

## Wiring Instructions for GE-0401, GE-0451 and GE-0501 Motorized Pumps with Terminal Box Connections

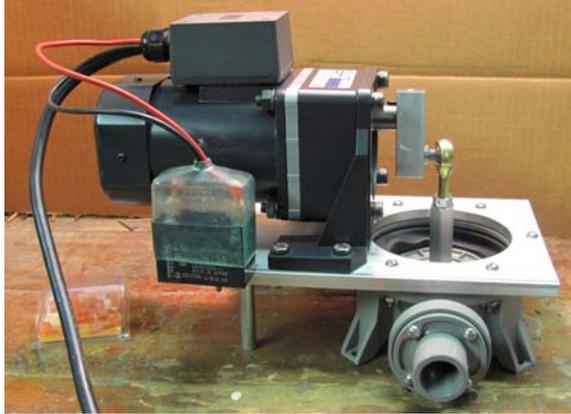


Figure 1. Final Assembly

### Before you start

You will need the following materials to wire your Guzzler pump (see Figure 2):

- 1) 6 foot 125V, 15 Amp, 3-conductor power cord with 3-prong outlet
- 2) 2 12" lengths of black and red 16 gauge power cord
- 3) 2 AMP Female Spade connectors

Additionally, you will need a small screwdriver and a wire stripping/crimping tool. It is recommended to also have a tube of silicone sealant available.

### Wiring Diagram

The motor wiring diagram is shown in Figure 3. Note that the capacitor must be included in the circuit for proper starting and operation of the motor.

### Step 1

Locate the junction box on the top of the pump motor. Remove the 4 screws on the top and put them aside for later. (Figure 4)

Remove the cover of the junction box, putting it aside for later as well. (Figure 5)

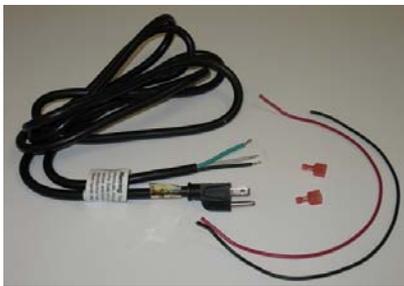


Figure 2. Materials

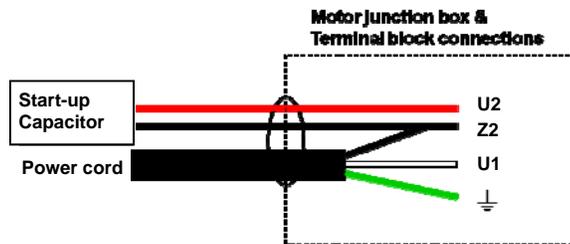


Figure 3. Wiring Diagram

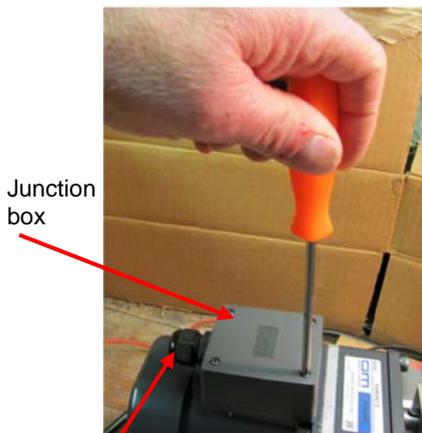


Figure 4. Remove screws from junction box.



Figure 5. Remove junction box cover.

Junction box  
 Wire nut

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Figure 6. Remove strain relief strap.

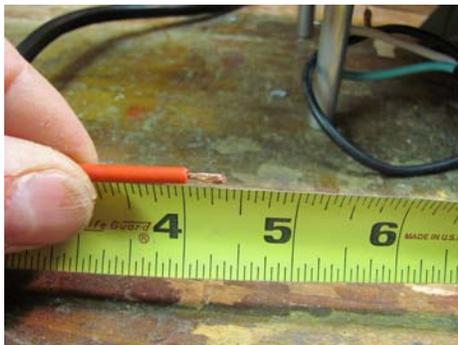
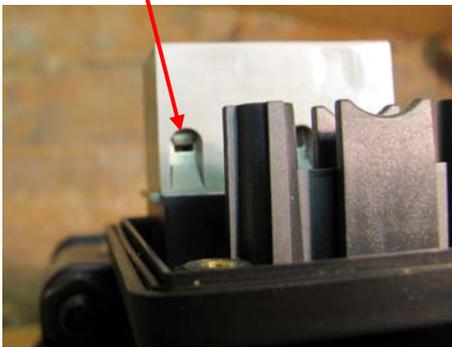


Figure 7. Strip wire 3/8".

Partially open



Fully open

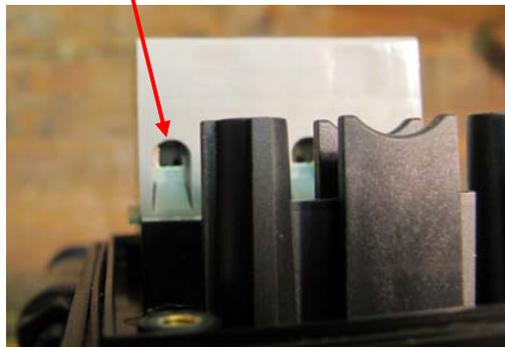


Figure 8. Open terminal block.

### Step 2

Remove the strain relief strap in the junction box. (Figure 6)

### Step 3

Unscrew the "wire nut" (see Figure 4) from the junction box and put it aside for later. Remove the rubber ring from inside the wire nut housing and discard.

### Step 4

Take a 12" piece of 16-gauge red wire and strip it back ~3/8". (Figure 7) Do the same for a 12" length of 16-gauge black wire.

### Step 5

Open all four terminals on the terminal block (Z2, U2, U1 &  $\perp$ ). (Figure 8)

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Figure 9. Thread power cord through wire nut.

### Step 6

Thread the power cord through the wire nut. (Figure 9)

### Step 7

Thread the power cord through the junction box hole, pulling about 6" of the cord through the hole. (Figure 10)

### Step 8

Thread the red 12" 16-gauge wire through the junction box hole, starting from the inside, unstripped end first. Do the same with the black 12" 16-gauge wire. (Figure 11)



Figure 10. Thread power cord through junction box hole.



Figure 11. Thread red and black 12" cords through junction box hole.

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Figure 12. Thread the two 12" black and red cords through wire nut.



Figure 13. Connect red wire to U2.



Figure 14. Connect green wire to  $\perp$  and the white wire to U1.



Figure 15. Twist black wires together and cut to 1/2".



Figure 16. Connect black wires to Z2.

### Step 9

Thread both the red and black wires through the wire nut. (Figure 12)

### Step 10

Connect the stripped red wire into location U2 of the terminal block and secure. Give it a tug to ensure it is securely fastened. (Figure 13)

### Step 11

Connect the green wire into the ground  $\perp$  location of the terminal block and secure.

Connect the white wire into the U1 location.

Give them both a tug to ensure they are securely fastened. (Figure 14)

### Step 12

Twist the bare ends of both black wires together and cut the exposed end to about 1/2". (Figure 15)

### Step 13

Connect the black wires to location Z2 of the terminal block. Give them a tug to ensure they are securely fastened. (Figure 16)

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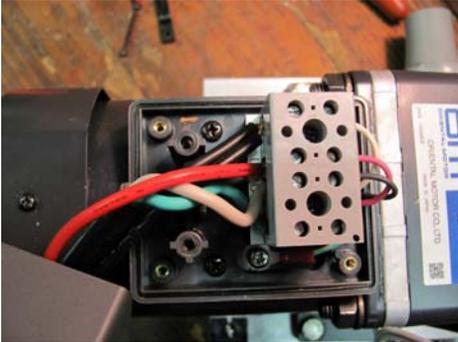


Figure 17. Reinstall strain relief strap over all 5 wires.



Figure 18. Red and black wires

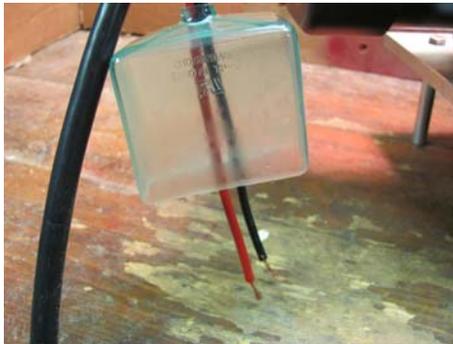


Figure 19. Strip ends of black and red wires. Thread through capacitor cap.



Figure 20. Crimp spade connectors onto wires.

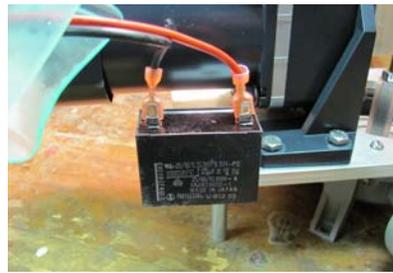


Figure 21. Connect wires to capacitor.



Figure 22. Install capacitor cap.

### Step 14

Lay all 5 wires into the strain relief and re-install the strain relief strap. Do not overtighten the strap. (The screws will not go all the way down.) (Figure 17)

Pull the wire slack out of the junction box cover, working the cover back into place. Screw cover back on with the 4 screws.

Slide the wire nut over the wires and screw it onto the end of the end of the junction box.

The red and black wires should be hanging out of the terminal box. (Figure 18)

### Step 15

Strip the ends of the black and red wires to expose about 1/4" of the wire. Thread both wires through the capacitor cap. (Figure 19)

### Step 16

Crimp a red spade connector onto the end of each wire. (Figure 20)

### Step 17

Connect the red wire to any lead of the capacitor. Connect the black wire to the lead furthest away. (Figure 21)

### Step 18

Slide the capacitor cap down the wires and onto the capacitor, about 2/3 of the way down. (Figure 22)

Add a dab of silicone seal into and over the wire hole on the capacitor cap.