84CM Wiring and Diagnostics









See 84CM Wiring Diagram above for detailed wiring information.

Note: The Same 12 Wire Colors connected to the Terminal Connector from the Control Cable are the same Color Wires that connect to the Antenna Controller inside the vehicle.

To directly test AZ or EL Motor, remove the Red and Black wires that are connected to the Terminal Connector and attach those wires to a 12 to 24 Volt DC power supply or Utility (Tool) Battery. Reversing the wires to the Power Supply will cause the Motor to run in the opposite direction.

Check that wires related to the failed condition are secured tightly to the Terminal Connector and the wire insulation is not preventing good electrical connection.

To test a Count (Reed) Sensor, remove the 2 black wires attached to the sensor from the Terminal Connector. Unscrew the Sensor from the PVC Gearbox case. Use a Multimeter in Ohms or Beep mode and hold meter leads to Sensor leads. Pass the threaded Sensor end back and forth over the Azimuth Stall Case Center Magnet. If Meter beeps or changes resistance from zero to infinite the Sensor is probably good.

To install the Reed Sensor, thread the sensor in until you feel solid resistance to threading. Back the Sensor back out away from the resistance 1/2 to 1 turn. Tighten the dual hex nuts to keep the sensor in place.



The 6 conductor Skew Cable comes from the AZ-EL Terminal Connector on the Main AZ/EL Base Assembly.

NOTE: Pin 6 Brown wire can also be Orange.

To directly the Skew Motor, remove the Red and Black wires that are connected to the Terminal Connector and attach those wires to a 12 to 24 Volt DC power supply or Utility (Tool) Battery. Reversing the wires to the Power Supply will cause the Motor to run in the opposite direction.

To test the Skew Count (Reed) Sensor, remove the 2 black wires attached to the sensor from the Terminal Connector. Unscrew the Sensor from the PVC Gearbox case. Use a Multimeter in Ohms or Beep mode and hold meter leads to Sensor leads. Pass the threaded Sensor end back and forth over the Azimuth Stall Case Center Magnet located under the AZ/EL Service Cover. If Meter beeps or changes resistance from zero to infinite the Sensor is probably good.

To install the Reed Sensor, thread the sensor in until you feel solid resistance to threading. Back the Sensor back out away from the resistance 1/2 to 1 turn. Tighten the dual hex nuts to keep the sensor in place.





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