



SLIMRACK® SLIDE-OUT
OWNER'S 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 in Apple App Store® for iPhone® and iPad® and also on Google Play™ for Android™ users. App Store® and iPad® are registered trademarks of Apple Inc. Google Play™ and Android™ are trademarks of Google Inc.

For information on the assembly or individual components of this product, please visit:

<https://support.lci1.com/slide-outs-support-slimrack>

Images used in this document are for reference only when assembling, installing and/or operating this product. Actual appearance of provided and/or purchased parts and assemblies may differ.

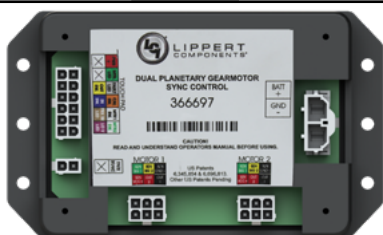
Product Information

The Lippert SlimRack Slide-Out system is a rack-and-pinion design operated by a 12V DC gear motor. Slide-out systems are engineered to provide years of trouble-free service. Changes to weight, stroke, weight distribution, gear rack position, controller, power supply seals, slide toppers, ramps, rollers, etc., all have an effect on the performance of the system. In order to secure warranty coverage, each new application or changes to existing applications **MUST** be audited and approved by Lippert Components with a signed document. Audits can be arranged by contacting Lippert Components.

This manual provides information for slide-out systems that use one of three different controllers: Power Gear part number 1510000199 / Lippert part number [366697](#), 700155, 700157 (Fig. 1), Power Gear part number 1510000236 / Lippert part number [366701](#) 697096, 700156 (Fig. 2) or Power Gear part number 1510000276 / Lippert part number 366703 (Fig. 3). Controller Power Gear part number 1510000199 / Lippert part number [366697](#) connects to a touchpad. Controller part numbers (Power Gear / LCI) 1510000236 / [366701](#) and 1510000276 / 366703 connect to a rocker switch.

NOTE: Previously, some Winnebago models used controller Power Gear part number 1510000276 / Lippert part number 366703 (Fig. 3) which required a wire harness with an 8-pin connector for connecting the controller to Motor 2 (Fig. 3A). For all new units, Power Gear part number 1510000276 / Lippert part number 366703 has been replaced by number 697096 or 700156. For servicing older Winnebago units, controller Power Gear part number 1510000276 / Lippert part number 366703 has been replaced with controller part number 697096 or 700156 with an added adapter wire harness 387587 (see section Wiring Diagram for controller 1510000276 / 366703 (WGO - Discontinued.)

Fig. 1



1510000199 / [366697](#)

Replacements

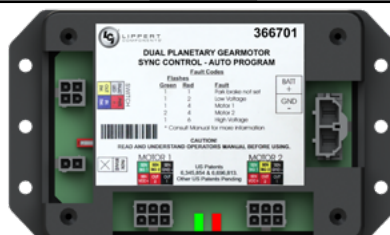


700155



700157

Fig. 2



1510000236 / [366701](#)

Replacements



697096



700156

Fig. 3



1510000276 / [366703](#)
(Winnebago) Discontinued -
replaced by 697096 or 700156
and harness 387587

NOTE: All the controllers that are being replaced by the new controllers. Refer to New Slim Rack Controller QR-124 document.

There are two types of brackets used for fastening the motor and block assembly. Effective early February, 2018, the bracket used for the spring and hook attachment (Figs. 4 and 5) between the motor and the block was replaced with a new bracket and retention screw (Figs. 6 and 7).

Fig. 4

Motor-Block Assembly
Production Prior to February 2018



Fig. 6

Motor-Block Assembly
Early February 2018 Production

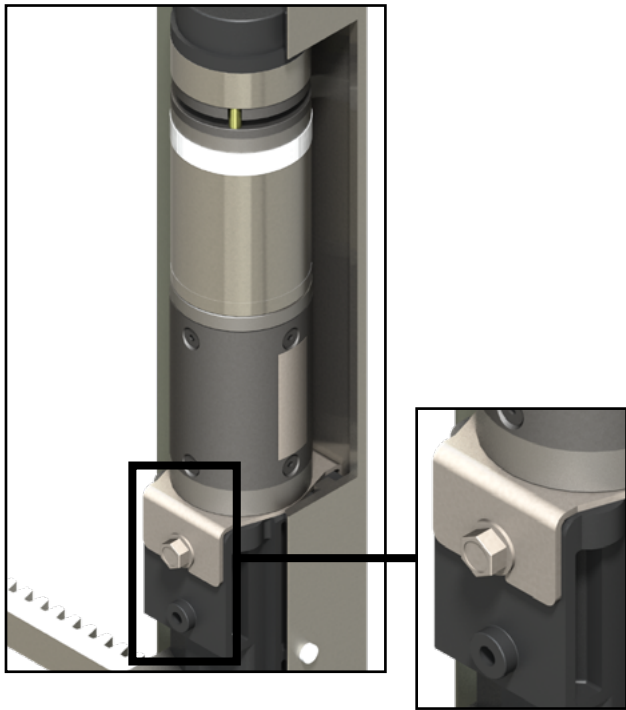


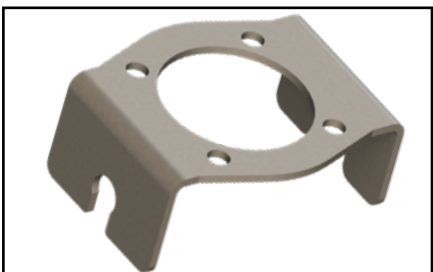
Fig. 5

Old Bracket 389061



Fig. 7

New Bracket 422671



Component Descriptions

- A touchpad (Fig. 8), used with programmable controller Power Gear part number 1510000199 / Lippert part number [366697](#), 700155, 700157 or a rocker switch (Fig. 9), used with auto-programmable controller part numbers (Power Gear / Lippert) 1510000236 / [366701](#) 697096, 700156 and 1510000276 / 366703 (Winnebago). Both types of devices mount to the wall and allow slide-out room movement as well as provide feedback to the user.
- A specially designed controller that gives the user full control of slide-out room movement, in or out. The controller has programmable stops that stop the motor when the slide-out room is fully extended or retracted and the ability to detect faults for ease in troubleshooting.

NOTE: The programmable controller, which incorporates use of a touchpad, is initially programmed once at installation. It is reprogrammed by an OEM-authorized dealer only if stops must be reset due to fault codes or to change the initial settings. With the auto-programmable controllers, those that connect to a rocker switch, the stops are automatically programmed each time the slide-out room is used.

- Vertical channel with 12V DC gear motor and gear rack arms that mount into the side wall opening and slide-out room.
- Harnesses to connect the rocker switch or touchpad and the motors to the controller.
- A manual override that allows extension / retraction of the slide-out room in the event of a loss of power.
- Floor rollers (not supplied by Lippert) that support the slide-out room's weight while extending and retracting the slide-out room. Only floor rollers approved by Lippert can be used with the system. Contact Lippert for recommended rollers.

Fig. 8

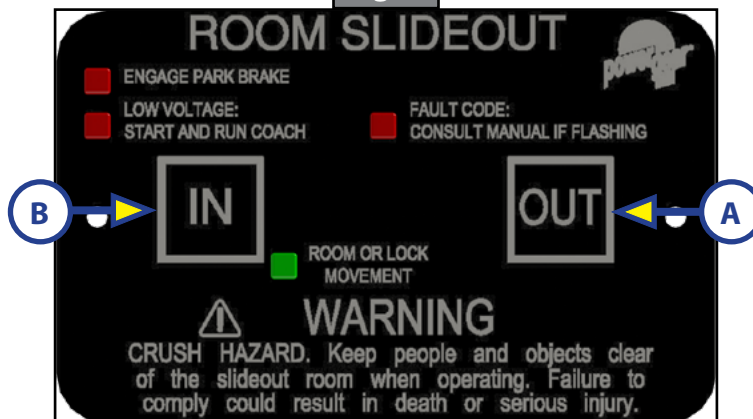
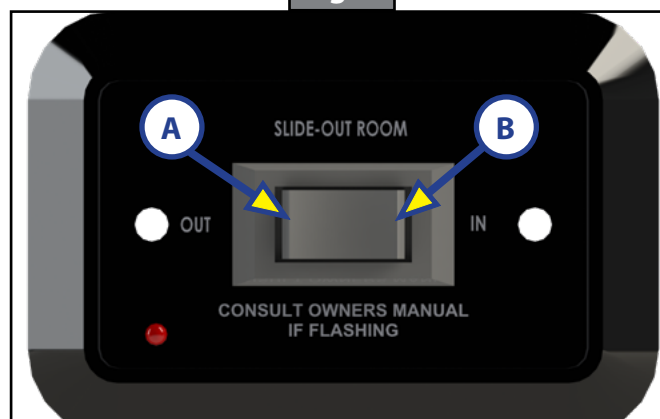


Fig. 9



WARNING

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.

WARNING

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 .

CAUTION

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

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

CAUTION

Always make sure that the slide-out room path is clear of people, pets 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 .

CAUTION

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

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 the transit bars.
5. If equipped, turn "on" the on/off switch or key.
6. Press and hold the OUT button (Fig. 8A or 9A). 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 stops 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 shore power.
2. If applicable, transmission must be in park or neutral.
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. 8B or 9B). 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 stops 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 the transit bars.

Preparation

Resources Required

- 1-2 people, depending on task
- Phillips head screwdriver
- Pick tool
- Ratchet or socket wrench
- 1/2" 8-point star socket or 15 mm 12-point star socket
- Dry lubricant
- 3" extension for sockets
- 5/8" deep well socket
- 12V DC power source
- Multimeter
- 5/16" open-ended wrench or ratcheting box wrench

Troubleshooting

Manual-Program Motorized and Towable Controllers

Controllers 1510000199 / [366697](#), 700155, 700157 which connects to a touchpad, has the ability to detect and display several faults. When a fault is detected, the slide-out room movement will stop and two different LEDs on the touchpad will flash in a pattern.

NOTE: The slide-out system with controller 1510000199 / [366697](#), 700155, 700157 will **NOT** function until the stops are properly set or faults are cleared.

1. The FAULT CODE LED (Fig. 10A) on the touchpad will flash red a number of times corresponding to a specific fault code. Refer to Fault Code Table - Controller 1510000199 / [366697](#), 700155, 700157 to best determine what caused the fault.
2. The ROOM MOVEMENT LED (Fig. 10B) on the touchpad indicates system operation and will flash green a number of times corresponding to which motor had the associated fault.

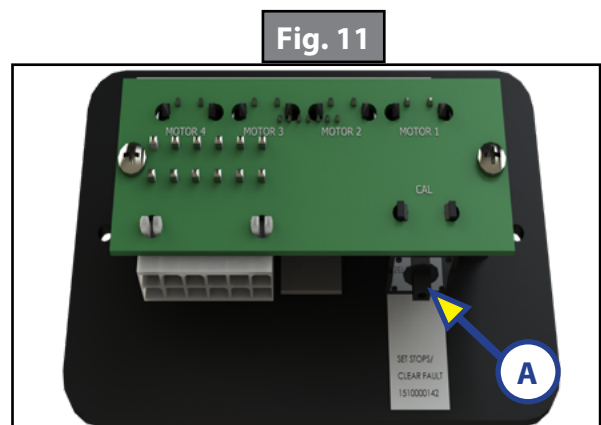
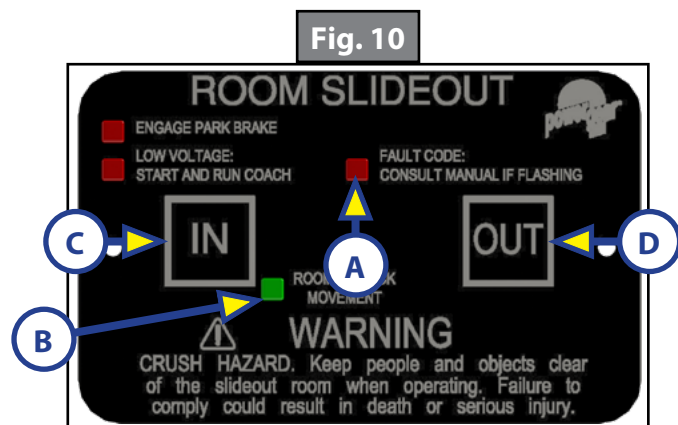
NOTE: For example, four RED flashes (Fault Code) and two GREEN flashes (Motor code) means there is a motor fault on Motor 2.

NOTE: A solid GREEN LED indicates normal slide-out room movement.

There are two types of faults, minor and major. Faults **MUST** be cleared in order for the slide-out room to operate.

1. Minor faults can be cleared by pressing and releasing the IN (Fig. 10C) or OUT (Fig. 10D) buttons on the wall touchpad.
2. Major faults **MUST** be cleared by pressing and releasing the SET STOPS/CLEAR FAULTS button located on the back of the touchpad (Fig. 11A).

NOTE: For major faults, the controller must be overridden by following the Electrical Override Mode procedure described in the Override Mode section. When the problem is repaired, the controller must then be reprogrammed by an OEM-authorized dealer.



Fault Code Table - Programmable 1510000199 / [366697](#)

Fault Code (# of RED flashes)	Fault Type	Description	Why?	What Should Be Done?
1	Major	Stops not programmed	Stops have not been set	Stops must be programmed by an authorized service facility.
			Stops were cleared	
			Stops were improperly set	
2	Minor	System fault	Obstruction present	Run slide-out room in opposite direction of drag. If slide-out room continues to move in opposite direction, remove obstruction or have damaged component replaced. If slide-out room stops moving in opposite direction, observe fault code and refer to this chart.
			Excessive system drag	Run slide-out room in opposite direction of drag. If slide-out room continues to move in opposite direction, remove obstruction or have damaged component replaced. If slide-out room stops moving in opposite direction, observe fault code and refer to this chart.
4	Major	Motor fault	Bad or loose connection(s)	Check all connections at controller and motor. See Wiring Diagram for Controller 1510000199 / 366697 , 700155, 700157.
			Defective harness	Check harness for broken wires. Replace as needed.
			Open or shorted motor	Apply a 12V DC power source to the motor. If motor does not operate, replace the motor.
6	Minor	Excessive battery voltage	Supply voltage to controller is 17V DC or greater	Use a multimeter to check 2-pin power connector at controller. See Wiring Diagram for Controller 1510000199 / 366697 , 700155, 700157. If the voltage is 17V DC or higher, contact OEM for power and ground supplies.
Park brake LED flashing			Parking brake not set if applicable	Set parking brake if applicable
			Ground signal lost at park brake connector on controller	Check for continuity to ground on wire plugged into park brake connector at controller. See Wiring Diagram for Controller 1510000199 / 366697 .
Low voltage LED flashing			Incoming voltage to controller is below 12V DC	Use a multimeter to check 2-pin power connector at controller. See Wiring Diagram for Controller 1510000199 / 366697 . If the voltage is below 12V DC, contact OEM for recommendation.

Fault Code Table - Programmable Controller 700155/700157

Fault Code (# of RED flashes)	Fault Type	Description	Why?	What Should Be Done?
1	Major	Stops not programmed	Stops have not been set	Stops must be programmed by an authorized service facility.
			Stops were cleared	
			Stops were improperly set	
2	Minor	System fault	Obstruction present	Run slide-out room in opposite direction of drag. If slide-out room continues to move in opposite direction, remove obstruction or have damaged component replaced. If slide-out room stops moving in opposite direction, observe fault code and refer to this chart.
			Excessive system drag	Run slide-out room in opposite direction of drag. If slide-out room continues to move in opposite direction, remove obstruction or have damaged component replaced. If slide-out room stops moving in opposite direction, observe fault code and refer to this chart.
4	Major	Motor fault	Bad or loose connection(s)	Check all connections at controller and motor. See Wiring Diagram for Controller 1510000199 / 366697 , 700155, 700157.
			Defective harness	Check harness for broken wires. Replace as needed.
			Open or shorted motor	Apply a 12V DC power source to the motor. If motor does not operate, replace the motor.
6	Minor	Excessive battery voltage	Supply voltage to controller is 17V DC or greater	Use a multimeter to check 2-pin power connector at controller. See Wiring Diagram for Controller 1510000199 / 366697 , 700155, 700157. If the voltage is 17V DC or higher, contact OEM for power and ground supplies.
7	Major	Stops Not Programmed	• Stops have not been set • Stops were cleared • Stops were improperly set	Stops need to be programmed according to the programing instructions in this document.
8	Minor	Fuse, Motor 1	Motor fuse concern	Contact Lippert Representative
9	Major	Battery Drop Out	Battery dropped below 8.5V while extending or retracting slide	Charge battery, start vehicle, generator, or make sure unit is pugged into shore power.
Park brake LED flashing (700157 only)			Parking brake not set if applicable	Set parking brake if applicable
			Ground signal lost at park brake connector on controller	Check for continuity to ground on wire plugged into park brake connector at controller. See Wiring Diagram.
Low voltage LED flashing			Incoming voltage to controller is below 12V DC	Use a multimeter to check 2-pin power connector at controller. See Wiring Diagram. If the voltage is below 12V DC, contact OEM for recommendation.

Auto-Programmable Controllers

Auto-programmable controllers, 1510000236 / [366701](#) 697096, 700156, or 1510000276 / 366703 (Winnebago), 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. 12A) will flash RED a number of times corresponding to the number of red flashes on the controller (Fig. 13A).

NOTE: Refer to the Fault Code Table - Auto-Programmable Controllers to best determine what caused the fault.

2. The Motor LED (Fig. 13B) 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.

Fig. 12

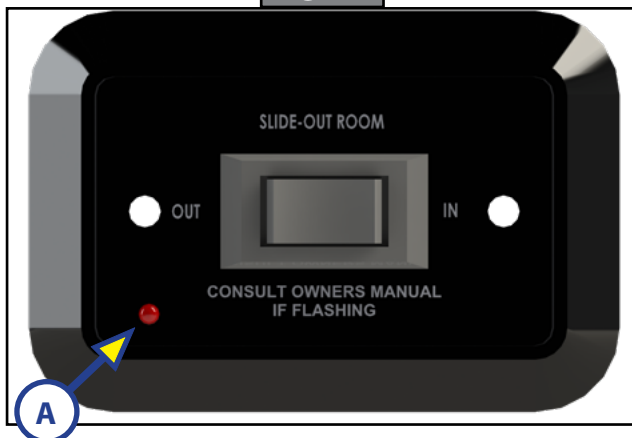


Fig. 13

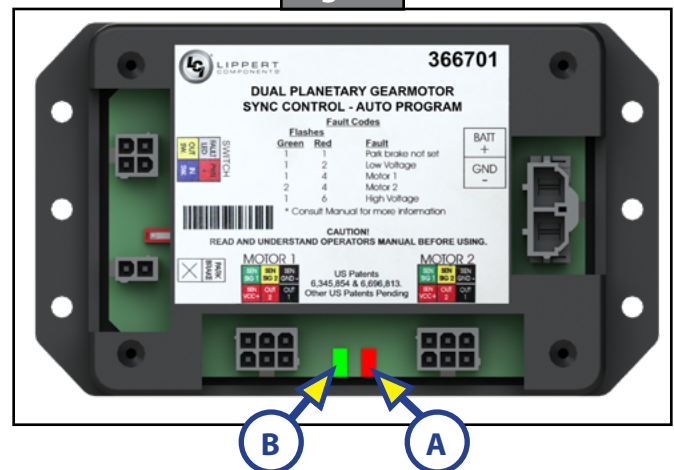


Fig. 14

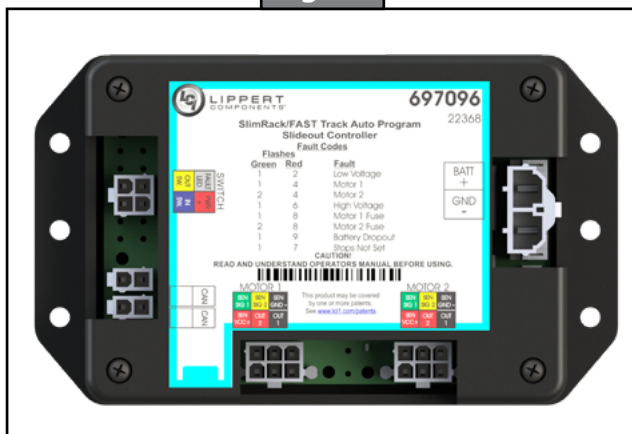
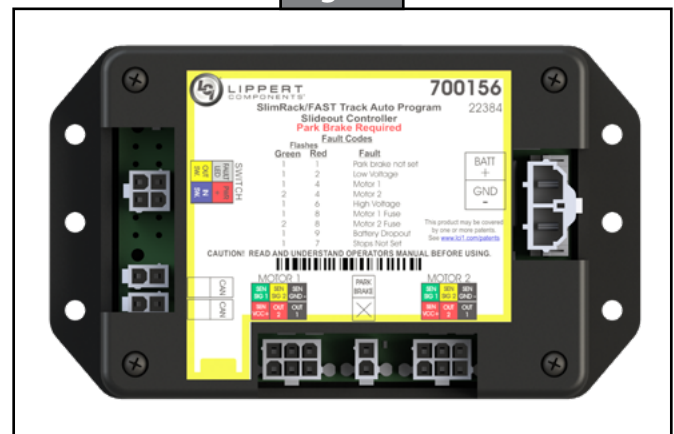


Fig. 15



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

Flashes		Fault Type	Description	Why?	What Should Be Done?
Green	Red				
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**

Flashes		Fault Type	Description	Why?	What Should Be Done?
Green	Red				
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.
2	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	2	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.
1	7	Major	Stops	• Stops have not been set • Stops were cleared • Stops were improperly set	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

Manual-Program Motorized or Towable Controllers

In the event of component failure, the slide-out room operation can be overridden and retracted for travel. Use this procedure when there is NO loss of power or electrical problem with the system.

1. Using a Phillips head screwdriver, remove the touchpad from the wall.
2. Prior to clearing the MAJOR fault, write down the number of red and green flashes, indicated by the LEDs on the touchpad, for reference later.

NOTE: Once the slide-out room is forced to move, the fault code will be cleared. Writing down the fault code allows monitoring to see if the original code changes to a different code. This information will help the OEM-authorized dealer troubleshoot the slide-out system.

3. Press and hold the SET STOPS / CLEAR FAULTS button (Fig. 16A) on the back of the touchpad for five seconds. Both red and green LEDs will be solidly lit while this button is pressed. After five seconds, the GREEN LED will begin flashing and the RED LED will remain solidly lit.

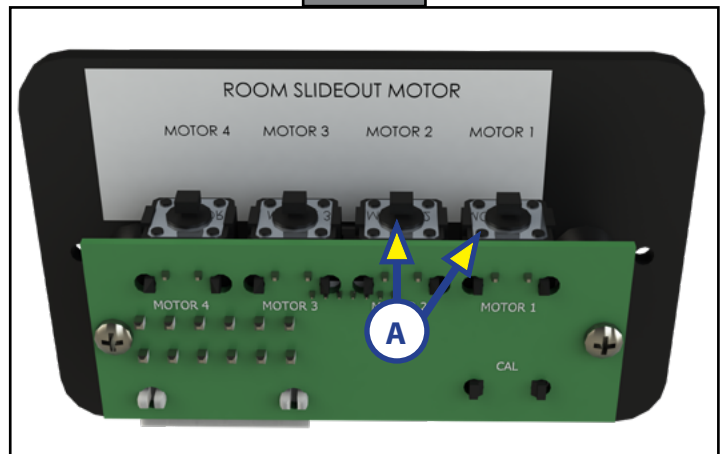
NOTE: The unit is now ready to retract the slide-out room.

4. Press and hold the ROOM SLIDE-OUT MOTOR buttons 1 and 2 on the back of the touchpad (Fig. 17A).

Fig. 16



Fig. 17



⚠ CAUTION

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.

⚠ CAUTION

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

5. Press the IN button on the front of the wall touchpad until the slide-out room is fully retracted. If one side of the slide-out room needs to retract further in order to get a good seal, press and hold the motor button corresponding only to the motor on the side that needs to move. Press the IN button on the front of the touchpad to retract the slide-out room the remainder of the way.

NOTE: At any time during the override procedure, the unit will exit the override mode if the slide-out room has not been moved for two minutes or if a fault is detected during slide-out room movement. The Fault Code and Room or Lock Movement LEDs on the front of the touchpad will flash rapidly for 10 seconds to indicate that the override procedure failed. After 10 seconds of flashing, the controller will automatically default to FAULT CODE 1 and programming must be restarted. Refer to Controller 1510000199 / 366697, 700155, 700157 Fault Codes chart for additional information.

6. Using a Phillips head screwdriver, reinstall the wall touchpad.

7. Take the unit to an OEM-authorized dealer for repairs.

NOTE: After the system has been overridden, the controller must be re-programmed by an OEM-authorized dealer.

Auto-Programmable Controllers

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.

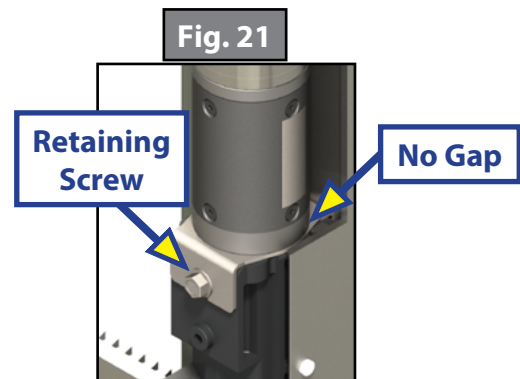
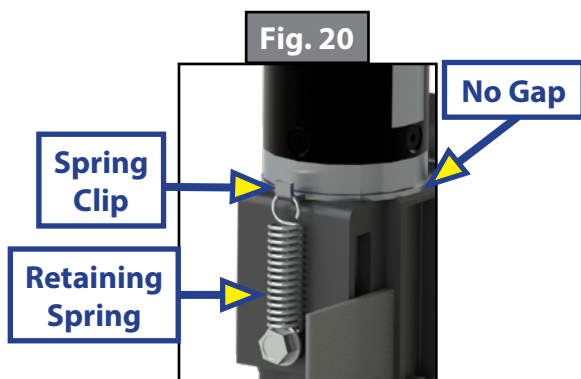
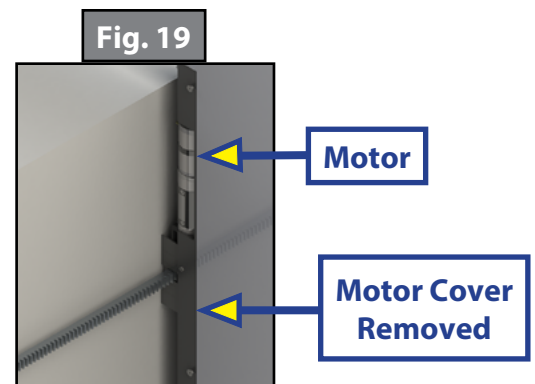
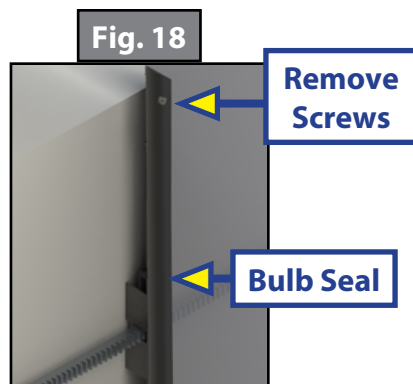
Manual Override Mode—All Controllers

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.

⚠ 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 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. 18).
3. Pull down the bulb seal and remove the motor cover (Fig. 19). The motor cover may stick to the bulb seal.
4. If there is a retaining spring (Fig. 20), 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 $\frac{5}{16}$ " open-ended wrench or ratcheting box wrench to loosen the motor retaining screw (Fig. 21) 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. 20).
 - B. With the motor retainer fully engage, tighten the motor retaining screw, until resistance is felt on the wrench. Be careful not to over tighten the screw (Fig. 21).
 - C. Make sure motor is properly seated with no gap between the mounting bracket and block (Figs. 20 and 21).
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—All Controllers

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. 22) to move the slide-out room.
 - A. Remove the motor. Follow steps 1-6 under the Manual Override Mode section.

⚠ CAUTION

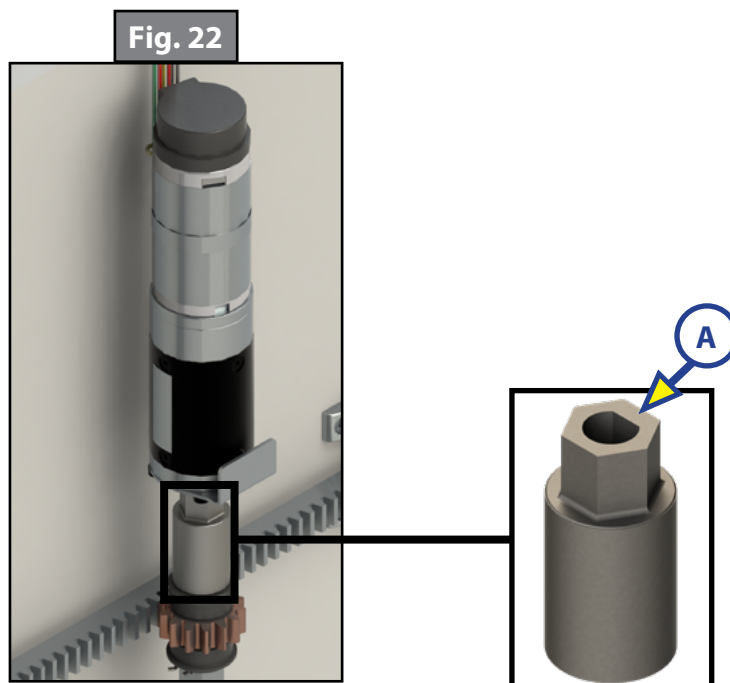
When manually retracting the slide-out room, make sure that both sides of the slide-out room move together. Damage to the slide-out room may result if movement is not uniform.

⚠ 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. 22A).
- 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 $\frac{1}{4}$ " for every 30-40 degree turn of the wrench.

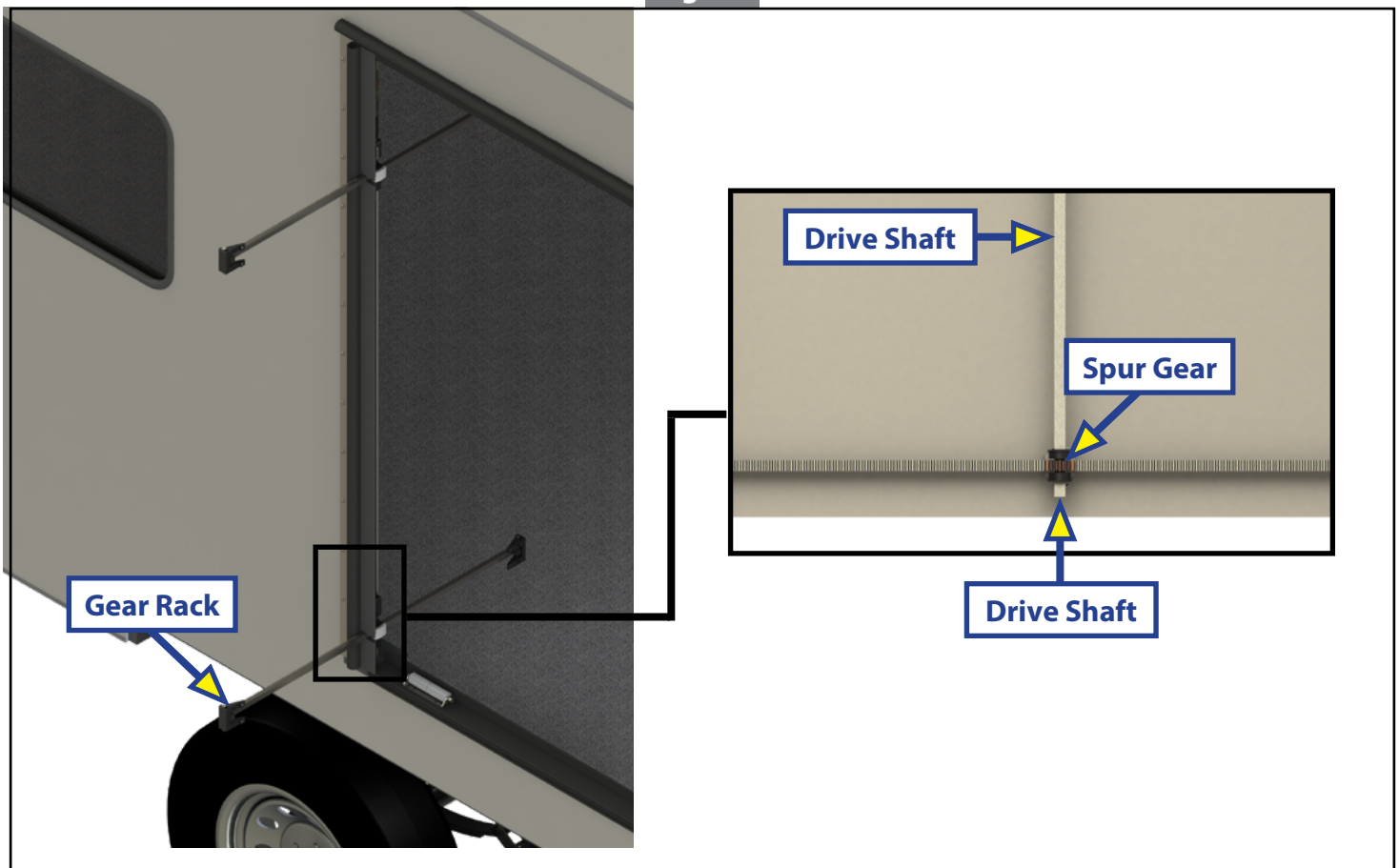


- D. Once the slide-out room is retracted, secure the slide-out room in-place by:
 - I. Re-installing the motors. If there is a retaining spring, make sure the end of the retaining spring is re-hooked to the motor spring clip (Fig. 20).
 - II. With the motor retainer fully engage, tighten the motor retaining screw, until resistance is felt on the wrench. Be careful not to over tighten the screw (Fig. 21).
 - III. Make sure motor is properly seated with no gap between the mounting bracket and block (Figs. 20 and 21).
 - 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. 23) 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. 20).
 - II. With the motor retainer fully engage, tighten the motor retaining screw, until resistance is felt on the wrench. Be careful not to over tighten the screw (Fig. 21).
 - III. Make sure motor is properly seated with no gap between the mounting bracket and block (Fig. 20 and 21).
- 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.

Fig. 23

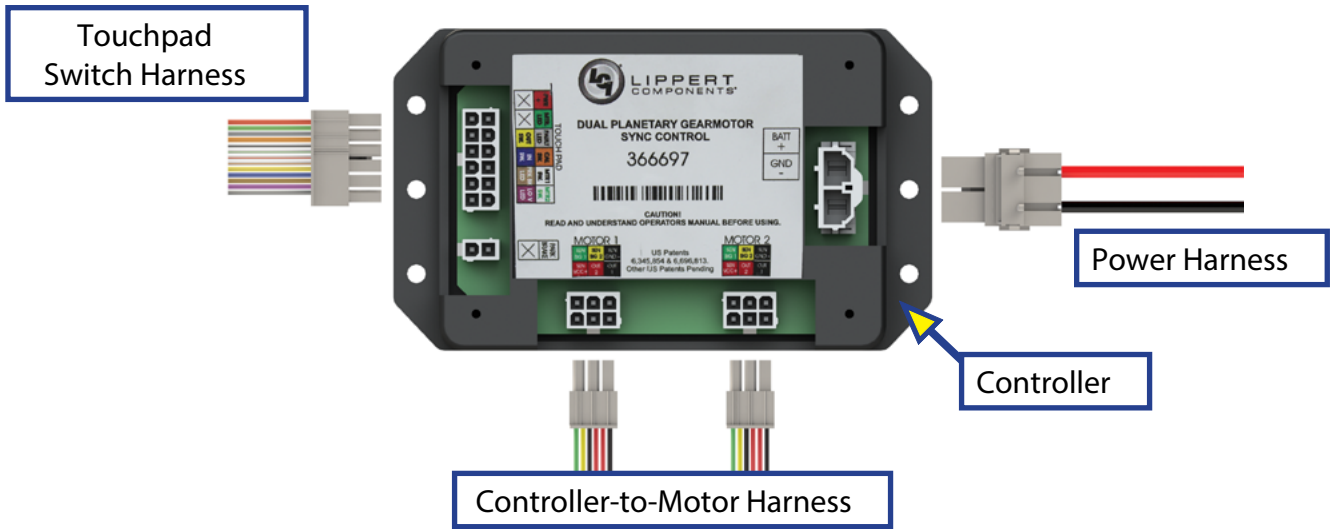


Maintenance

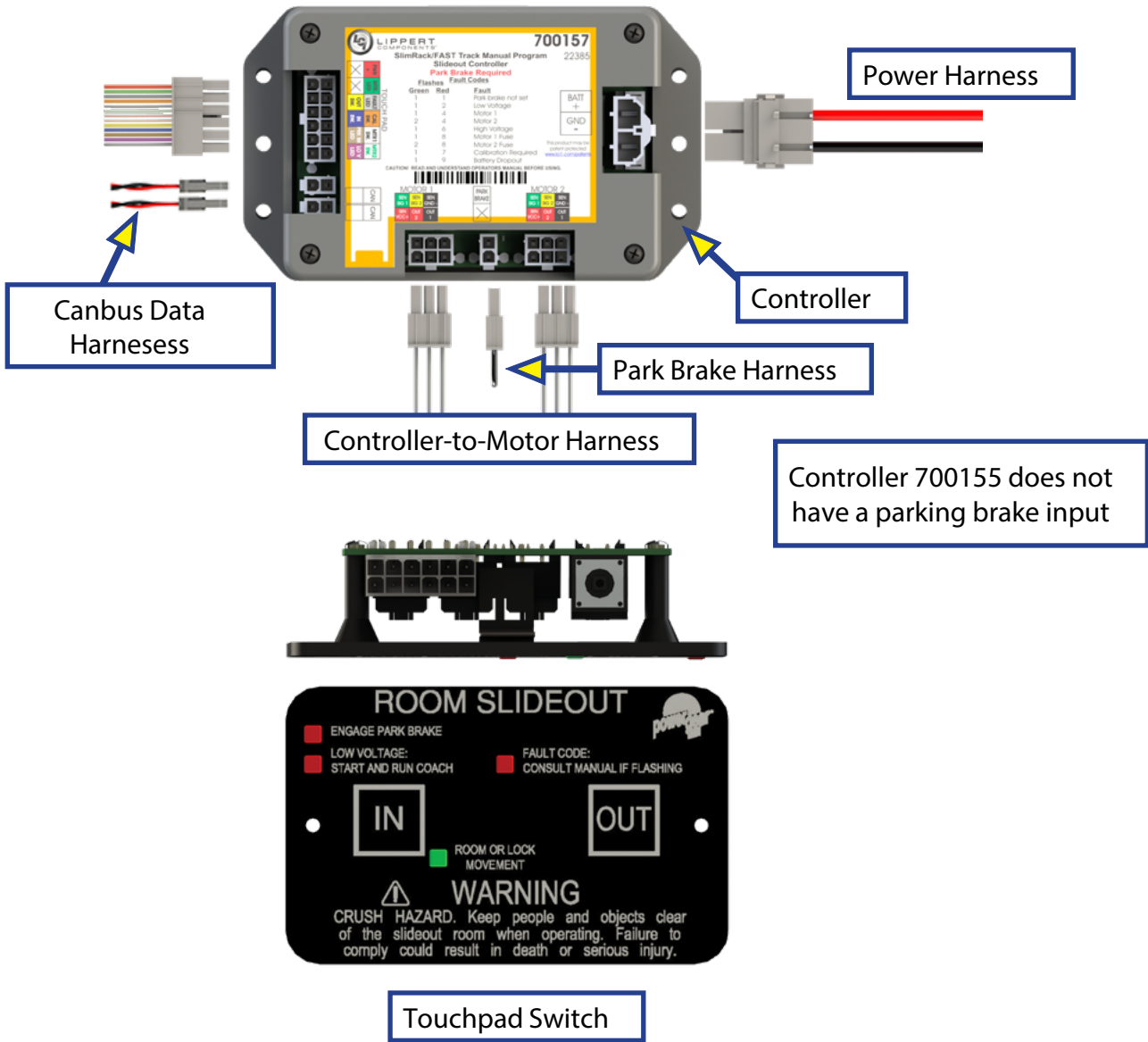
The Lippert Slide-Out system has been designed to require very little maintenance. To ensure the long life of the Slide-Out system, read and follow these simple procedures:

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.

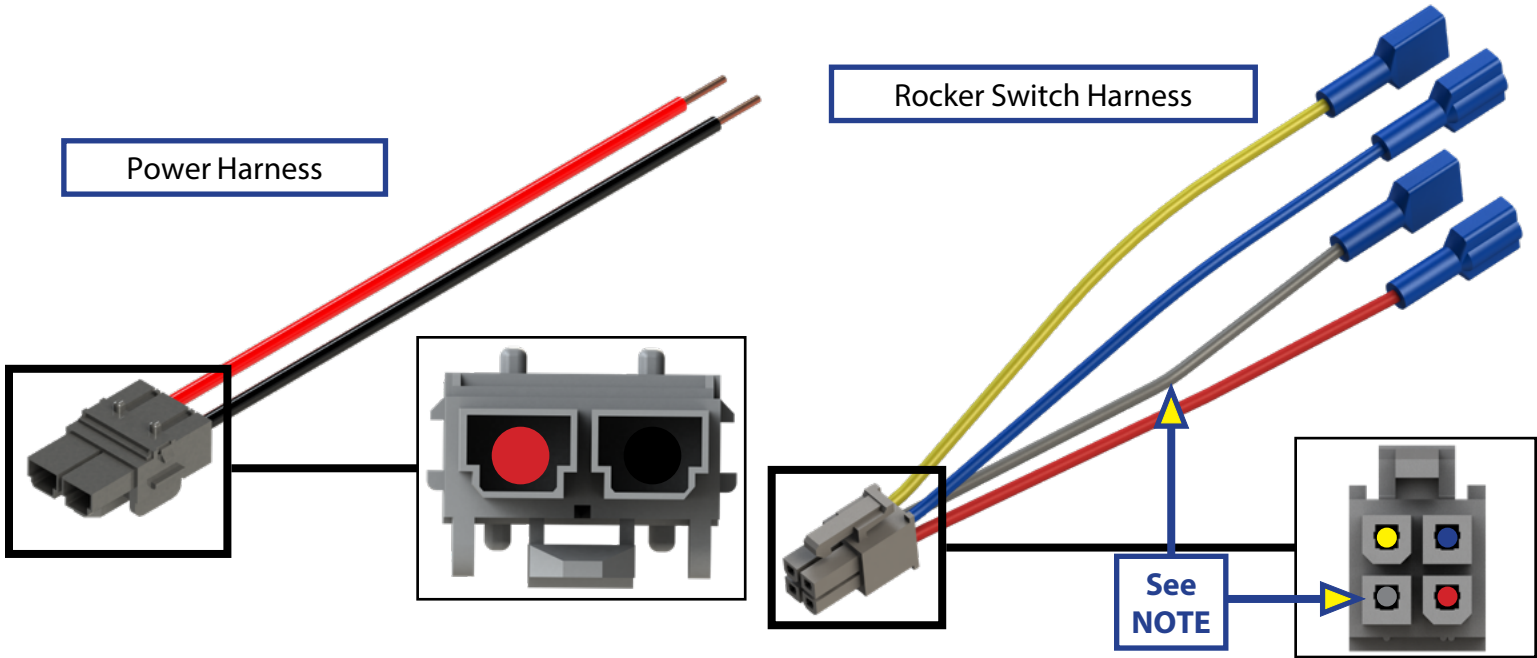
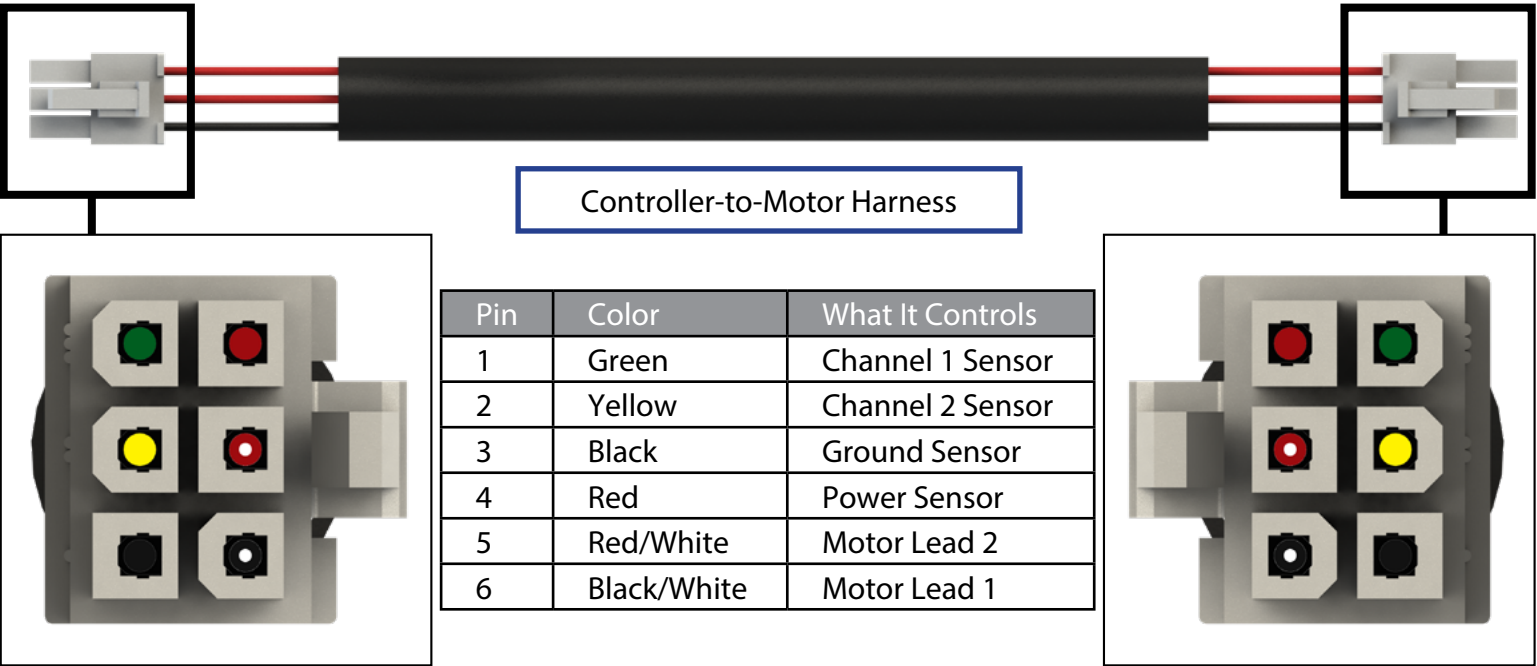
Wiring Diagram for Controller 1510000199 / 366697



Wiring Diagram for Controller 700155/700157



Wiring Diagram for Controller 1510000236 / [366701](#), 697096, 700156

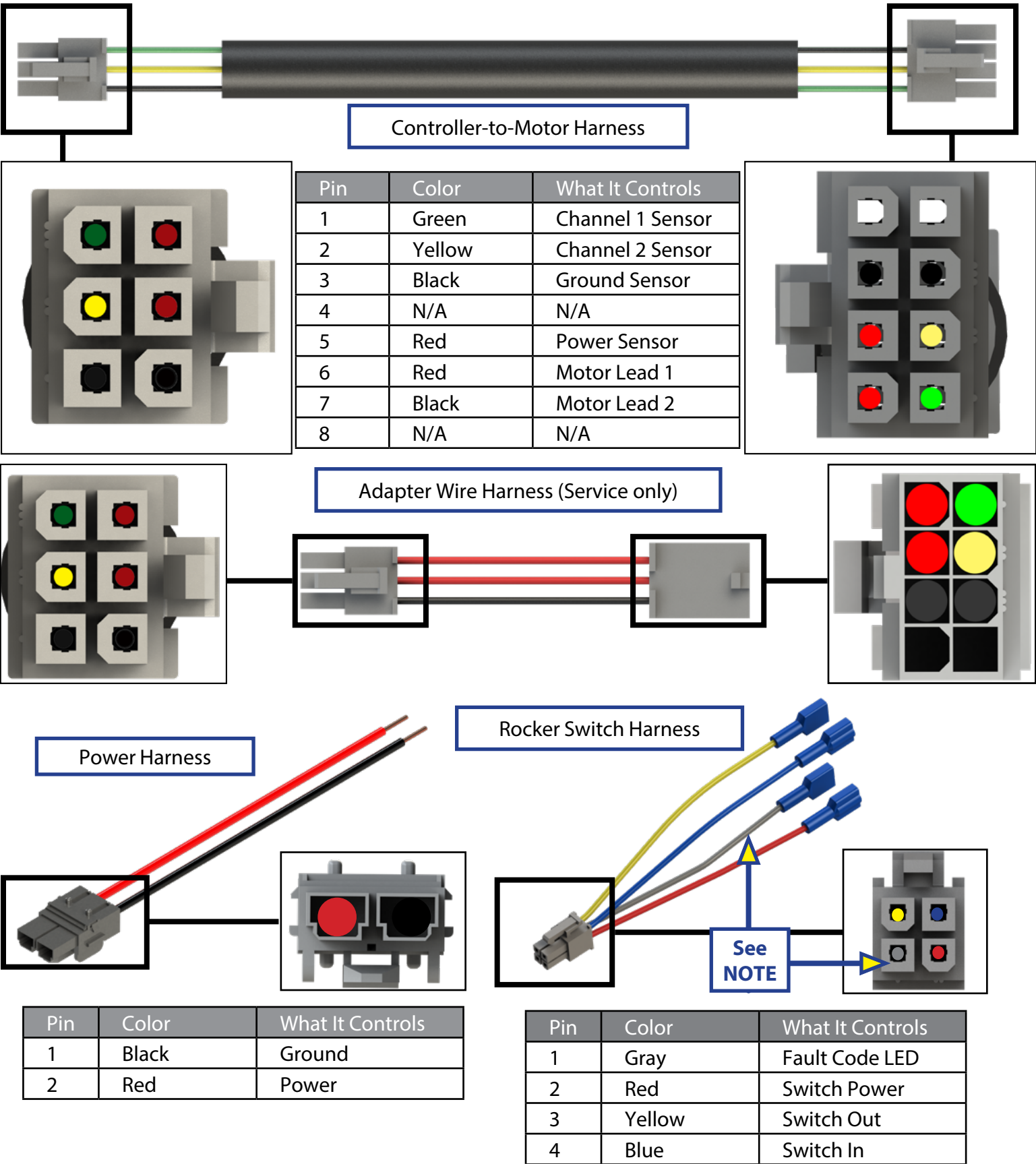


Pin	Color	What It Controls
1	Black	Ground
2	Red	Power

Pin	Color	What It Controls
1	Gray	Fault Code LED
2	Red	Switch Power
3	Yellow	Switch Out
4	Blue	Switch In

NOTE: If the slide-out operation rocker switch is not supplied by Lippert Components, the gray wire on the 4-wire switch harness is not used.

Wiring Diagram for Controller 1510000276 / 366703 (WGO - Discontinued)



NOTE: If the slide-out operation rocker switch is not supplied by Lippert Components, the gray wire on the 4-wire switch harness is not used.

Information for this document was obtained from and supersedes information included in Power Gear manual 30100002679, Rev. 0C issued December 2014 for controller Power Gear part number 1510000199 / Lippert part number [366697](#), 700155, 700157 and document 30100002814, Rev 0F issued December 2014 for auto-programmable controller part numbers (Power Gear / Lippert) 1510000236 / [366701](#) 697096, 700156 and 1510000276 / 366703 (Winnebago). All information has been updated to current practices.

Notes

This image shows a full page of blank, lined paper. It features approximately 28 horizontal black lines spaced evenly across the page, typical of notebook paper. The lines are thin and extend from the left edge to the right edge. There are no margins, text, or other markings on the page.



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