - Before you begin, ensure input voltage of WEG Controller matches line input voltage to air handler.

1. Turn off power to the air handler, and allow 5 minutes for power stored in capacitors


Fig. 2-LV-1750 Circuit Box
3. Disconnect motor ground wire from circuit box. (Fig. 3a) Using existing machine bolt, connect motor ground wire to provided ground wire extension. (Figs. 3b-3c)


Fig. 3a


Fig. $3 b$


Fig. 3c
4. Insert ground wire extension into 4 -prong motor plug. (Figs. 4a, 4b)


Fig. 4a-Ground Wire Extension


Fig. $4 b$ - Motor Plug
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## LV-Z-1750 Circuit Box Installation

5. Remove all thermostat and power wiring from the air handler. Undo screw on circuit box and remove box from air handler. (Fig. 5a)
6. Drill hole in the center plate of the air handler. (Figs. 6a, 6b)


Fig. 5a - Undo Screw


Fig. 6a


Fig. 6b
7. Install provided bulkhead fitting into the drilled hole. (Figs. 7a, 7b)


Fig. 7a


Fig. $7 b$
8. Replace middle access door of air handler. (Fig. 8)
9. Plug one side of the provided pressure tube into the center plate bulkhead (Fig. 9a) and

Fig. 8 the other end into the positive (+) bulkhead on the circuit box. (Fig. 9b)


Fig. 9a


Fig. $9 b$
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## LV-Z-1750 Circuit Box Installation

10. Plug in the 4-prong motor plug (male) into the female plug connector coming out of the WEG VFD. Ensure the cut star plug is opened and wrapped around the motor leads then snapped into the motor leads hole in the side of the circuit box. (Figs. 10a-10c)


Fig. 10a


Fig. 10b


Fig. 10c


Fig. 11
13. Connect the second pressure tube to the negative (-) bulk head on the circuit box and run the other end external to the air handler, through the provided star plug. Clamp this end with the provided hose clamp so that it senses ambient pressure. (Fig. 13)

15. Replace large access door on air handler. (Fig. 15)


Fig. 15

## LV-Z-1750 Air Handler - PSB Circuit Board/CFW300 WEG Wiring Diagram



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