



# Encoder Test 2

Programmable Slide Controllers  
1510000120, 1510000121

Tip Sheet # 82-S0540, Rev. OA June 2013

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## ! 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 the room is being operated. The gear assembly may pinch or catch on loose clothing.

When the encoder is unplugged and the motor shafts moving, the room stops will need to be reset. Consult the correct manual or TIP sheet for the proper procedure.

## ! NOTE

Power Gear will not be liable for excessive labor time required to gain access to Power Gear components.

## ! Warning

12 volt automotive batteries contain sulfuric acid which can cause severe burns. Avoid contact with the skin, eyes and clothing. 12 volt automotive batteries produce hydrogen gas which is explosive; keep cigarettes, open flames and sparks away from the battery at all times.



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

**Test 2:** This is to be used when the slide-out room will not operate normally with the wall switch or if the room is already retracted in and the emergency retract mode (see owner's manual # 3010001346 for emergency retract mode) cannot be performed. If the room will operate with the wall switch or the room is extended and the emergency retract mode can be performed, proceed to Test 1 (Document # 82-S0539), available on our website at [www.lci1.com](http://www.lci1.com).

### Fault Code: Code 8, 9, or 10 on control 1510000120

#### 4 Wire Internal Encoder Testing

Means no signal on sensor wire. On the wall switch, the Green LED flashes to identify which encoder is in fault (see owner's manual 3010001346)

### Fault Code: Code 8, 9, or 10 on control 1510000121

#### 4 Wire Internal Encoder Testing

Means no signal on sensor wire. On the wall switch, the Green LED flashes to identify which encoder is in fault (see owner's manual 3010001346)



Internal Encoder

### **STEP 1: Removing the Motor/Encoder Assembly from the rail assembly.**

**NOTE:** Depending on the accessibility, it may be necessary to remove the entire rail assembly from the coach.

For questions on supporting the room or accessing the rail assembly, contact the OEM.

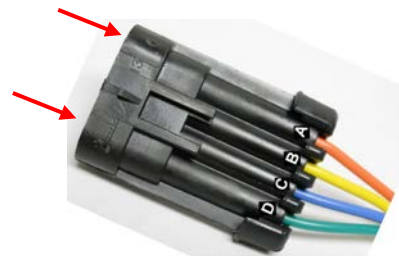


Figure 1

### **STEP 2: Applying 12VDC and Ground to the Motor Plug and to the Encoder Plug.**

Using a fully charged +12V DC battery: Apply 12V DC to the Encoder Plug labeled "A".

Apply a good Ground to the encoder plug labeled "D".

**See Figure 1.** This will provide power to the encoder.

Using a multi-meter, back probe between Pin A and Pin D at the Encoder Plug to verify there is 12V DC and Ground going to the encoder. **See Figure 2.**

Apply 12V DC to the Motor Plug on the red wire. Apply a good Ground to the Motor Plug on the black wire. This will provide power to the motor and will cause it to operate.

**Caution: The motor shaft will turn when the motor is operating.**

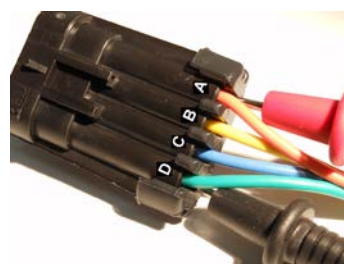


Figure 2

## ! 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 the room is being operated. The gear assembly may pinch or catch on loose clothing.

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### STEP 3: Checking for the encoder signal.

Using a multi-meter set on AC Volts, back probe between Pin "D" and Pin "B" at the Encoder Connector. **See Figure 3** Check for a steady AC voltage reading.

Using a multi-meter set on AC Volts, back probe between Pin "D" and Pin "C" at the Encoder Connector. **See Figure 4** Check for a steady AC voltage reading.

If there is a steady AC voltage, proceed to **Step 4**.

If there is NOT a steady AC voltage reading, or there is no voltage reading, replace the motor assembly. See the motor label or the rail assembly label for the Power Gear part number for replacement.

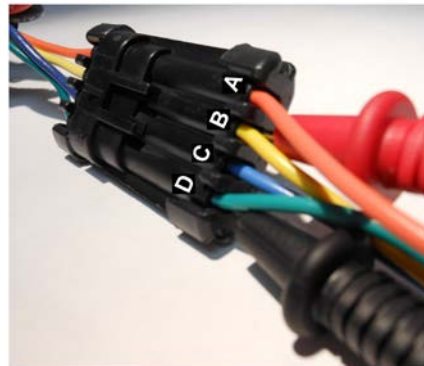


Figure 3 Encoder Plug

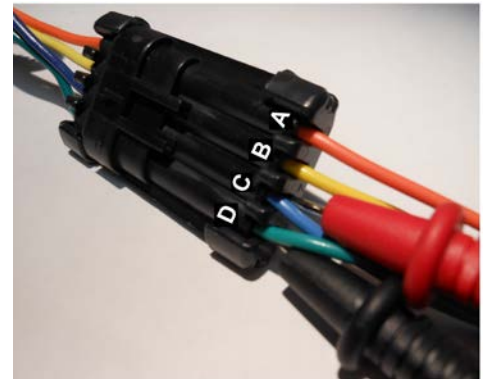


Figure 4 Encoder Plug

**Step 4:** If the test in STEP 3 showed a steady AC Voltage at the Encoder Connector, contact Lippert Components Technical Service at [www.lci1.com](http://www.lci1.com) for further diagnostic before proceeding.

## Additional Reference Publication located at [www.lci1.com](http://www.lci1.com)

Document #	Description:
3010001346	Owner's Manual Slide-Out Room for Slide-Out Control boxes 1510000120, 1510000121
3010001345	Installation and Service Manual for Slide-Out Room Systems With Control Box 1510000120, 1510000121
82-S0539	Encoder Test 1 Programmable Slide-Out Controllers 1510000120, 1510000121