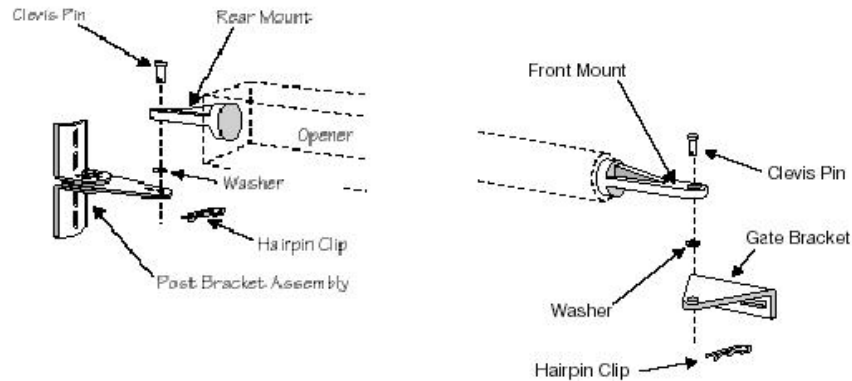


## Testing the Open Position Limit on a Pull to Open Gate

You can test the open position limit if you have a volt meter.

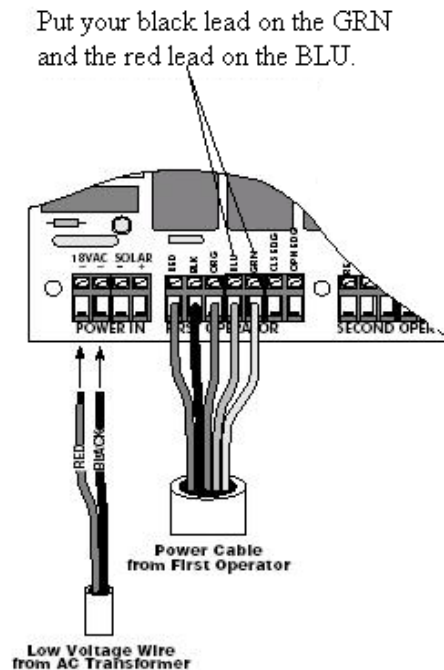
**Pull the clevis pins to remove the operator arm from the gate.**



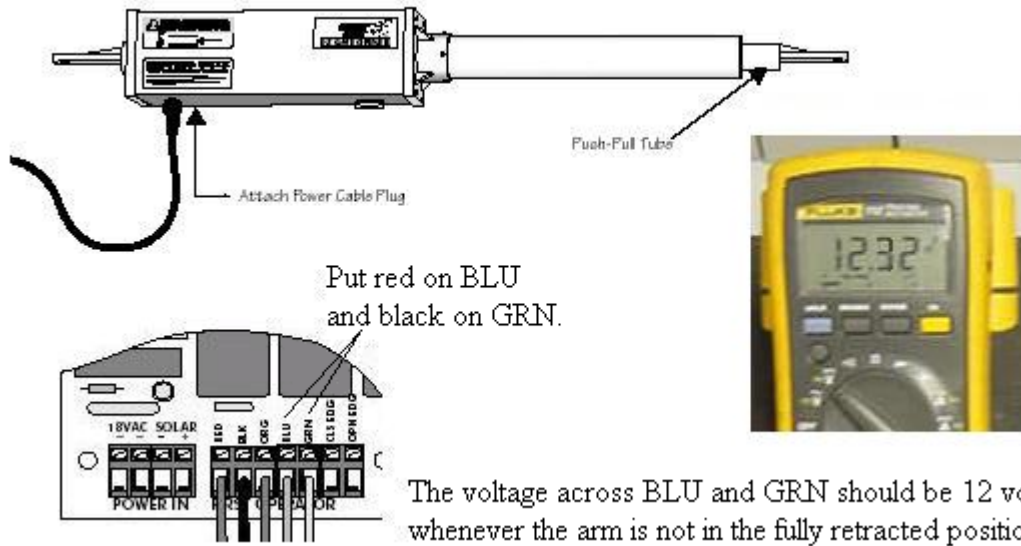
Use the remote, push button, or keypad to extend and retract the arm. If the arm works properly while disconnected from the gate, you have an adjustment problem with the gate. Reset the closed position limit or readjust the open position with the gate bracket in the middle of the gate.

If the arm retracts and jams, it is not recognizing the open position limit. It could be a problem with the limit switch inside the arm, the power cable from the arm to the control box, or the circuit board.

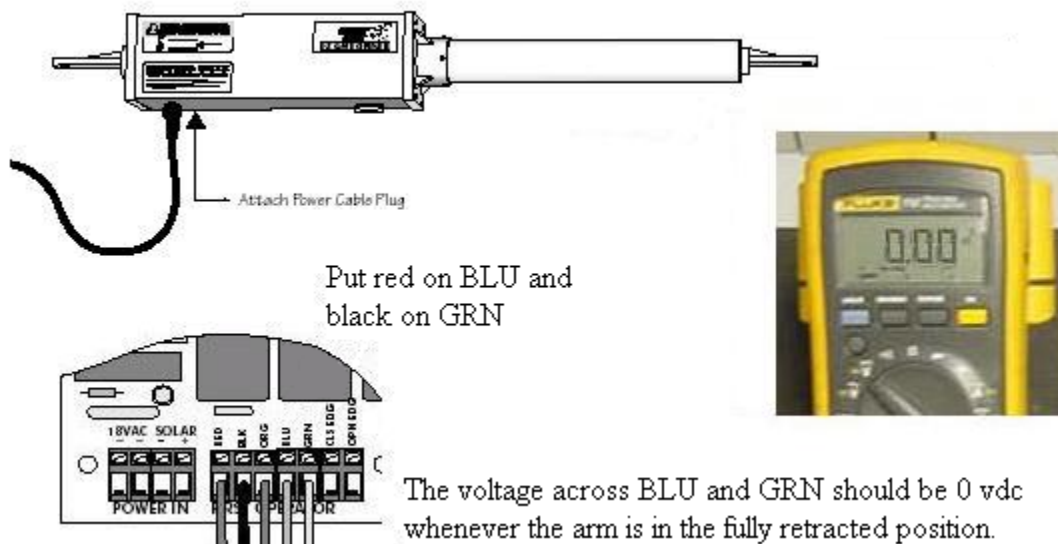
**Measure the voltage on the blue and green wire on the first operator.**



You should have 12 vdc whenever the arm is extended or in the middle of its cycle.

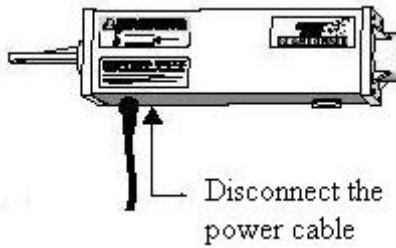


Whenever the arm gets to the open or retracted position, the limit switch in the arm should close and the voltage should drop down to 0 vdc.

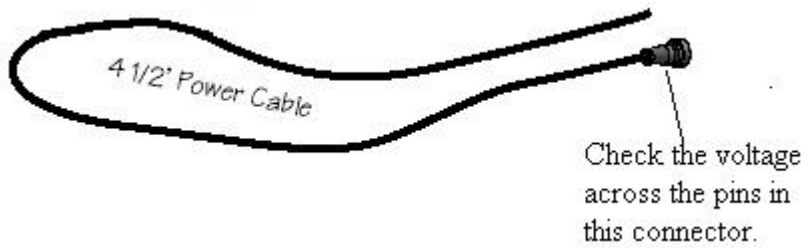


If the voltage never drops to 0, either the limit switch is not making or the power cable is not making good connection.

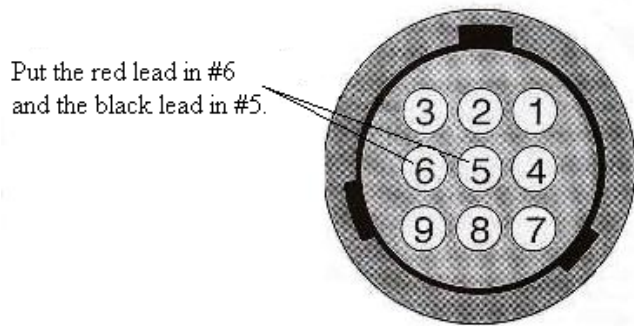
To check the power cable, disconnect the cable from underneath arm.



Check the voltage across the #6 and #5 pins in the female connector on the end of the cable. You should read 12 vdc.



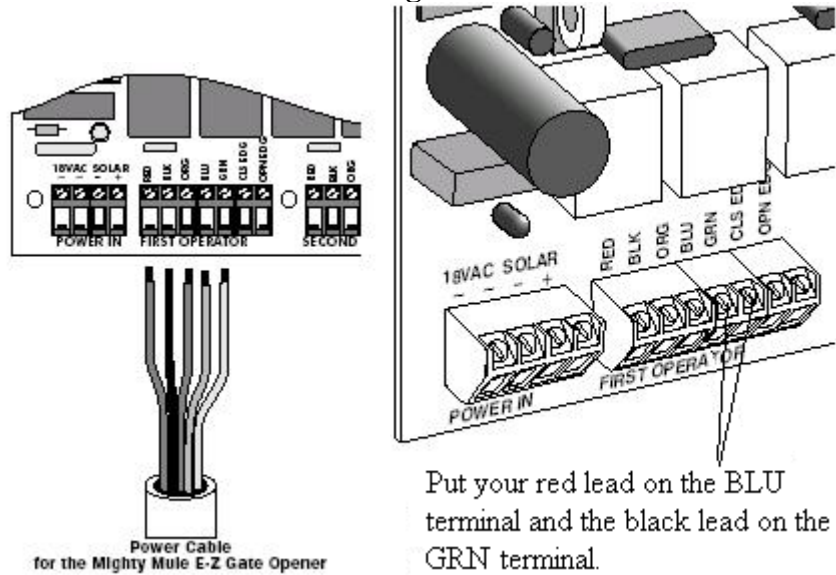
### Power Cable Wiring Chart



- ① - Red - Motor Positive (+)
- ② - White - Hall-Effect Units Only
- ③ - Orange - Adjustable Limit Switch
- ④ - Black - Motor negative (-)
- ⑤ - Green - Common Ground / Switches
- ⑥ - Blue - Non Adjustable Limit Switch
- ⑦ - Blank - Not Used
- ⑧ - Blank - Not Used
- ⑨ - Blank - Not Used

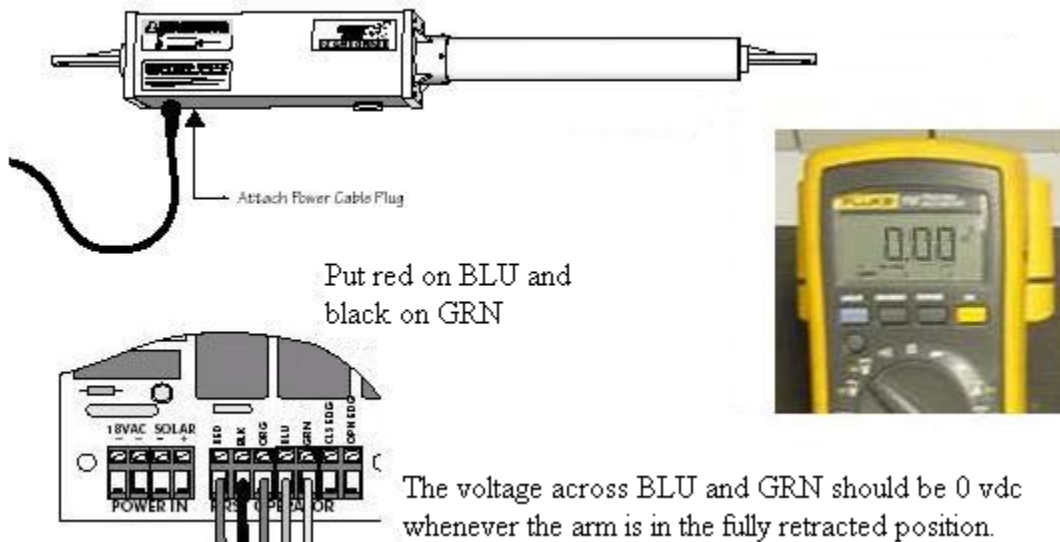
If the voltage at the circuit board never drops to 0 vdc when the arm is retracted and you read 12 vdc on #6 and #5 pins on the power cable, the cable is good and the problem will be the limit switch in the operator arm.

If you do not read 12 vdc, go to the control box, disconnect the five power cable wires from the first operator and measure the blue and green terminals on the circuit board.

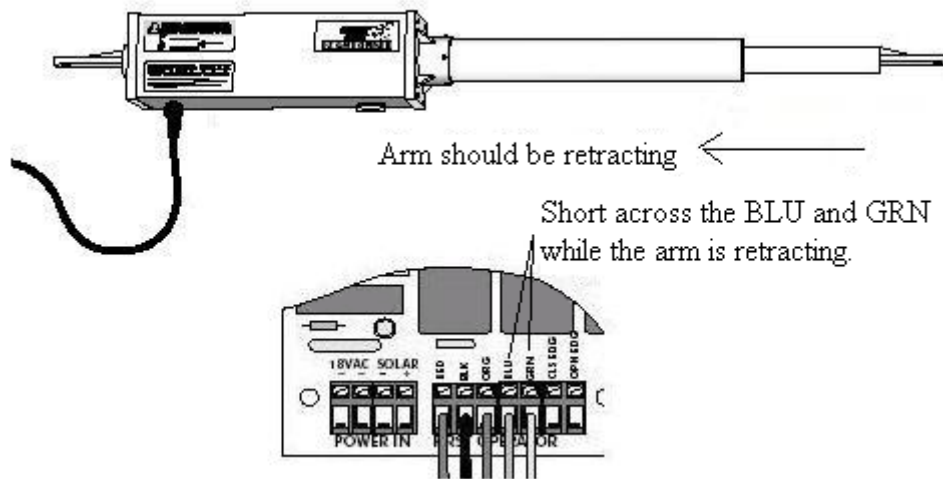


If you have voltage on the terminals, but not across the pins, the cable is bad.

If you measure the voltage on the First Operator BLU and GRN terminals with the cable connected, you retract the arm, the voltage on BLU and GRN drops to zero, and the arm over retracts, then the circuit board could have a problem.



Take a short piece of wire to use as a jumper about two or three inches long. Retract the arm. While the gate is still retracting, short the BLU and GRN terminals. Make sure that the arm is retracting. Nothing will happen if the arm is extending and you short BLU and GRN.



If that does not stop the motor, the circuit board needs replacing.