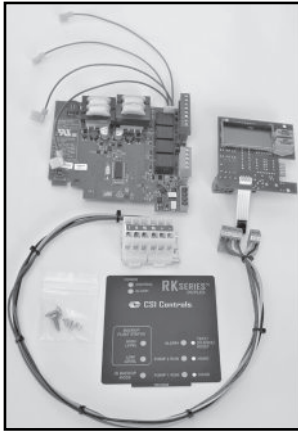




RK Series™ Panel Retrofit Installation Instructions Converts Pressure to 4-20mA Level Control



Parts included

- (1) RK-2401 (simplex) or RK-2402 (duplex) main circuit board
- (1) RK-DIBSTD (simplex) or RK-DIBDTD (duplex) display circuit board
- (1) Wiring Harness, approx. 24" long
- (1) RKST (simplex) or RKDT (duplex) inner door label
- (4) 4-40 × 1/4" circuit board mounting screws
- (2) 10-12 × 1/2" DIN rail mounting screws
- (3) 4" zip ties (not pictured)
- (1) RK Series™ Control Panel Transmitter 4-20mA Models Installation and Operation Manual (not pictured)

⚠ WARNING!
ELECTRICAL SHOCK HAZARD
 Disconnect all power sources before servicing. Failure to do so could result in serious injury or death.

This control panel must be installed and serviced by a licensed electrician in accordance with the National Electric Code NFPA-70, state and local electrical codes. UL Type 4X enclosures are for indoor or outdoor use.

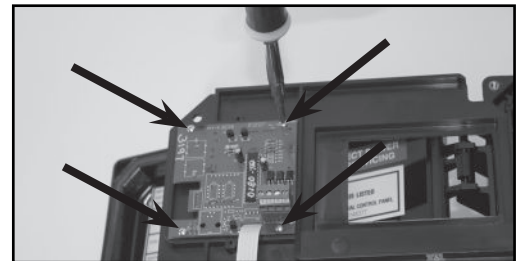
Installation

1. Disconnect all power from the control panel.

2. Open the inner door of the control panel.

3. If an optional RK-DIB or RK-DDC display is installed:

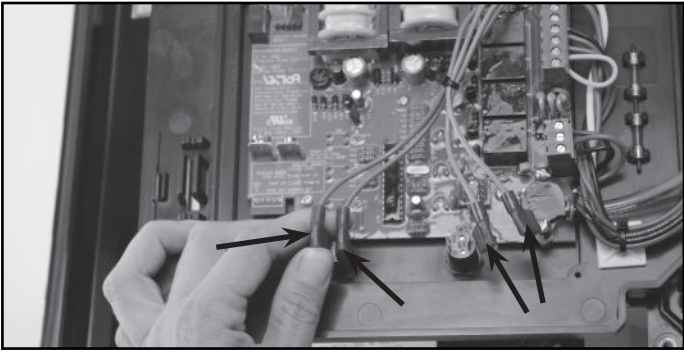
- Unclip the black connector of the display board's ribbon cable from the main RK Series™ panel circuit board.
- Remove the 4 mounting screws from the display circuit board (these screws can be reused later when installing the new display board).
- The display circuit board can now be removed from the door.



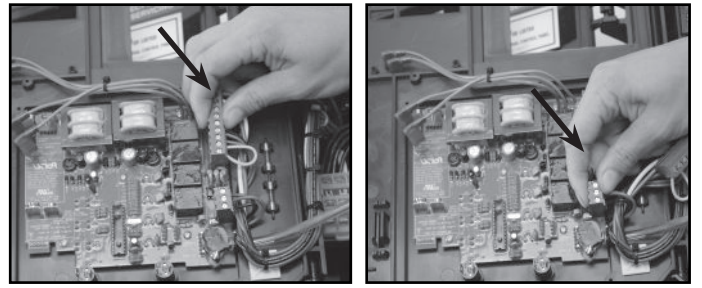
4. If no display circuit board is installed, remove the black plastic cover from the display area of the inner door.

Installation - continued

5. Pull the four fuse wire connectors from the fuse holders.

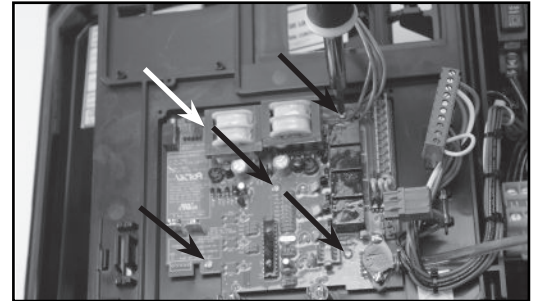


6. Unplug the two green terminal block plugs from the main circuit board.



7. Remove the 4 mounting screws from the main circuit board. (These screws will be reused later when installing the new 4-20mA main circuit board). (Black arrows)

a. Note: Older RK Series™ panel pressure circuit boards may also have a black screw through the front side of the door to a retaining nut on the circuit board that will need to be removed as well. (White arrow)



8. Remove the RK Series™ panel pressure circuit board from the door. The pressure tubing may need to be disconnected or cut to remove the circuit board from the panel completely.

10. Place the circuit board in position on the inner door. Carefully align the push-buttons with the holes in the door and the mounting bosses with the holes in the circuit board.

9. Obtain the new RK Series™ 4-20mA main circuit board and remove any green terminal block plugs that may be in it.

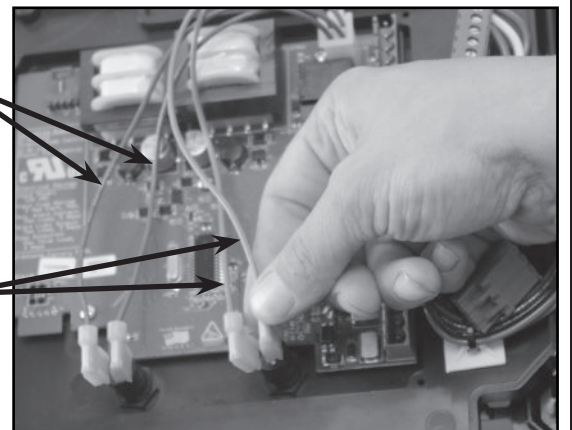
11. Fasten the circuit board to the door using the four screws that were removed in step 7.

12. Connect the four fuse wires to the fuse holder spades placing the red pair of wires on the left, and the blue pair of wires on the right.

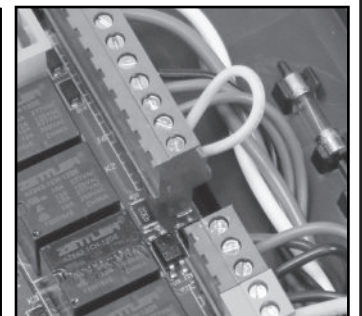
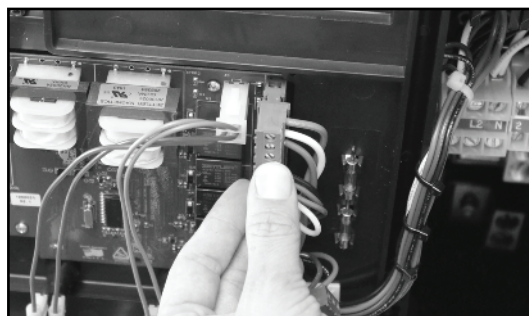
a. Note: Make sure the quick connect terminal is inserted properly with a good connection and that the spade isn't accidentally inserted between the metal connector and the plastic insulation.

Red Wires

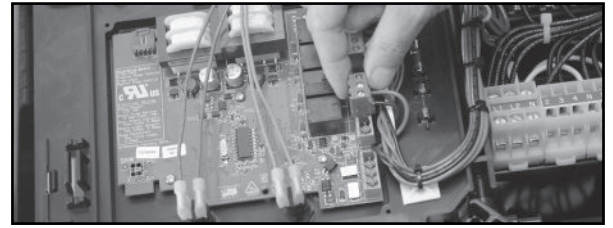
Blue Wires



13. Plug the green 10-position terminal block into the new RK Series™ panel 4-20mA circuit board. Note the new circuit board has only an 8-position header. Align the plug with the top edge of the header, with the bottom two plug terminals overhanging the header.

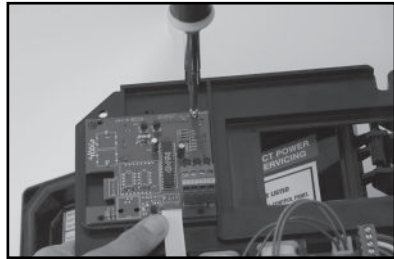


- 14.** Plug the green 3-position terminal block into the new RK Series™ panel 4-20mA circuit board. It will need to be placed in the top three positions of the 5-position terminal block header.

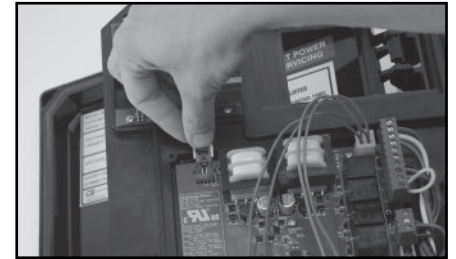


- 15.** Place the new RK-DIB display circuit board in position on the inner door above the RK Series™ panel main board. Carefully align the push-buttons with the holes in the door and the mounting bosses with the holes in the circuit board.

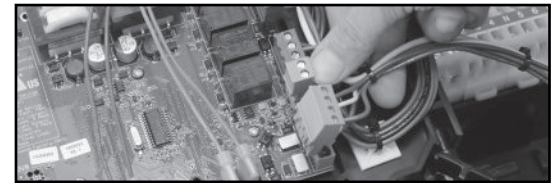
- 16.** Screw in the four display board mounting screws using the screws removed in step 3b or the four screws included in the retrofit kit.



- 17.** Plug the RK-DIB display board's ribbon cable into the main RK 4-20mA Series™ panel circuit board.

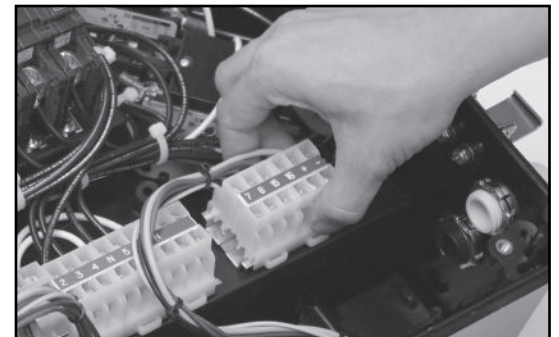
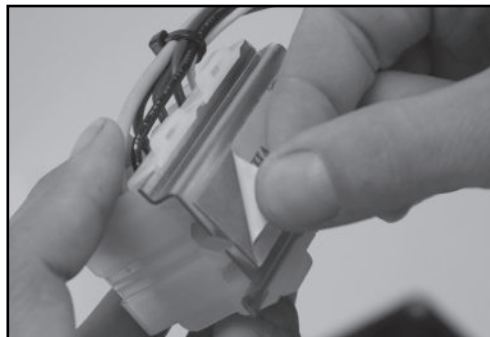


- 18.** Find the end of the wiring harness that has two green terminal block plugs. Plug these into the main RK circuit board, with the 2-position plug going into the remaining 2 positions of the 5-position header, and the 4-position plug going into the 4-position header.



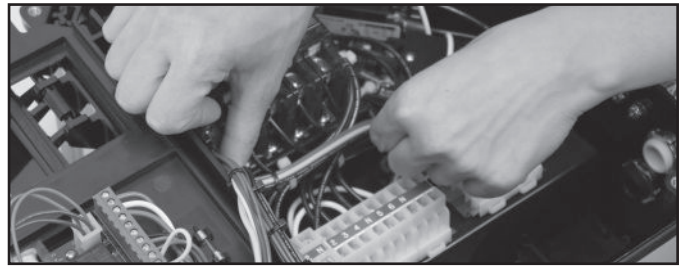
- 19.** In the control panel, locate a convenient place to mount the other end of the wiring harness which contains the field wiring terminals. Preferably, this will be on the plastic backpanel riser near the other field wiring terminals. Clean the surface of the area where the field wiring terminals will be mounted.

- 20.** Peel the backing from the VHB tape on the bottom of the DIN rail. Press the terminal blocks firmly into place, with the open side of the terminals oriented downward for field wiring. Apply firm pressure for at least 10 seconds so the tape bonds well to the backpanel.

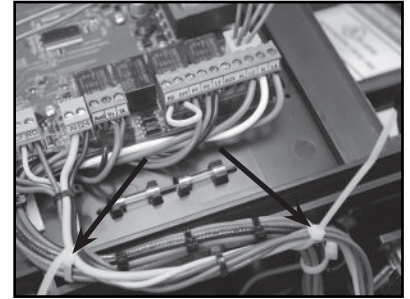
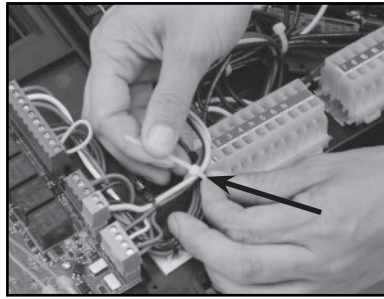
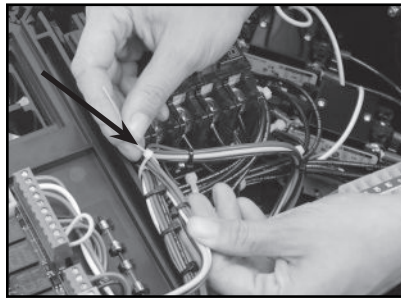


- 21. OPTIONAL STEP.** In most cases, the VHB tape will be sufficient to hold the field wiring terminal blocks in place permanently. If a more secure mounting is preferred, terminal blocks may be screwed down. The two new terminal blocks will need to be removed from the DIN rail using a flat bladed screwdriver to pull the bottom of the terminal block outwards. Drive one or two of the provided 10-12 × ½" screws into the slot of the DIN rail. No predrilling is required, but small pilot holes can be drilled to make screwing easier. Once securely screwed in, the two terminal blocks can be clipped back onto the DIN rail.

22. Tuck any extra length of the wire bundle down and out of the way.



23. Use zip ties to secure the new wire bundle to the existing wire bundle that goes up to the inner door. This will keep the new wires secure when the door is opened and closed.

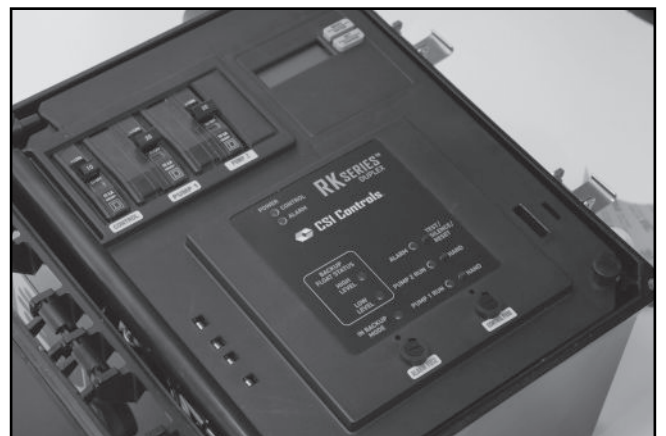


24. Close the inner door. Clean the existing inner door label of any dirt and debris that could prevent the new label from adhering properly.

25. Peel the backing from the new inner door label and place it very carefully over the existing label. Be careful to align the label properly with the push-buttons and LED indicators. It is recommended that the area around the push-buttons is applied first to make sure they are aligned properly.



26. The retrofit conversion into an RK Series™ 4-20mA control panel is complete. The level transmitter and optional backup float switches may now be installed according to the RK Series™ 4-20mA panel installation instructions.



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