Encoder Test 1

Dual Planetary Gear Motor Sync with Control Box 1510000236 or 1510000276

 #82-S0534, Rev. 0C

Read, understand, and follow all instructions in this test before starting.

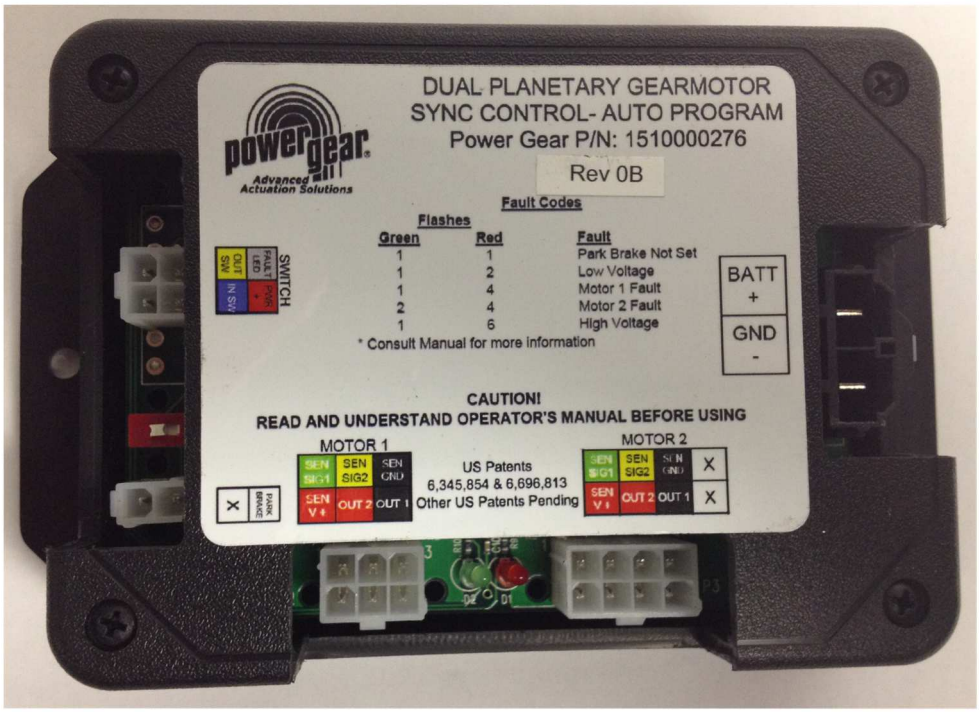
Encoder Test 1 for In-Wall slide out system with Auto- Program control box 1510000236 or 1510000276

Test 1: Use this test only if the slide out room can be moved at least 12" of travel (see manual #3010002813).

1. Write down the number of flashes indicated by the red and green led's on the control box for reference later.
2. Press the wall switch to move the room in or out for 12" of travel or more.

3. If the room will not operate in emergency retract mode, proceed to Test 2 (document number 82-S0535), or contact Power Gear at www.powergearus.com.

Note: All the harnesses need to stay plugged in during this test.



⚠ WARNING

Always make sure that the slide out room path is clear of people and objects before and during operation of the slide out room. Always keep away from the slide out rails when room is being operated. The gear assembly may pinch or catch on loose clothing

⚠ CAUTION

Damage to the room can occur during over travel of the slide out rails. Do not allow rails to become too far out of sync with each other. This will cause the room to bind and may cause damage to the slide out rail.

⚠ WARNING

If the room was moved while the encoder was unplugged, the room stops will need to be reset. Consult the correct manual or TIP Sheet for the proper procedure.

NOTE

Note: All the harnesses need to stay plugged in during this test.

CAUTION

Damage to the room can occur during over travel of the slide out rails. Do not allow rails to become too far out of sync with each other. This will cause the room to bind and may cause damage to the slide out rail.

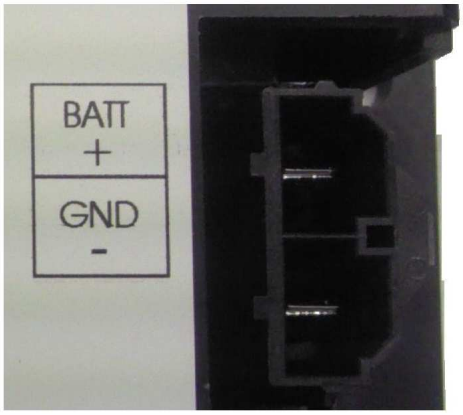
WARNING

If the room was moved while the encoder was unplugged, the room stops will need to be reset. Consult the correct manual or TIP Sheet for the proper procedure

Step 1: Verifying incoming voltage and ground to the control box.
The slide out control main power connector needs a minimum of +12 VDC and a good ground to operate correctly. **This requires the coach engine to be running**. See note to left.
To test the 1510000236 control, back probe the power connector using a multi-meter and check for a minimum of +12 VDC at the main power connection. Probe between the "BATT +" and "GND –" See Figure 1

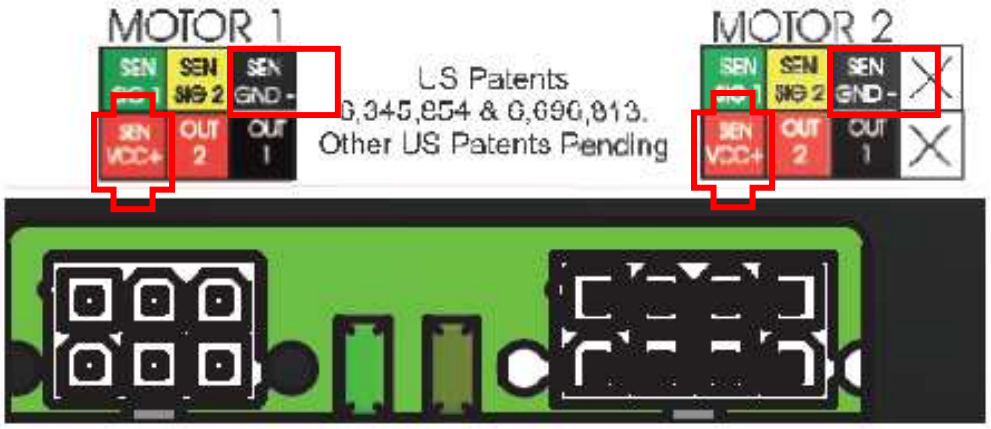
If no power or ground or less than 12 DC Volts is measured between the pins, contact the OEM for the power and ground sources.

Figure 1



Step 2: Verifying the control box is sending power and ground to the encoder. See note to left. Set multi-meter to DC volts, and back probe at the "motor 1" and "motor 2" connectors. To test motor 1 encoder, probe between "SEN-VCC" (power) and "SEN-GND" (ground) at motor 1 connector. To test motor 2 encoder, probe between "SEN-VCC" (power) and "SEN-GND" (ground) at motor 2 connector. This voltage should read 10-12VDC. See Figure 2

Figure 2



NOTE

Note: All the harnesses need to stay plugged in during this test.

WARNING

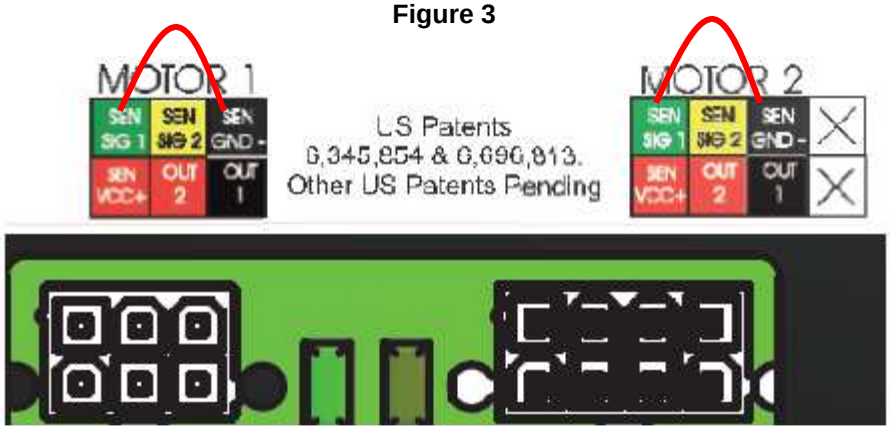
Damage to the slide out can occur during over travel of the slide out. Do not allow the rails to become too far out of sync with each other. This will cause the slide out to bind and may cause damage to the slide out rails.

WARNING

If the slide out was moved while the encoder was unplugged, the room stops will need to be reset. Consult the correct manual or TIP sheet for the proper procedure.

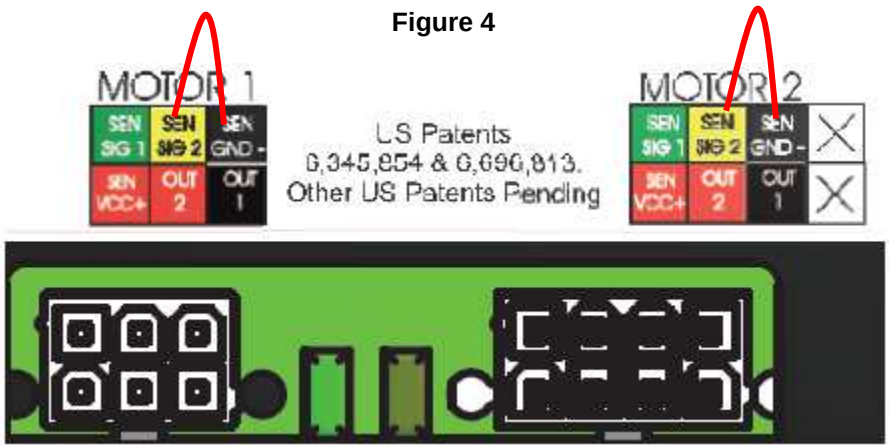
Step 3: Checking the first encoder signal. There are 2 signal wires per encoder. See note to left.
Set multi-meter to AC Volts, and while the room is moving back probe at the controller sensor connection. For the motor 1 encoder, probe between the "SEN-GND" and "SEN SIG 1" at motor 1 connector. For the motor 2 encoder probe between the "SEN -GND" and "SEN SIG 1" at motor 2 connector.
See Figure 3. This should be a steady AC signal. If there is a steady AC Voltage, proceed to step 5.

Figure 3



Step 3 Continued: Checking for the second encoder signal.
Set multi-meter to AC Volts, and while the room is moving, back probe at the controller sensor connection. For motor 1 encoder probe between the "SEN-GND" and "SEN SIG 2" at motor 1 connector. For motor 2 encoder, probe between the "SEN-GND" and "SEN SIG 2" at motor 2 connector. See Figure 4. This should be a steady AC signal. If there is a steady AC Voltage, proceed to step 5.

Figure 4



Step 4: Checking the harness continuity and all connections.
If there is no voltage reading from the encoder or the AC Voltage reading was **NOT** steady, check the following:
A: Check the continuity of the harness between the control box encoder pins and the motor encoder pins. If the harness does not have continuity, then replace the bad wire, or the harness. The harness can also be checked from pin to pin for continuity, and from each pin to ground. There should not be continuity to ground, or pin to pin.

B: Check the connections at the motor and control box. Repair any loose connections or loose pins. If the continuity of all the harness wires tests good, and connections are good, then replace the motor assembly. See the motor label for the Power Gear part number for replacement.

Step 5: If the tests in step 3 show a steady AC Voltage at the controller sensor connection, please contact Power Gear at www.powergearus.com for further diagnostic.

Additional Reference Information located At www.powergearus.com

Document #	Description
3010002813	Owner's manual slim rack in-wall slide out system control box part number 1510000236 or 1510000276
3010002814	Installation and service manual slim rack in-wall slide out system control box 1510000236 or 1510000276
82-S0533	Trouble shooting slide out control box 1510000236 or 1510000276 for in-wall slim rack systems
82-S05535	Encoder test 2 dual planetary gear motor sync control part number 1510000236 or 1510000276