Encoder Test 1

FLS/RPE Controllers:
1510000151, 1510000152
And 1510000180

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

This test will require two people, one to operate the wall switch and one to check at the control box for voltage readings.

NOTE

The motors need to move the rails at least 12" to take readings from the encoders.

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.

Test 1: Use this test if the slide-out room is fully extended and the room can be retracted using the override mode, see page 3 for override procedures. If the room is not extended, or will not operate in override mode, proceed to Test 2 or contact Power Gear Technical Service at www.lci1.com. **NOTE: All the harnesses need to stay plugged in during this test.**

1510000151 and 1510000180 3 Wire Internal Encoder Testing for the following Fault Code: Code 5 Means No Signal on Sensor Wire. On the wall switch, th e 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).**

Main Power Connection

Figure 1

Controller Sensor Connection

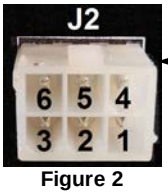


Figure 2

1510000151 or 1510000180 Control Box

STEP 1: Verifying incoming voltage and ground to the control box. The slide-out control main pow er connector needs +12 VDC and a good ground to operate correctly. **This requires the coach engine to be running.** Using a multi-meter check for +12VDC at Main Power Connection bet ween the following. For the Front Encoder probe between P1 (12VDC) & P2 (Ground). For the Rear Encoder probe between P3 (Ground) & P4 (12VDC). ***See Figure 1.*** **If no voltage or ground is measured between the pins, contact the OEM for power and ground sources.**

STEP 2: Verifying the control box is sending power and ground to the encoder.
Set multi-meter to DC Volts, and while the room is moving, back probe at the Controller Sensor Connection. ***See Note in Test 1 to the left.***
For the Front Encoder probe between Pin 1 (12VDC) & pin 3 (Ground). ***See Figure 2.***
For the Rear Encoder probe between Pin 4 (12VDC) & pin 6 (Ground). ***See Figure 2***.
This should read 5-7 Volts DC.

STEP 3: Checking for the Encoder Signal.
Set multi-meter to AC Volts, and while the room is moving, back probe at the Controller Sensor Connection. For the Front Encoder probe between pin 2 (Signal) and pin 3 (Ground). For the Rear Encoder probe between pin 5 (Signal) and pin 6 (Ground). ***See Figure 2.***
This should read as a steady AC Voltage. If there is a steady AC Voltage, proceed to ***STEP 5***.

STEP 4: Checking harness continuity and all connections.
If there was no voltage reading from the encoder or the AC Voltage reading was **NOT** steady check the following:
A: Check continuity of the harness between the controller 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 or 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 the harness 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 Technical Service at www.lci1.com for further diagnostic.

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.

This test will require two people, one to operate the wall switch and one to check at the control box for voltage readings.

NOTE

The motors need to move the rails at least 12" to take readings from the encoders.

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.

Test 1: Use this test if the slide-out room is fully extended and the room can be retracted using the override mode, see page 3 for override procedures**.** If the room is not extended, or will not operate in override mode, proceed to Test 2 or contact Power Gear Technical Service at www.lci1.com. **NOTE: All the harnesses need to stay plugged in during this test.**

1510000152 3 Wire Internal Encoder Testing for the following Fault Code: 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).**

Main power Connection

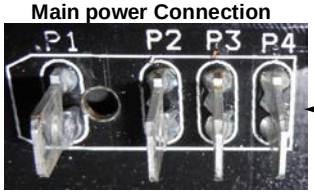


Figure 1

Controller Sensor Connection

Figure 2

1510000152 Control Box

STEP 1: Verifying incoming voltage and ground to the control box. The slide-out control main power connector needs +12 VDC and a good ground to operate correctly. **This requires the coach engine to be running**. Using a multi-meter check for +12VDC at Main Power Connection between the following. For the Front Encoder probe between P1 (12VDC) & P2 (Ground). For the Rear Encoder probe between P3 (Ground) & P4 (12VDC). ***See Figure 1***. **If no voltage or ground is measured between the pins, contact the OEM for power and ground sources.**

STEP 2: Verifying the control box is sending power and ground to the encoder.
Set multi-meter to DC Volts, and while the room is moving, back probe at the Controller Sensor Connection. ***See Note in Test 1 to the left.***
For the Front Encoder probe between Pin 1 (12VDC) & pin 3 (Ground). **See Figure 2.**
For the Rear Encoder probe between Pin 4 (12VDC) & pin 6 (Ground). **See Figure 2.**
This should read 5-7 Volts DC.

STEP 3: Checking for the Encoder Signal.
Set multi-meter to AC Volts, and while the room is moving, back probe at the Controller Sensor Connection. For the Front Encoder probe between pin 2 (Signal) and pin 3 (Ground). For the Rear Encoder probe between pin 5 (Signal) and pin 6 (Ground). **See Figure 2.**
This should read as a steady AC Voltage. If there is a steady AC Voltage, proceed to **STEP 5.**

STEP 4: Checking harness continuity and all connections.
If there was no voltage reading from the encoder or the AC Voltage reading was **NOT** steady check the following:
A: Check continuity of the harness between the controller 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 or 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 the harness tests good and connections are good, then replace the motor assembly. See the motor label for the Power Gear part number for replacement.

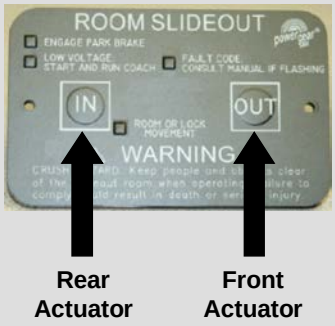
STEP 5: If the tests in STEP 3 show a steady AC Voltage at the Controller Sensor Connection, please contact Power Gear Technical Service at www.lci1.com for further diagnostic.

NOTE

Manual Mode and corresponding Actuator 1 & 2 locations:

Retract Rear Actuator: In Button

Retract Front Actuator: Out Button



Rear Actuator **Front Actuator**

Manual Mode Override Procedure

This override procedure can only be used if there is not a motor failure. If there is, proceed to Test 2.

Manual mode permits the operator to individually retract the two room arms by pressing the IN and OUT buttons on the touch pad. To override the sensor and enter the Manual Mode, press and hold the Set Stops/Clear Fault button (**See Figure 1**) for approximately 5 seconds until the two upper left-hand red LEDs (Park Brake and Low Voltage) begin to flash.

While in Manual Mode each of the two room slide arms are activated by pressing and holding the IN and OUT buttons. One button will retract the front arm (See Note to the left) and the other will retract the rear arm (See Note to the left). Both IN and OUT buttons may be held down at the same time to simultaneously activate both arms to retract the room. If one side of the room gets ahead of the other, release that button until the other arm catches up. The current limiting feature of the control still functions in the Manual Mode so each side can be fully retracted until it stops.

Once the room has been retracted the control will return to the automatic mode after 60 seconds. You can manually return to automatic mode by pressing and holding the Set Stops/Clear Faults button for approximately 1 second, then releasing then the two upper left-hand red LED's (Park Brake and Low Voltage) stop flashing.

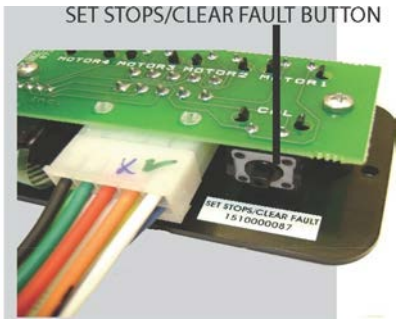


Figure 1

Additional reference Publication located at www.lci1.com

Document #	Description:
82-S0520	Encoder Test 2 FLS / RPE controllers: 1510000151, 1510000152, 1510000180 and 907202015
3010002129	FLS / RPE Digi Sync Operation Manual