

Situation 1

Will not tilt

PG Remote Plus through joystick

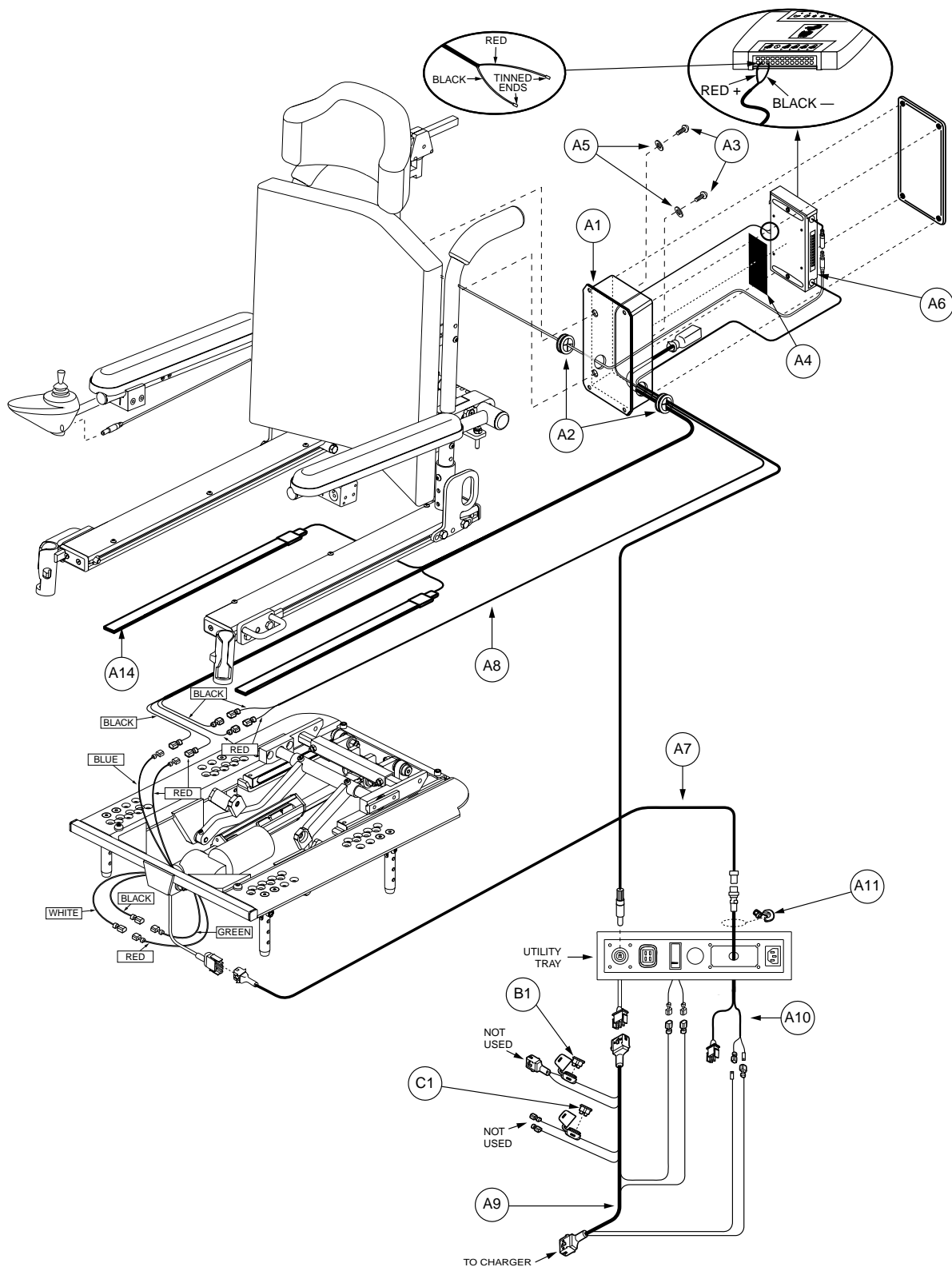


Figure 4.70. Remote Plus Through Joystick Electronics

Operate the mode switch on the joystick until the tilt function is activated. The tilt function will be displayed by a red LED illuminated on the seat base and back. See figure 4.71. Observe the tilt and listen to the actuator motor.

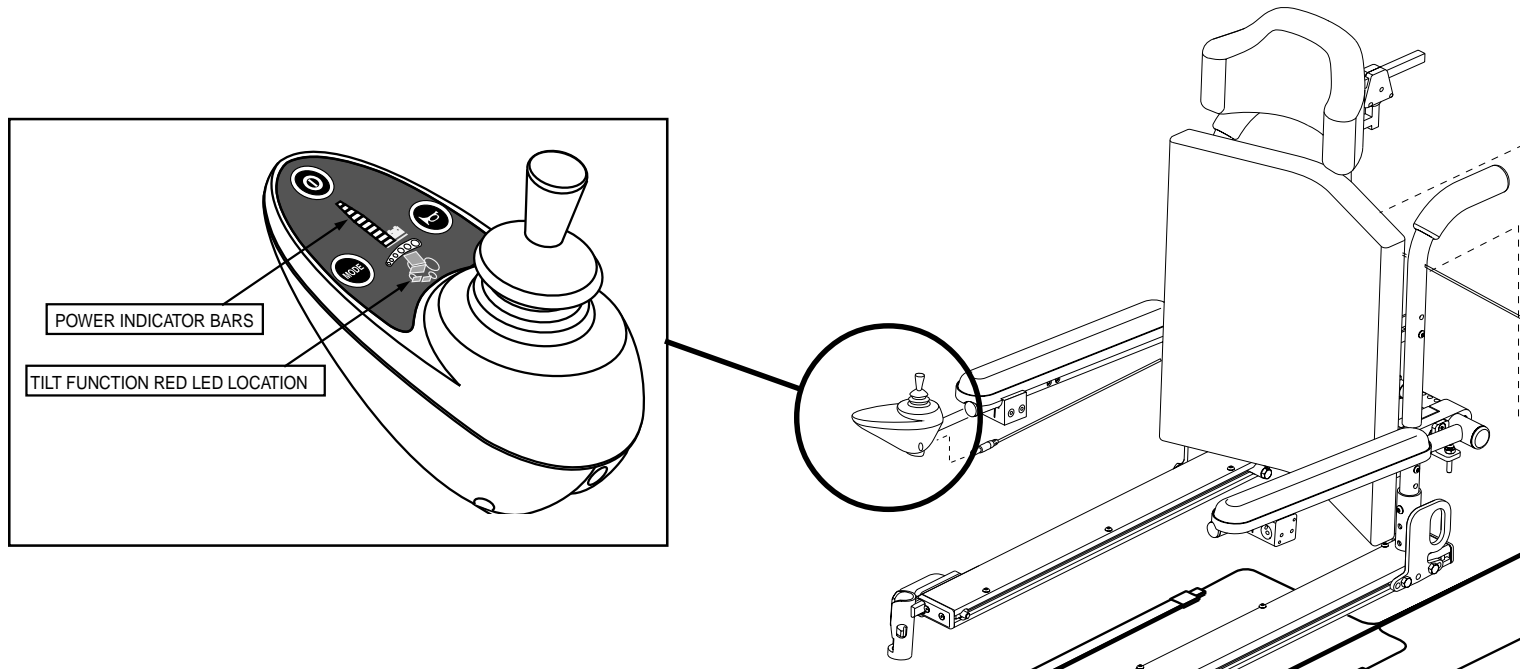


Figure 4.71. Controller Keypad



If the actuator runs but the tilt does not operate, replace the tilt actuator.

Notes:

If the "Tilt" LED does not display, verify that the wires leading from the harness (A8) are attached to the connectors of the other harness (A14). Also make sure the tinned connectors of the harness (A8) are attached to the ALM module. If the wires are not connected, connect them. See figure 4.72.

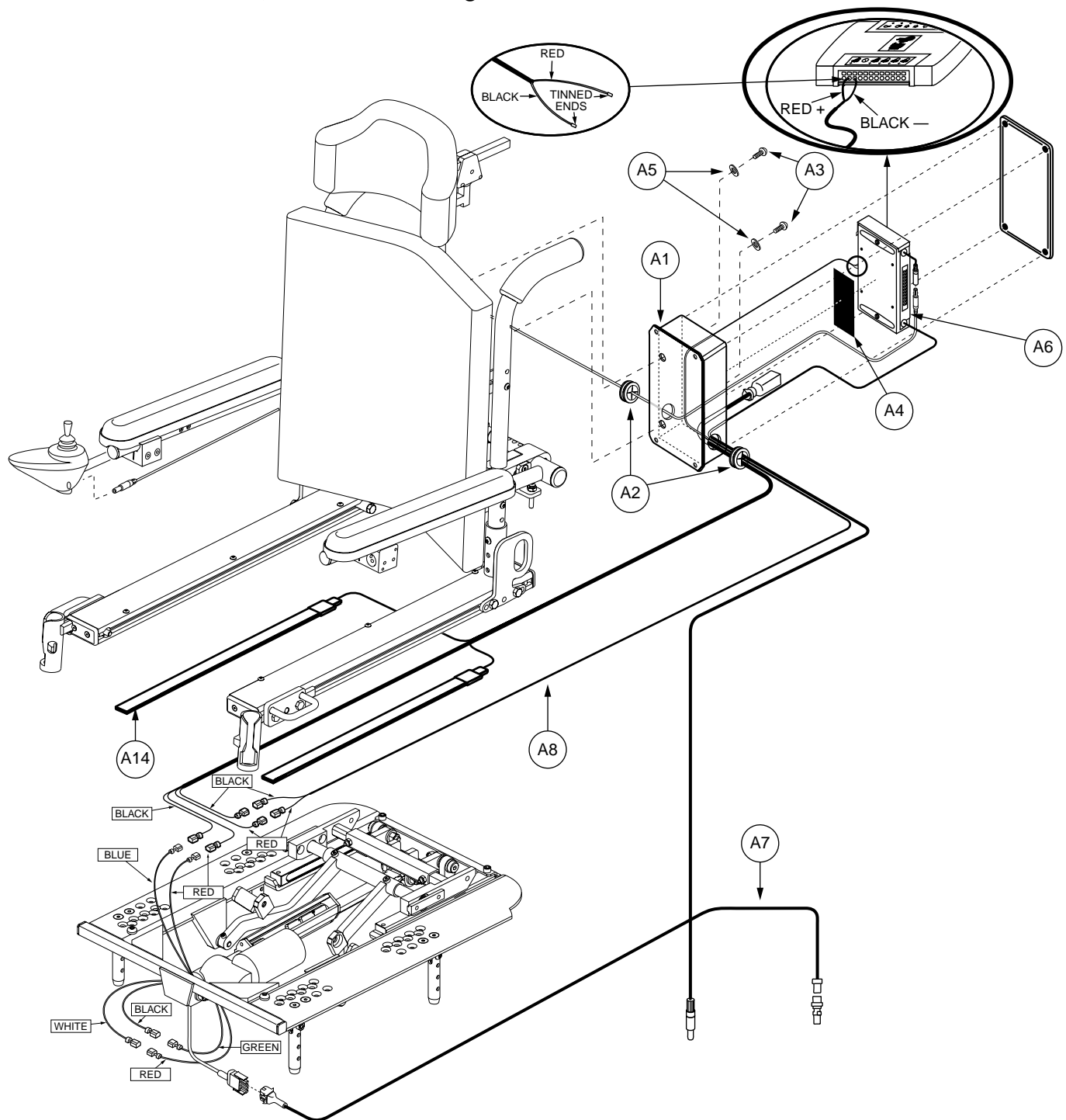


Figure 4.72. Harness Connections

Disconnect the plugs on the actuator motor. Using a multimeter that is set to its lowest resistance scale, measure the resistance through the actuator motor at the pigtails. Normal resistance is between .5 to 15 ohms. See figure 4.73.

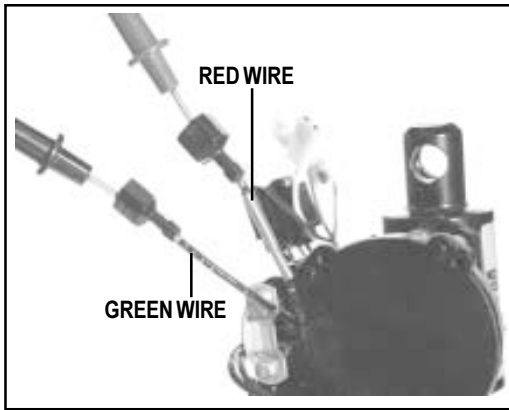
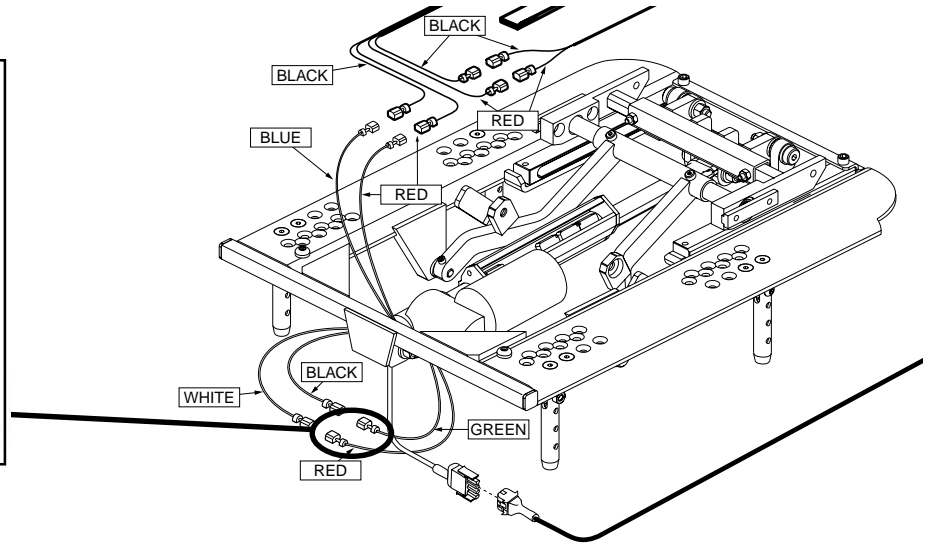


Figure 4.73. Actuator Test



The meter reads _____ ohms



If the meter reads an "open" or is out of the normal resistance range, replace the actuator.



A reading of less than .5 ohms could indicate a shorted actuator.

Notes:

If the actuator motor reads normal resistance, disconnect the two actuator tilt wires from the ALM harness (A8). Using a multimeter set to its lowest resistance scale, place one of the meter leads on the tinned end of the red wire that was removed from the ALM. See figure 4.74. Place the other lead to the corresponding end that was disconnected from the harness (A14). See figure 4.74. Continuity should be present.

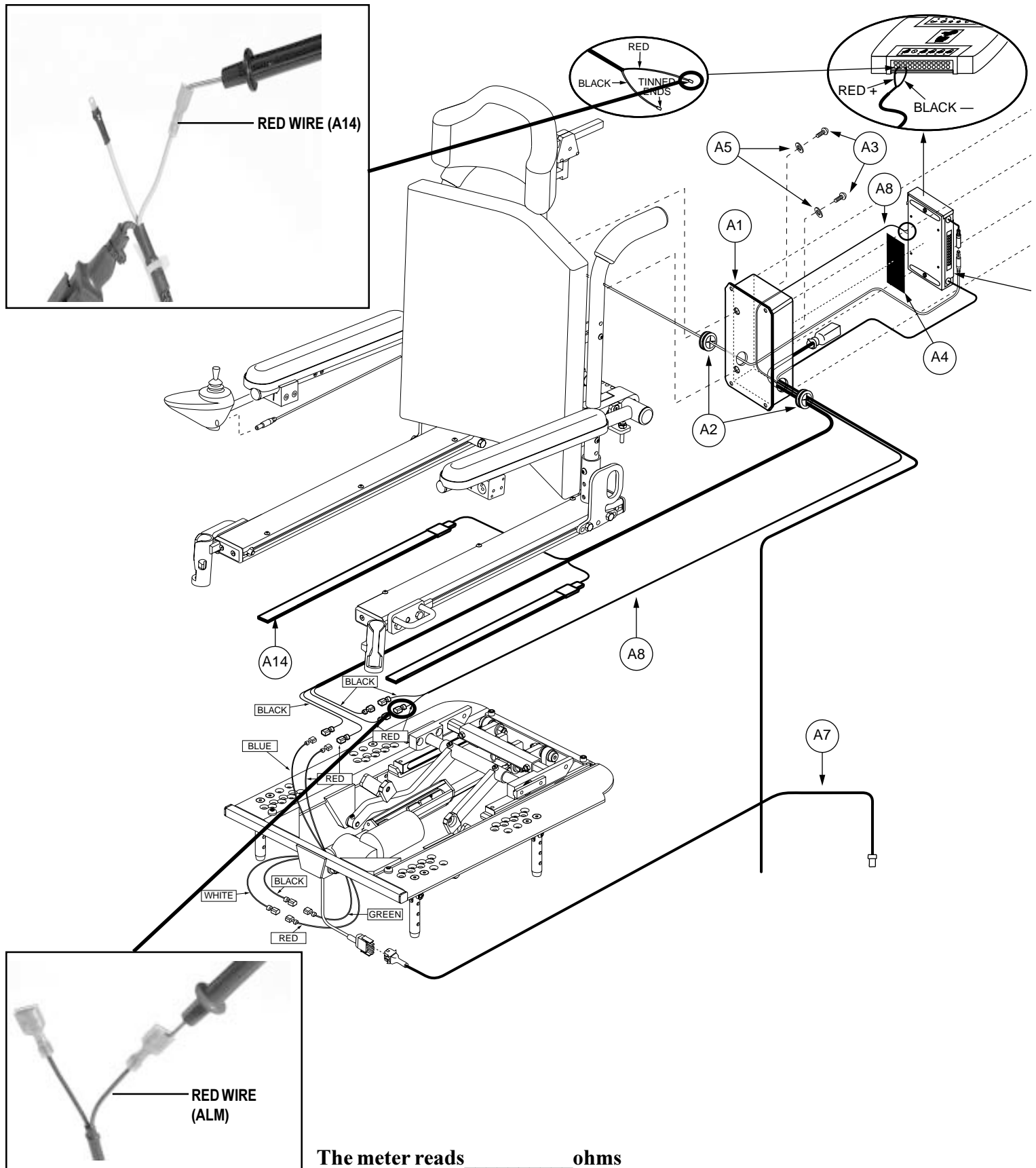


Figure 4.74. ALM Harness/ Red Wire Test

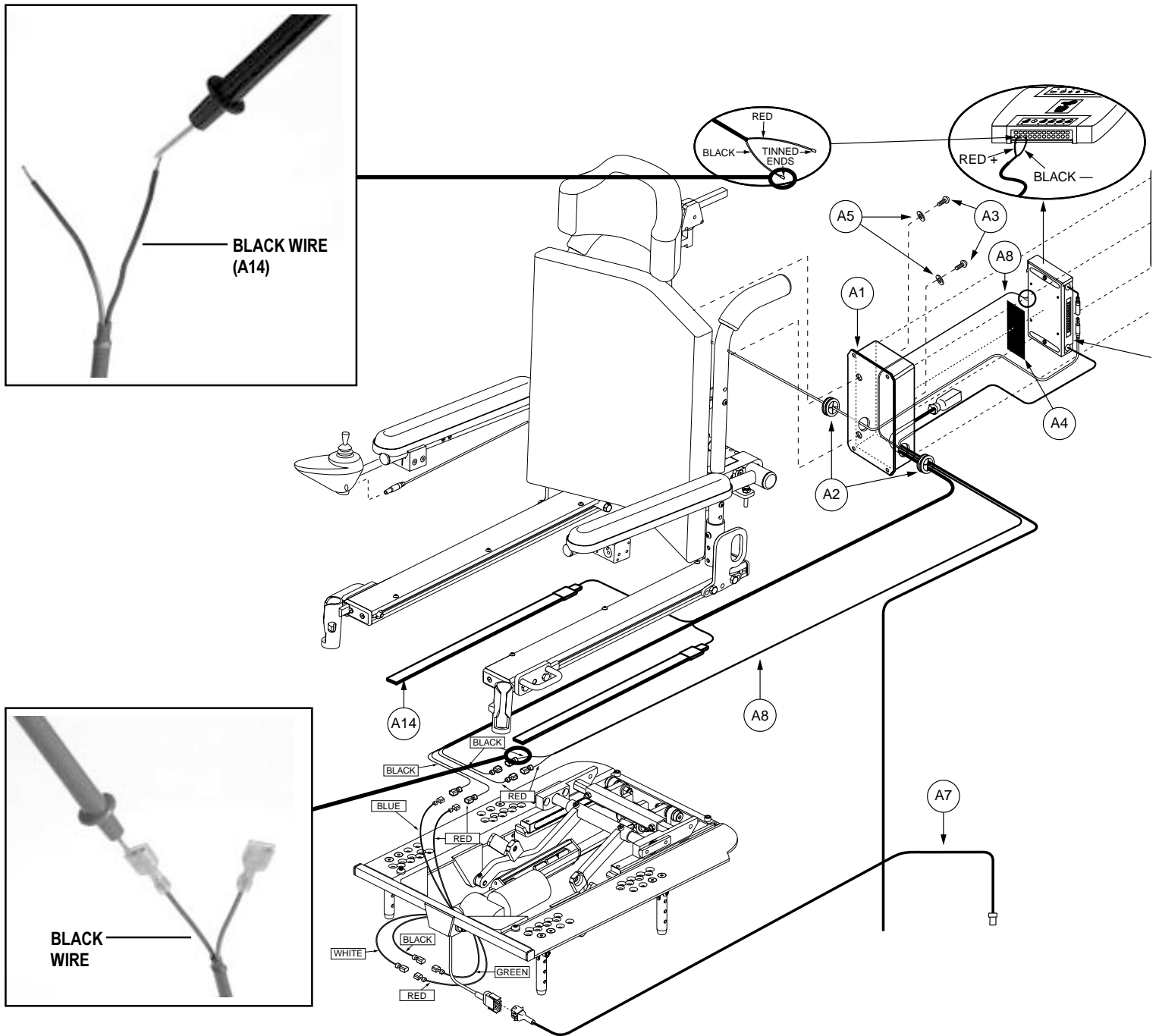


Figure 4.75. ALM Harness/ Black Wire Test

Repeat the same procedure for the black wire, continuity should also be present. See figure 4.75

The meter reads _____ ohms



If no continuity is present on either wire, replace the ALM to actuator harness (A8).

If continuity in the harness is present, reconnect the harness (A8) to the ALM and the other harness (A14). See figure 4.70. Locate and test the UP limit switch in the actuator. It is easiest to check it by removing it from the circuit. Locate the green wire painted black from the actuator motor and disconnect it. Locate the black wire from the ribbon switch assembly with the 1/4-inch female connector and disconnect it. Connect the green wire from the actuator motor to the black wire from the ribbon switch and test the tilt. See figure 4.76.

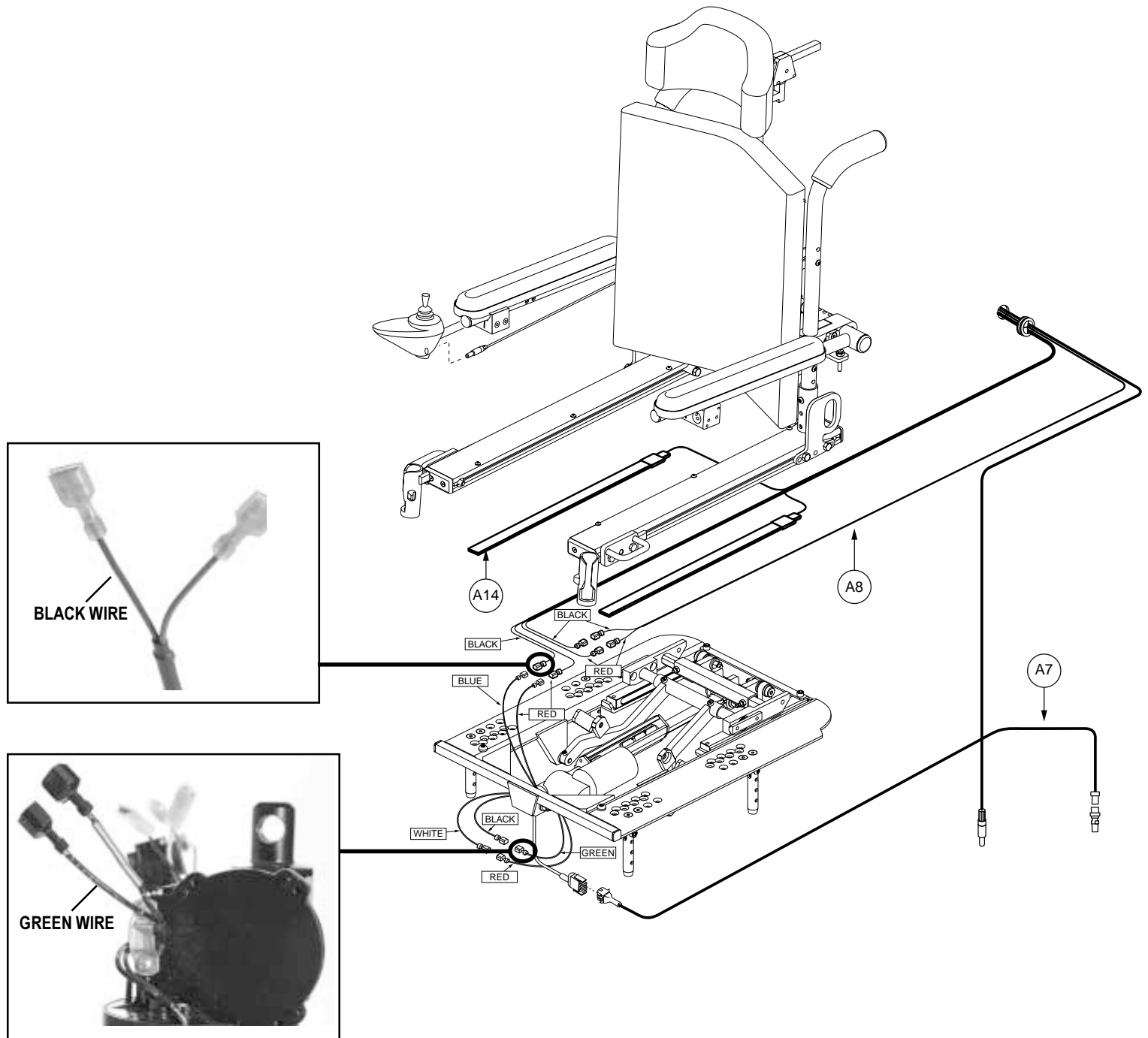


Figure 4.76. UP Limit Switch Test



If the tilt operates, the UP limit is defective. Replace the actuator. If the tilt still does not operate, reconnect the wires and proceed to the next step.

Test the DOWN limit switch in the actuator by removing the switch from the circuit. Locate the red wire painted black from the actuator and disconnect it. Locate the red wire from the ribbon switch assembly with the ¼-inch female connector and disconnect it. Connect the red wire from the actuator motor to the red wire from the ribbon switch and test the tilt. See figure 4.77.

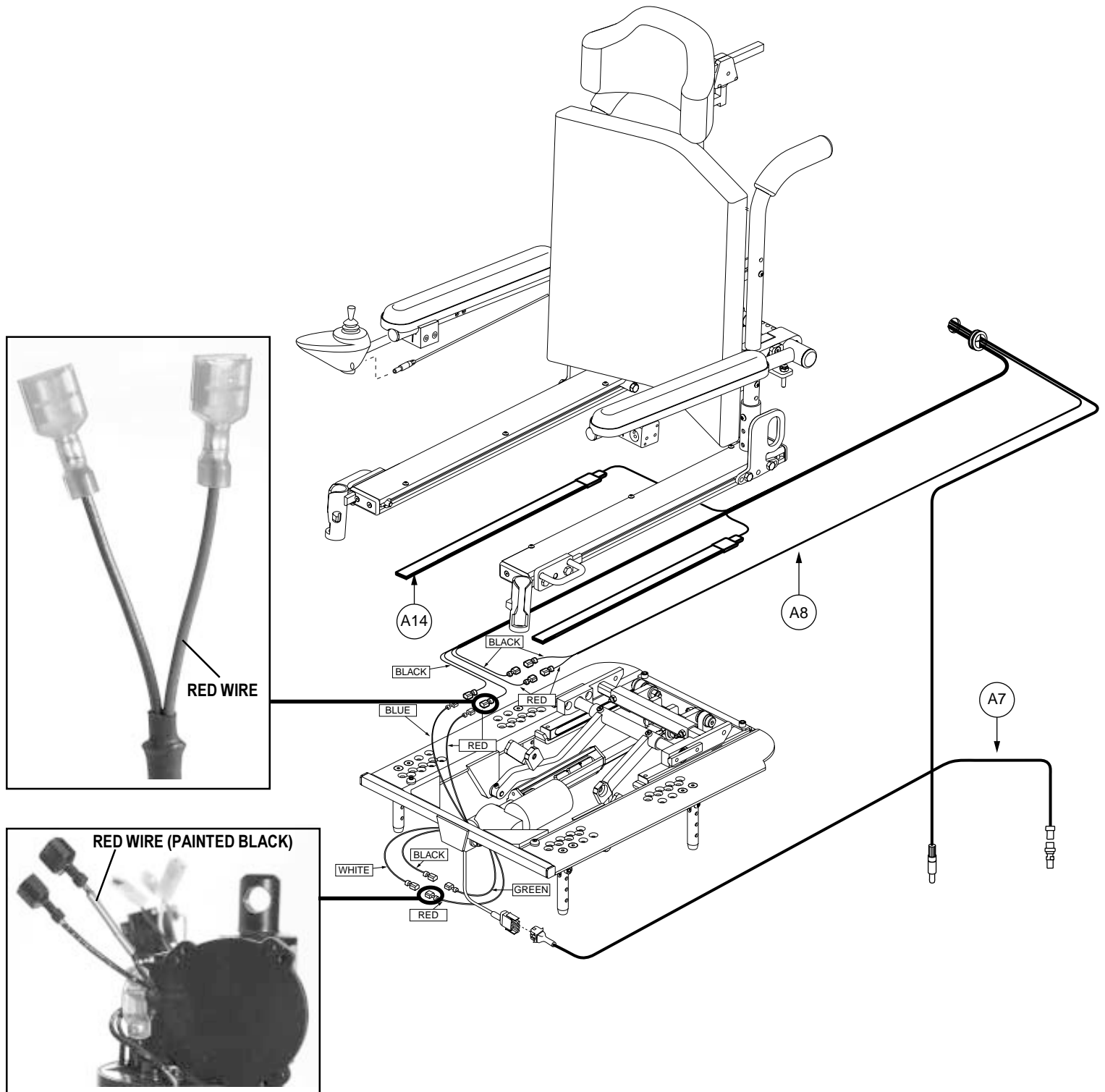


Figure 4.77. DOWN Limit Switch Test



If the tilt operates, the DOWN limit is defective. Replace the actuator. If the tilt still does not operate, reconnect the wires and proceed to the next step.

Test the ribbon switches by removing them from the circuit. Locate the front of the actuator and note the white and black wires leading to the actuator. Disconnect these wires. Connect the red wire from the ALM harness (A8) to the red wire painted black leading to the actuator. Connect the black wire from the ALM to the green wire painted black leading to the actuator. See figure 4.78.

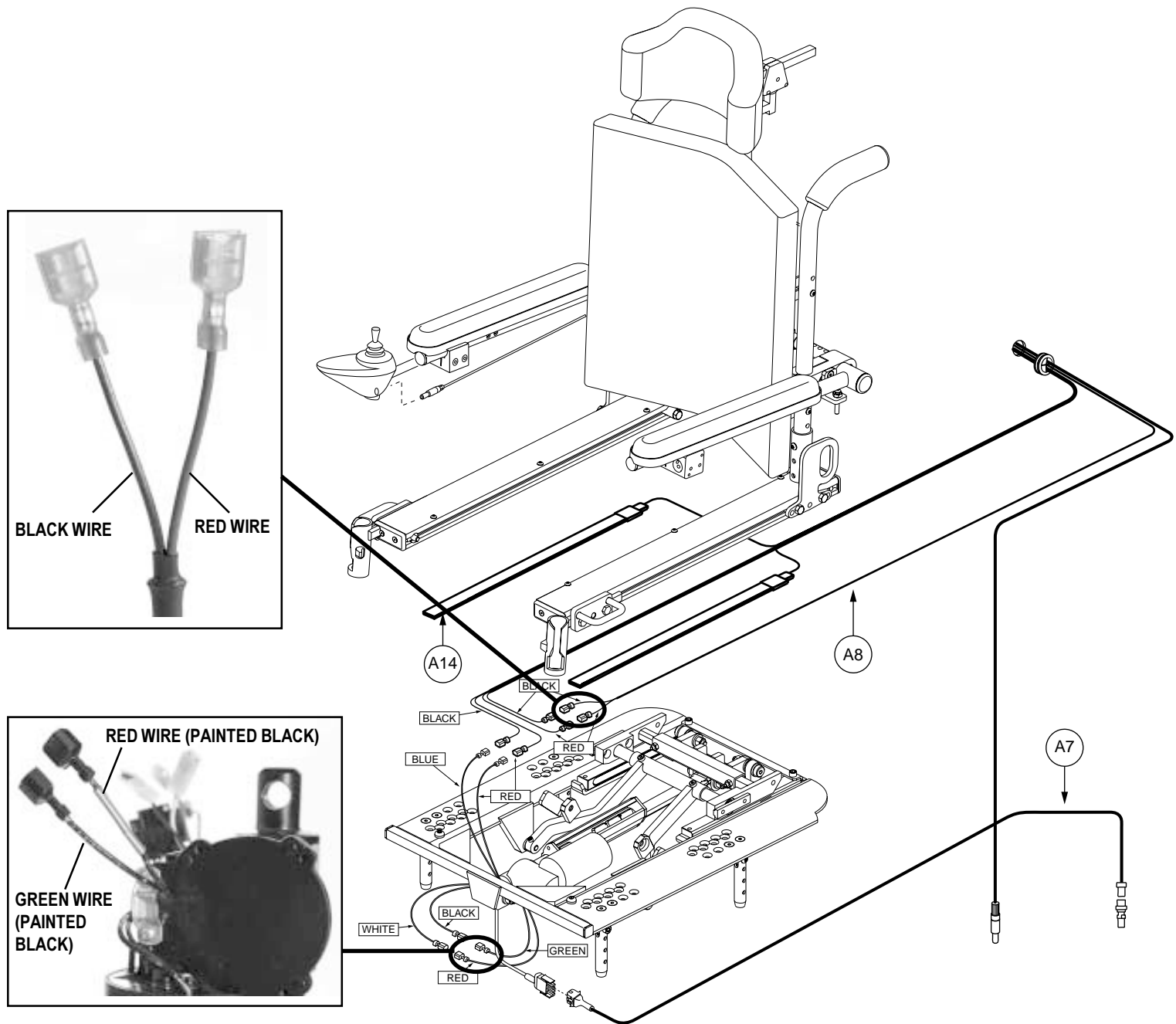


Figure 4.78. Ribbon Switch Test



Test the tilt. If the chair tilts in both the up and down directions, replace the tape switch assembly harness (A14). If all of the previous tests do not correct the problem, replace the ALM.