

# SLIMRACK® AUTO-PROGRAMMABLE SLIDE-OUT OWNERS MANUAL

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#### Introduction

The Lippert SlimRack® Slide-Out system maximizes interior RV space by providing added comfort and offering a practical solution for additional space needs. The Lippert SlimRack Slide-Out system combines versatile above-floor placement with attractive, seamless flush-floor style for a sleek, polished, high-end look with no step up.

Additional information about this product can be obtained from lci1.com/support or by downloading the free LippertNOW app. The app is available on Apple App Store® for iPhone® and iPad® and also on Google Play™ for Android™ users.

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## Safety

# **AWARNING**

The "WARNING" symbol above is a sign that an procedure has a safety risk involved and may cause death or serious injury if not performed safely and within the parameters set forth in this manual. Always wear eye protection when performing this procedure. Other safety equipment to consider would be hearing protection, gloves, and possibly a full face shield, depending on the nature of the procedure.

# **AWARNING**

Always make sure that the slide-out room path is clear of people and objects before and during operation of the slide-out. Always keep away from the gear racks when the slide-out room is being operated. Obstructions in the slide-out room's path can cause serious personal injury, severe product or property damage.

# **A** CAUTION

Moving parts can pinch, crush or cut. Keep clear and use caution.

# **A** CAUTION

When manually retracting the slide-out room, make sure that both sides of the slide-out room move together. Damage to the slide-out room may result if movement is not uniform.

## **Operation**

#### Prior to Moving the Slide-Out Room

- 1. Make sure the engine or generator is running to ensure ample voltage is being supplied to the slide-out controller.
- **2.** Set the parking brake if applicable.

## **Extending the Slide-Out Room**

- 1. The engine or generator must be running, or unit must be plugged into shore power.
- **2.** Transmission must be in park or neutral (if applicable).
- **3.** If applicable, set the park brake and level the unit.
- **4.** If equipped, remove transit bar.
- **5.** If equipped, turn "on" the on/off switch or key.
- **6.** Press and hold the OUT button (Fig. 1A). There will be a slight delay before the slide-out room will begin to move. This is normal.
- 7. Release the button when the slide-out room is fully extended and stops moving.

**NOTE:** Once the room has stopped moving, it is not necessary to press the switch a second time.

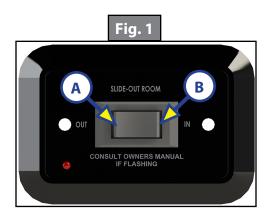
**8.** If equipped, turn "off" the on/off switch or key.

#### Retracting the Slide-Out Room

- 1. The engine or generator must be running, or the unit must be plugged into the shore power.
- **2.** Transmission must be in park or neutral (if applicable).
- **3.** If applicable, set the park brake and level the unit.
- **4.** If equipped, turn "on" the on/off switch or key.
- **5.** Press and hold the IN button (Fig. 1B). There will be a slight delay before the slide-out room will begin to move. This is normal.
- **6.** Release the button when the slide-out room is fully retracted and stops moving.

**NOTE:** Once the room has stopped moving, it is not necessary to press the switch a second time.

- **7.** If equipped, turn "off" the on/off switch or key.
- **8.** If equipped, install transit bar.



# **Troubleshooting**

Auto-programmable controllers, 1510000236 / 366701, 697096, 700156, which connect to a rocker switch, have the ability to detect and display several faults. When a fault is detected, the slide-out room movement may stop and two different LEDs on the controller will flash in a pattern.

**NOTE:** Not all rocker switches contain fault indicator LEDs. For best results when reading fault codes, refer to the controller's Fault Code LED scheme and Auto-Programmable Controllers Fault Codes table.

1. The Fault Code LED on the rocker switch (Fig. 2A) will flash RED a number of times corresponding to the number of red flashes on the controller (Fig. 3A, 4A, and 5A).

**NOTE:** Refer to the Fault Code Tables for the controller of the unit to best determine what caused the fault.

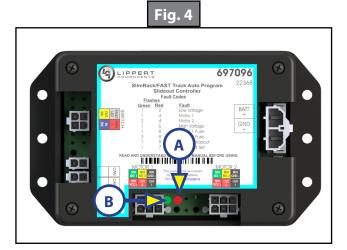
2. The Motor LEDs (Fig. 3B, 4B, and 5B) on the controller will flash GREEN a number of times corresponding to which motor had the associated fault. For example, two GREEN flashes and four RED flashes means there is a motor fault on Motor 2.

**NOTE:** For major faults, the controller will automatically enter "Emergency Jog" mode when motor movement is not detected by the controller in either direction during slide-out room activation. When in "Emergency Jog" mode, the controller will jog both motors in the direction the rocker switch is pressed (IN or OUT). The rocker switch may need to be pressed multiple times to fully retract or extend the slide-out room. Take the unit to an OEM-authorized dealer for service.

The controller will return to normal operation mode after five minutes of inactivity or by cycling the power to the controller.









# Fault Code Table - Auto-Programmable Controllers 1510000236/366701 or 1510000276/366703

Flashes		- L.T.		14/1 2	
Green	Red	Fault Type	Description	Why?	What Should Be Done?
1	1	Minor	Park brake not set	Parking brake (if applicable) is not set.	Set parking brake (if applicable).
				Ground signal is lost at parking brake receptacle at control box.	Check for continuity to ground on wire plugged into parking brake receptacle at control box.
1	2	Minor	Low voltage	Incoming voltage to control is below 12V DC. The room will not move if the voltage is 10.5V DC or below.	Start vehicle, generator, or make sure the unit is plugged in to shore power. Check 2-pin power connector at the control box at BATT + and GND. Consult manufacturer of unit charging system for troubleshooting assistance.
1	4	Major	Motor 1 fault	Bad wire connection.	Refer to Technical Information Sheets: Troubleshooting Control Box for SlimRack Systems 82-S0533. If necessary, copy and paste or type the following path into a browser; https:// www.lci1.com/slide-outs-/support- slimrack then look for the specified document among the listing.
				Bad motor.	
2	4	Major	Motor 2 fault	Bad wire connection.	
				Bad motor.	
1	6	Minor	High voltage	Supply voltage to control box is 17V DC or greater.	Consult manufacturer of unit charging system for troubleshooting assistance.

# Fault Code Table - Auto-Programmable Controllers 697096/700156

				097090/700130	
Flas Green	shes Red	Fault Type	Description	Why?	What Should Be Done?
1	1	Minor	Park brake not set (700156 only)	Parking brake (if applicable) is not set.	Set parking brake (if applicable).
				Ground signal is lost at parking brake receptacle at control box.	Check for continuity to ground on wire plugged into parking brake receptacle at control box.
1	2	Minor	Low voltage	Incoming voltage to control is below 12V DC. The room will not move if the voltage is 10.5V DC or below.	Start vehicle, generator, or make sure the unit is plugged in to shore power. Check 2-pin power connector at the control box at BATT + and GND. Consult manufacturer of unit charging system for troubleshooting assistance.
	4	Major	Motor 1 fault	Bad wire connection.	Refer to Technical Information Sheets: Troubleshooting Control Box for SlimRack Systems 82-S0533. If necessary, copy and paste or type the following path into a browser; https://www.lci1. com/slide-outs-/support-slimrack then look for the specified document among the listing.
2				Bad motor.	
	2 Majo			Bad wire connection.	
2		Major	Motor 2 fault	Bad motor.	
1	6	Minor	High voltage	Supply voltage to control box is 17V DC or greater.	Consult manufacturer of unit charging system for troubleshooting assistance.
1	7	Major	Stops	<ul><li> Stops have not been set</li><li> Stops were cleared</li><li> Stops were improperly set</li></ul>	Stops need to be programmed according to the programing instructions in this document.
1	8	Major	Fuse	Motor fuse concern	Contact Lippert Representative
1	9	Major	Battery Dropout	Battery dropped below 8.5V while extending or retracting slides.	Charge battery, start vehicle, generator, or make sure unit is plugged into shore power.

#### **Electrical Override Modes**



During this procedure, the slide-out room has NO stop locations. Use another person to assist in determining when the slide-out room is retracted. Damage to the slide-out room can occur if the slide-out room is retracted too far.

# **A** CAUTION

Moving parts can pinch, crush or cut. Keep clear and use caution.

For major faults, controllers 1510000236 / 366701,697096, 700156 and 1510000276 / 366703 will automatically enter "Emergency Jog" mode when motor movement is not detected by the controller, in either direction, during slide-out activation. When in Emergency Jog mode, the controller will jog both motors in the direction the switch is pressed (IN or OUT). The switch may need to be pressed multiple times to fully retract or extend the slide-out. Take the unit to an OEM-authorized dealer for service.

**NOTE:** At any time during the override procedure, the unit will exit override mode if the slide-out has not been moved for five minutes. The controller will return to normal operation mode after five minutes of inactivity or by cycling power to the controller.

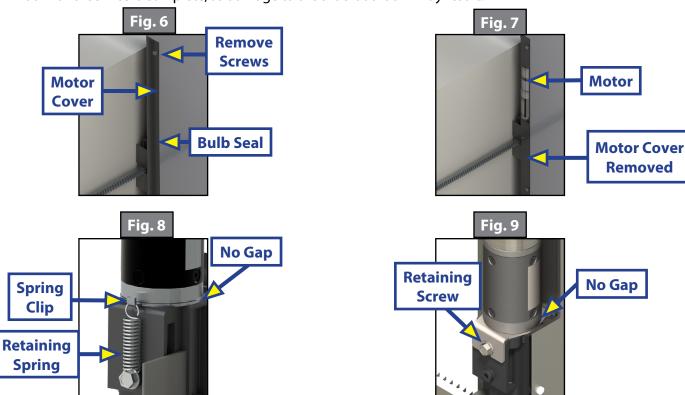
#### **Manual Override Mode**

In the event that power is lost to the slide-out motor(s) or when the Electrical Override Mode does not work, the slide-out room can be manually retracted by following these steps.

# **A** CAUTION

When manually retracting the slide-out room, make sure that both sides of the slide-out room move together. Damage to the slide-out room may result if movement is not uniform.

- 1. Gain access from either the inside or outside of the unit to the vertical channel assembly by removing the OEM trim and flange pieces on the slide-out room box. The motors (Fig. 7) are currently located at the top of the channel.
- 2. If applicable, use a Phillips head screwdriver to remove the top screw from the bulb seal at the top of the vertical channel (Fig. 6).
- **3.** Pull down the bulb seal (Fig. 6) and remove the motor cover (Fig. 6). The motor cover may stick to the bulb seal.
- **4.** If there is a retaining spring (Fig. 8), use a pick tool to remove the end of the retaining spring from the motor spring clip. Do not remove the retaining spring screw.
- 5. If not equipped with a retaining spring, use a 5/16" open-ended wrench or ratcheting box wrench to loosen the motor retaining screw (Fig. 9) one to two rotations. Do not remove the motor retaining screw.
- **6.** Unplug the motor from the harness and remove the motor by lifting it up and out of the column.
- **7.** Repeat steps 1-6 for the other side.
- **8.** Push the slide-out room uniformly into the retracted position.
- **9.** Once the slide-out room is retracted, secure the slide-out room in-place by:
  - **A.** Re-installing the motors. If there is a retaining spring, make sure the end of the retaining spring is re-hooked to the motor spring clip (Fig. 8).
  - **B.** Torquing the motor retaining screw to 40 in-lbs (Fig. 9) with the motor retainer fully engaged.
  - **C.** Using a transit bar (slide-out locking bar). Make sure motor is properly seated with no gap between the mounting bracket and block (Figs. 8 and 9).
- **10.** Have the slide-out room serviced by the OEM-authorized dealer as soon as possible. Do not operate slide-out room until service is complete, as damage to the slide-out room may result.



#### **Alternate Override Modes**

If none of the previous override methods retract the slide-out room, it may be possible to manually retract the slide-out room by one of the following alternate methods. Both of these procedures will only be possible if there is access to the described areas.

- 1. Manually retract the slide-out room using a ratchet and socket attached to the end of the coupler (Fig. 10A) to move the slide-out room.
  - **A.** Remove the motor. Follow steps 1-6 under the Manual Override Mode section.

# **A** CAUTION

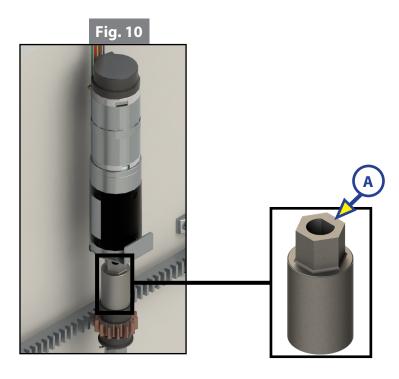
When manually retracting the slide-out room, make sure that both sides of the slide-out room move together. Damage to the slide-out room may result if movement is not uniform.

# **A** CAUTION

Moving parts can pinch, crush or cut. Keep clear and use caution.

- **B.** Place a ratcheting wrench with a 3" extension and  $\frac{5}{8}$ " deep well socket through the motor access opening and seat the socket onto the coupler (Fig. 10A).
- **C.** Using the ratcheting wrench with socket, and alternating from one side to the other, turn the wrench to retract the slide-out room.

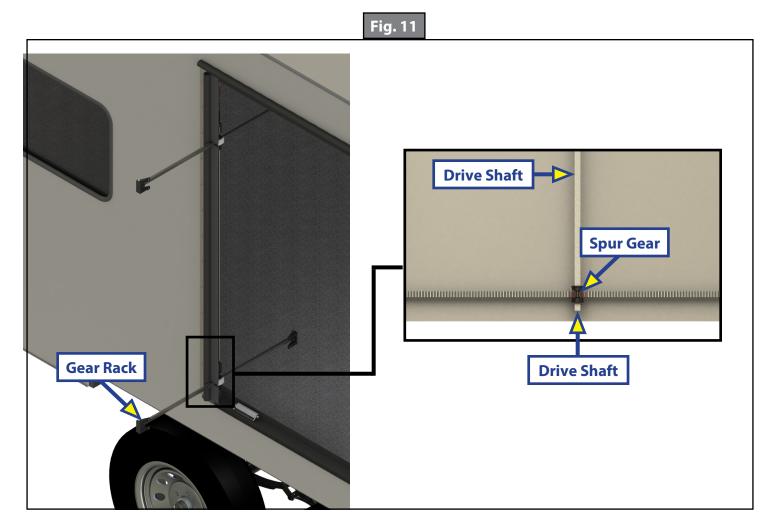
**NOTE:** One person per side of the slide-out room (two total) with ratcheting wrench and socket will expedite the process. Make sure that both sides of the slide-out room retract together uniformly. The slide-out room moves approximately 1/4" for every 30-40 degree turn of the wrench.



- **D.** Once the slide-out room is retracted, secure the slide-out room in-place by:
  - **I.** Re-installing the motors. If there is a retaining spring, make sure the end of the retaining spring is re-hooked to the motor spring clip (Fig. 8).
  - **II.** Torquing the motor retaining screw to 40 in-lbs (Fig. 9) with the motor retainer fully engaged.
  - III. Using a transit bar (slide-out locking bar). Make sure motor is properly seated with no gap between the mounting bracket and block (Figs. 8 and 9).
- **E.** Have the slide-out room serviced by an OEM-authorized dealer as soon as possible. Do not operate the slide-out room until service is complete as damage to the slide-out room may result.
- 2. Manually retract the slide-out room by turning the  $\frac{1}{2}$  square drive shaft of each vertical channel assembly.
  - **A.** Remove the motor. Follow steps 1-6 of the Manual Override Mode.
  - **B.** Access the  $\frac{1}{2}$ " square drive shaft (Fig. 11) of each vertical channel.
  - C. Using a  $\frac{1}{2}$ " 8-point, star socket and alternating from one side to the other, turn the  $\frac{1}{2}$ " square drive shaft to retract the slide-out room.

**NOTE:** A 15 mm 12-point socket is an option if the  $\frac{1}{2}$ " 8-point star socket is not available. Use caution, as the 15 mm 12-point socket does not fit as snug as the  $\frac{1}{2}$ " 8-point socket.

- **D.** Once the slide-out room is retracted, secure the slide-out room in-place by:
  - **I.** Re-installing the motors. If there is a retaining spring, make sure the end of the retaining spring is re-hooked to the motor spring clip (Fig. 8).
  - **II.** Torquing the motor retaining screw to 40 in-lbs (Fig. 8) with the motor retainer fully engaged.
  - III. Using a transit bar (slide-out locking bar). Make sure motor is properly seated with no gap between the mounting bracket and block (Figs. 8 and 9).
- **E.** Have the slide-out room serviced by an OEM-authorized dealer as soon as possible. Do not operate slide-out room until service is complete as damage to the slide-out room may result.



## Maintenance

The Lippert Components Slide-Out system has been designed to require very little maintenance. To ensure the long life of the Slide-Out system, read and follow these simple procedures:

- 1. When slide-out room is extended, visually inspect the slide gear rack assemblies. Check for excess buildup of dirt or other foreign material. Remove any debris that may be present.
- 2. If the system squeaks or makes any noises, hand apply a dry lubricant to prevent and/or stop squeaking.



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