Encoder Test 2:

FLS/RPE Controllers: 151000151, 151000152, 151000180, 907202015

 #82-S0520, Rev. 0B 06/13

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.

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.

NOTE

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

Warranty Labor Guidelines

For Linear Actuator Assy:
Diagnostic Time: .30hrs
Repair Time: 2.00hrs

For the Encoder Only:
Diagnostic Time: .30hrs
Repair Time: 1.00hrs

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 override procedure (see owner's manual # 3010002129 for override procedure) cannot be performed**.** If the room will operate with the wall switch or the room is extended and the override procedure can be performed, proceed to Test 1 (Document # 82-S0517) available on our website at www.lci1.com**.**

1510000151, 151000152 and 1510000180 3 Wire Internal Encoder Test for the following Fault Codes: Code 5 Means No Signal on Sensor Wire. On the wall switch, the Green "Room Movement" LED flashes to identify which Encoder is in fault (See owner's manual 3010002129). Follow these steps to test the specific encoder (front or rear).

Figure 1 Linear Actuator Assembly

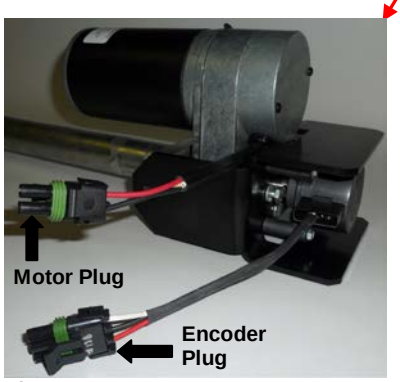

Figure 1A

Motor Plug

Encoder Plug

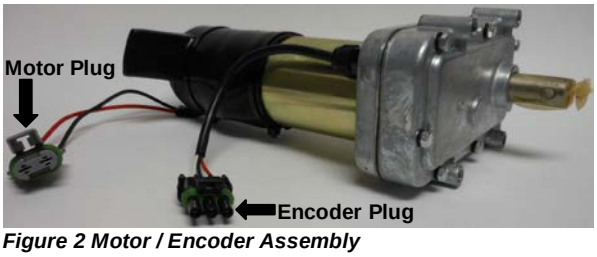

Figure 2 Motor / Encoder Assembly

Motor Plug

Encoder Plug

STEP 1: Removing the Motor/Encoder Assembly, or removing the Linear Actuator Assembly from the rail assembly.

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

Remove the Linear Actuator Assembly ***(Figure 1)*** from the rail assembly.

Remove the Motor/Encoder Assembly ***(Figure 2)*** from the rail assembly.

For a Linear Actuator ***(Figure 1)*** that is not able to be removed from the rail: Remove the complete rail assembly from the coach. The room must be extended 12". If the room is not extended the 12", the motors can be operated with 12V DC and Ground applied to each pin of the Motor Plug from a separate battery.

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

If Step 1 is not able to be completed, or there are questions, locate the rail assembly part number on the Power Gear label and contact Power Gear.

WARNING

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

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.

CAUTION

Always keep clear of the Linear Actuator Assembly when it is being operated. It may pinch or catch on loose clothing causing personal injury.

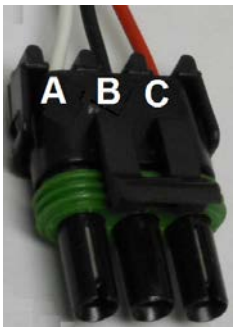

Figure 3 Encoder Plug

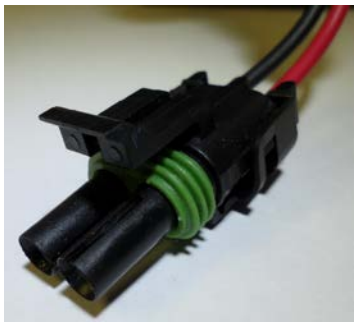

Figure 4 Motor Plug Linear Actuator Only

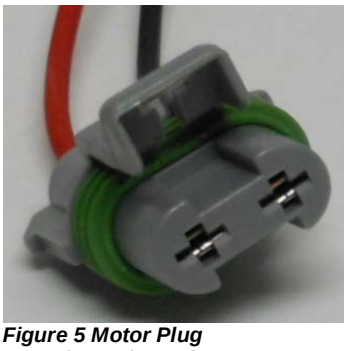

Figure 5 Motor Plug Motor/Encoder Only

STEP 2: Applying 12V DC and Ground to the Motor Plug and to the Encoder Plug.

This applies to either the Linear Actuator Assembly or to the Motor/Encoder Assembly.

Using a fully charged +12V DC battery:
Apply 12V DC to the Encoder Plug labeled C (Red wire).
Apply a good Ground to the encoder plug labeled B (Black wire).
See Figure 3. This will provide power to the encoder.

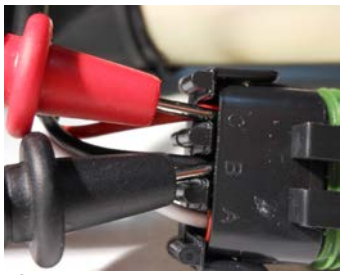

Figure 6

Using a multi-meter, back probe between Pin B and Pin C at the Encoder Plug to verify there is 12V DC and Ground going to the encoder. ***See Figure 6***.

Apply 12V DC to the Motor Plug on the red wire. Apply a good Ground to the Motor Plug on the black wire. ***See Figure 4 (Linear Actuator) or Figure 5 (Motor/Encoder Assy.)*** This will provide power to the motor and will cause it to operate. ***Caution: The motor shaft will turn when the motor is operating.***

Caution: The Linear Actuator outside tube may also turn, keep clear as it may pinch or catch on loose clothing causing personal injury.

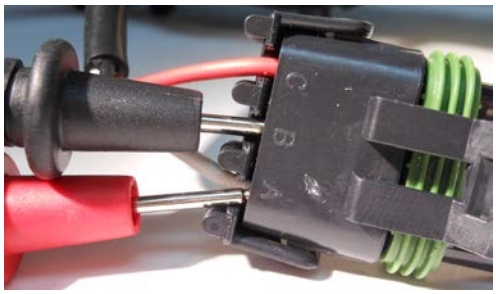

Figure 7 Encoder Connector

STEP 3: Checking for the encoder signal.

Using a multi-meter set on AC Volts, back probe between Pin A and Pin B at the Encoder Connector. ***See Figure 7***. 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 encoder assembly. See the motor label or the rail assembly label for the Power Gear part number for replacement.

Step 4: If the test in STEP 3 showed a steady AC Voltage at the Encoder Connector, contact Power Gear Technical Serviced at www.powergearus.com for further diagnostic before proceeding.

Additional reference Publication located at www.lci1.com

Document #	Description:
82-S0517	Encoder Test 1 FLS / RPE controllers: 1510000151, 1510000152, 1510000180 and 907202015
3010002129	FLS / RPE Digi Sync Operation Manual