

Manual Override - Inside Frame

Locate the hex head crank extension at the top of the actuator inside the chassis main frame (Fig. 4). Using a 3/4 socket and ratchet (Fig. 5), rotate the extension clockwise to retract the slide-out and counter clockwise to extend the slide-out. It is important to note that you DO NOT need to attempt to disengage the motor as the actuator is "manual ready."

NOTE: Use EXTREME CAUTION when extending and/or retracting room using the manual override feature. It is possible to operate the slide-out beyond the maximum extension and/or retraction and damage the slide components, slide room structure or trim components.

NOTE: The gears can be stripped out if the room is manually retracted/extended to its fullest extent and the operator continues to rotate the manual override. Any damage due to misuse of the Manual Override feature will disqualify any and all claims to the Limited Warranty.

Fig. 4

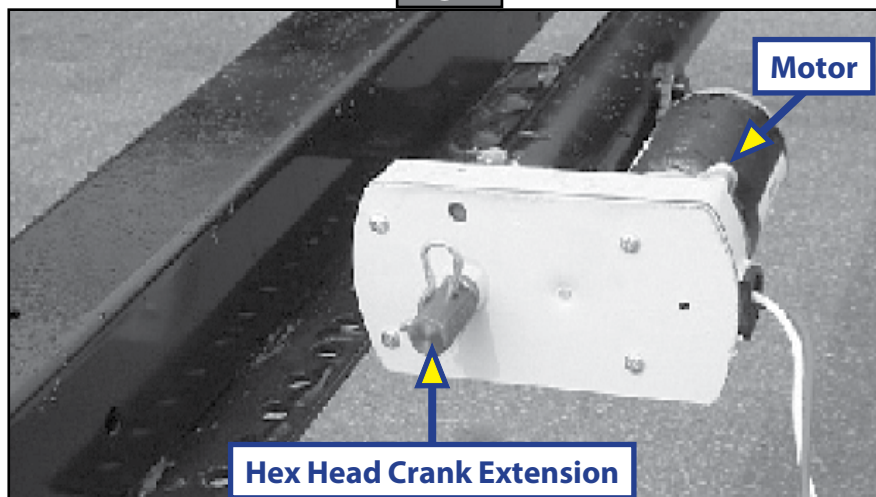
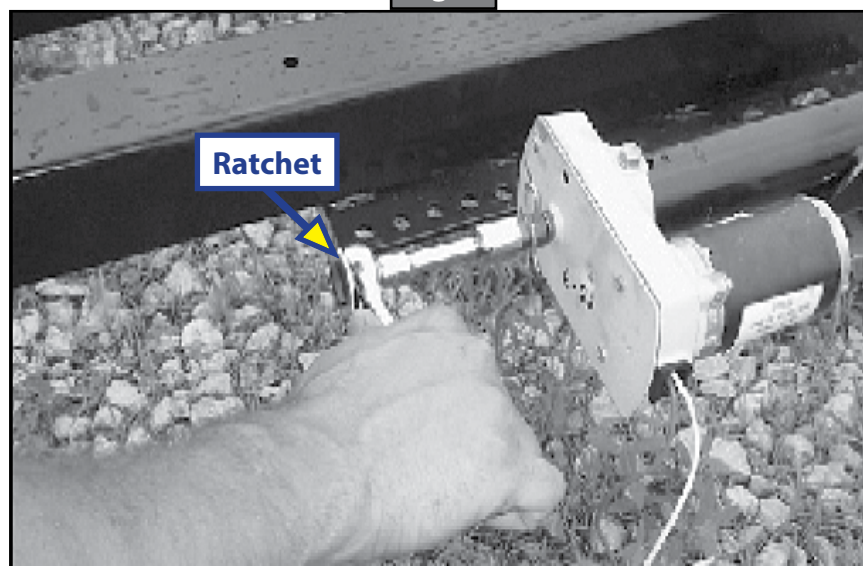


Fig. 5



HYDRAULIC THROUGH FRAME SLIDE-OUT

SLIDE-OUTS

Warning, Safety, and System Requirement Information

Description

The Lippert Hydraulic Through Frame Slide-out System is a rack and pinion guide system, utilizing a hydraulic cylinder to move the room assembly. The power unit drives the cylinder rod in a forward and backward motion to move the slide room in and out. The Lippert Hydraulic Slide-out System is designed to operate as a negative ground system.

Safety Information

WARNING

The “WARNING” symbol above is a sign that a service or maintenance procedure has a safety risk involved and may cause serious injury or death if not performed safely and within the parameters set forth in this manual.

Always wear eye protection when performing service or maintenance to the vehicle. Other safety equipment to consider would be hearing protection, gloves and possibly a full face shield, depending on the nature of the service.

This manual provides general service and maintenance procedures. Many variables can change the circumstances of the service procedure, i.e., the degree of difficulty involved in the service operation and the ability level of the individual performing the operation. This manual cannot begin to plot out procedures for every possibility, but will provide the general instructions for effectively servicing the vehicle. In the event the skill level required is too high or the procedure is too difficult, a certified technician should be consulted before performing the necessary service. Failure to correctly service the vehicle may result in death, serious injury or voiding the warranty. The owner’s manual for the unit may have more procedures for service and maintenance.

WARNING

Failure to act in accordance with the following may result in death, serious injury, coach or property damage.

The Lippert Hydraulic Through Frame Slide-out System is intended for the sole purpose of extending and retracting the slide-out room. Its function should not be used for any other purpose or reason than to actuate the slide-out room. To use the system for any reason other than what it is designed for may result in damage to the coach and/or cause serious injury or even death.

Before actuating the system, please keep these things in mind:

1. Parking locations should be clear of obstructions that may cause damage when the slide-out room is actuated.
2. Be sure all persons are clear of the coach prior to the slide-out room actuation.
3. Keep hands and other body parts away from slide-out mechanisms during actuation. Severe injury or death may result.
4. To optimize slide-out actuation, park coach on solid and level ground.

Prior to Operation

Prior to operating the Lippert Hydraulic Through Frame Slide-out System, follow these guidelines:

1. Coach should be parked on the most level surface available.
2. Leveling or stabilizing system should be actuated to ensure coach will not move during operation of slide-out system.
3. Be sure battery is fully charged.
4. Be sure to keep all persons and pets clear of slide-out system during operation.



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 rails when the room is being operated. The gear assembly may pinch or catch on loose clothing causing personal injury.

NOTE: Install transit bars (if so equipped) on the slide-out room during storage and transportation.

Operation

Extending Slide-Out Room

1. Level the Unit.
2. Verify the battery is fully charged and hooked up to the electrical system.
3. Remove transit bars (if so equipped).
4. Press and hold the IN/OUT switch (Fig.1) in the OUT position (Fig.1B) until room is fully extended and stops moving.
5. Release switch, which will lock the room into position.

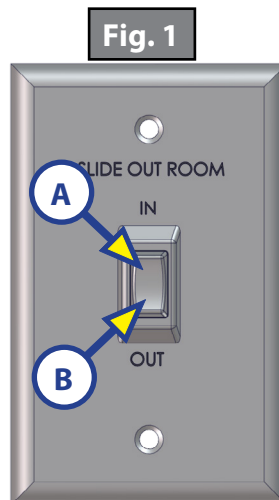
NOTE: Only hold OUT switch until room stops.

Retracting Slide-Out Room

1. Verify the battery is fully charged and hooked up to the electrical system.
2. Press and hold the IN/OUT switch (Fig.1) in the IN position (Fig.1A) until the room is fully retracted and stops moving.
3. Release the switch. This will lock the room into position.

NOTE: Only hold IN switch until room stops.

4. Install the transit bars (if so equipped).



Maintenance

Inspection

After servicing the slide-out system in any way, be sure to check the following:

1. Slide-out stops are installed and adjusted properly.
2. Head assemblies are installed and adjusted properly.
3. System is mounted properly.
4. Cross shafts are mounted properly and clear all other components.
5. Gear packs function properly.
6. Manual override is accessible.
7. Outside seals compress when slide-out is retracted.
8. Inside seals compress when slide-out is extended.
9. Slide-out extends and retracts smoothly.
10. Both sides of slide-out are synchronized.
11. Any dirt or debris is cleaned from the interior or exterior of the coach.

System Maintenance

The Lippert Through Frame Slide-out System has been static tested to over 4,000 continuous cycles without any noticeable wear to rotating or sliding parts. It is recommended that when operating in harsh environments (road salt, ice build up, etc.) the moving parts be kept clean. They can be washed with mild soap and water. No grease or lubrication is necessary and in some situations may be detrimental to the environment and long term dependability of the system.

Electrical System Maintenance

For optimum performance, the slide-out system requires full battery current and voltage. The battery must be maintained at full capacity. Other than good battery maintenance, check the terminals and other connections at the battery, the control switch, and the system for corrosion, and loose or damaged terminals. Check motor leads under the trailer chassis. Since these connections are subject to damage from road debris, be sure they are in good condition.

NOTE: The Lippert Through Frame Slide-out System is designed to operate as a negative ground system. A negative ground system utilizes the chassis frame as a ground and an independent ground wire back to the battery is necessary. It is important that the electrical components have good wire to chassis contact. To ensure the best possible ground, a star washer should be used. Over 90% of unit electrical problems are due to bad ground connections.

Mechanical Maintenance

Although the system is designed to be almost maintenance free, actuate the room once or twice a month to keep the seals and internal moving parts lubricated. Check for any visible signs of external damage after and before movement of the travel trailer.

NOTE: For long-term storage: It is recommended that the room be closed (retracted).

Fluid Recommendation

The Lippert Electronic Leveling System is pre-filled, primed and ready to operate direct from the manufacturer. Type "A" Automatic Transmission Fluid (ATF) is utilized and will work. ATF with Dexron III® or Mercon 5® or a blend of both is recommended by Lippert Components, Inc.

In colder temperatures (less than 10° F) the jacks may extend and retract slowly due to the fluid's molecular nature. For cold weather operation, fluid specially formulated for low temperatures may be desirable. For a list of approved fluid specifications, see [TI-188](#).

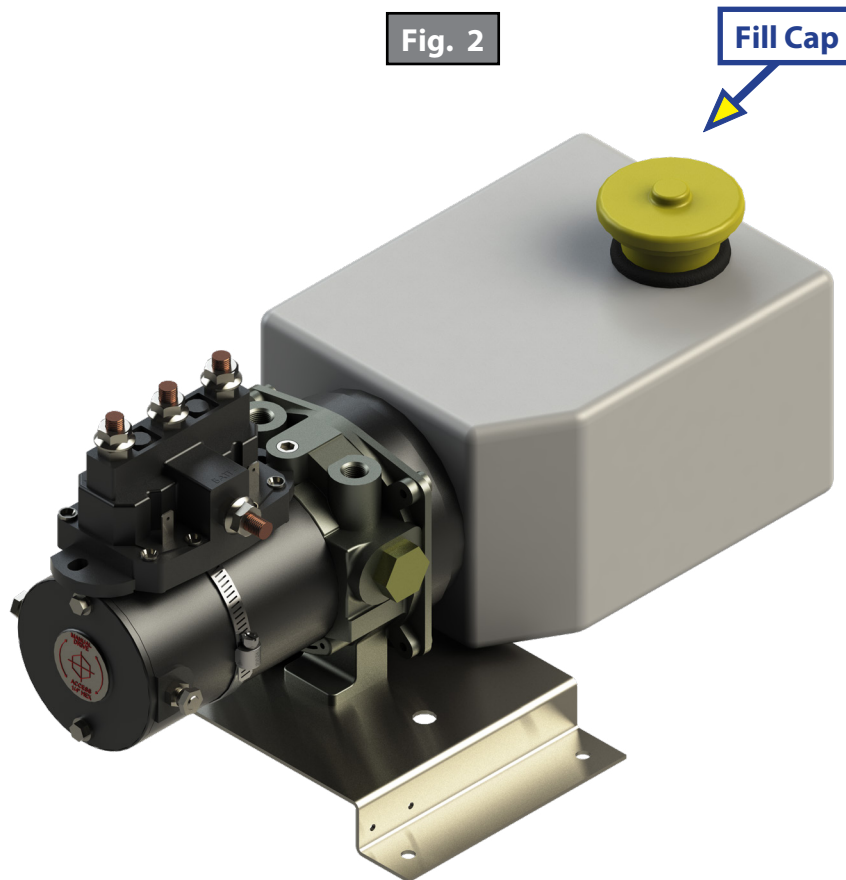
1. Remove Breather/Fill Cap (Fig. 2).
2. Pour ATF into Breather/Fill opening.

NOTE: Do not allow any contamination into reservoir during fill process.

NOTE: Standard reservoir holds approximately 2 quarts (1.89 liters) of ATF.

3. Fill to within ½" of top.
4. Replace Breather/Fill cap when finished.

NOTE: System is self-purging. By simply cycling the system 2-3 times, any air in the system will be forced back to the reservoir and out of the Breather/Fill cap.



Adjusting room so it seals in the IN position

1. Locate cylinder coming through the frame.
2. Run room partially out.
3. Hold jam nut (Fig. 3A) in place with wrench.
4. Adjust Nylock nut (Fig. 3C) towards the bracket if the room does not seal. Adjust the Nylock nut (Fig. 3C) away from the bracket if the room is too tight and damages the fascia.

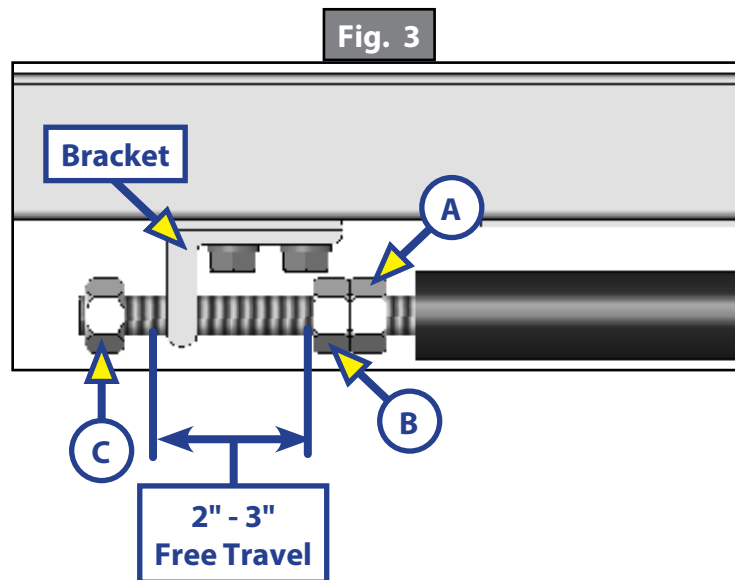
NOTE: Make small adjustments, running the room in after each adjustment until proper seal is achieved.

Adjusting room so it seals in the OUT position

1. Locate cylinder coming through the frame.
2. Extend room completely out.
3. Check the inside fascia and seal positioning.
4. Partially retract room.
5. Loosen and back off jam nut (Fig. 3A) from nut (Fig. 3B) to give nut (Fig. 3B) room for adjustment.
6. Adjust nut (Fig. 3B) away from the bracket if the room extends too far and damages the inside fascia. Adjust nut (Fig. 3B) towards the bracket if the room does not seal.

NOTE: Make small adjustments, running the room out after each adjustment until proper seal is achieved.

7. Tighten jam nut (Fig. 3A) to nut (Fig. 3B).



2" to 3" of free travel is normal.

Mechanical Room Adjustment

NOTE: All slide-out room adjustments must be performed by certified service technicians. Adjustments made by non-certified persons may void any and all warranty claims.

Horizontal Adjustment

1. Loosen carriage bolts (Fig. 4A) on each bracket located at the end of each guide tube.
2. Room is ready to be positioned horizontally by pushing on the outside, sidewall or by using a prying device inserted into the opening between the room and coach.

NOTE: Use caution when using prying device so seals do not become damaged.

Vertical Adjustment

1. Loosen 2 carriage bolts (Fig. 4A) on each bracket located at the end of each guide tube.
2. Loosen jam nut (Fig. 5A).
3. For vertical adjustment turn vertical adjustment bolt (Fig. 5B) up or down to locate room height.
4. Once room height is located, tighten carriage bolts (Fig. 4A) and jam nut (Fig. 5A).

Fig. 4

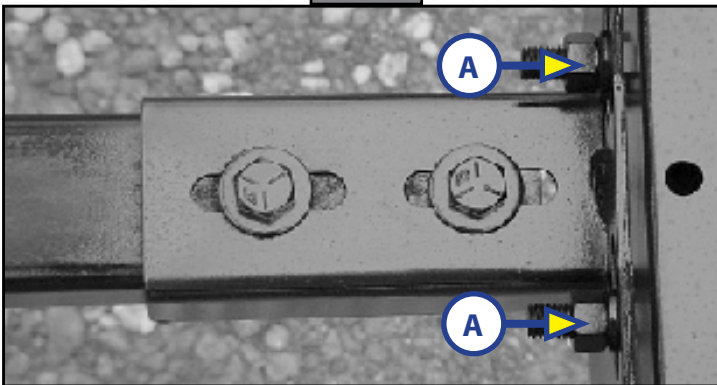
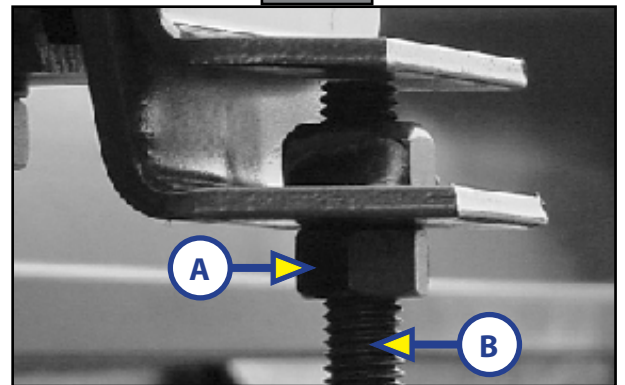


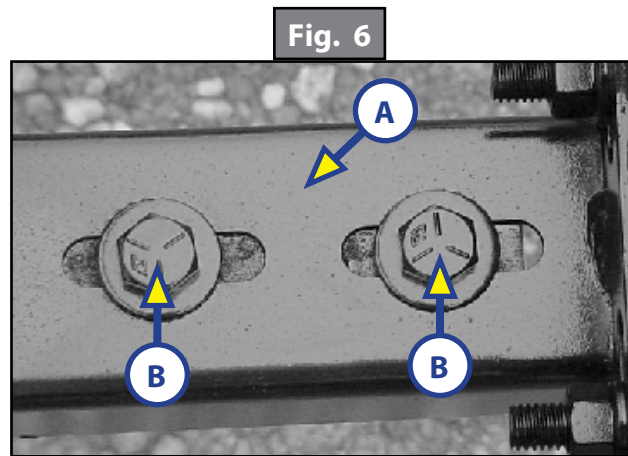
Fig. 5



Synchronizing Room Travel

The Lippert Hydraulic Slide-out System room travel (both sides of the room traveling the same distance) can be adjusted with specially designed synchronizing bracket mounted on the passive slide tube. The passive slide tube is the one that is not powered. The active slide tube is the one that has the cylinder attached. If one side of the room fails to seal adjust as follows:

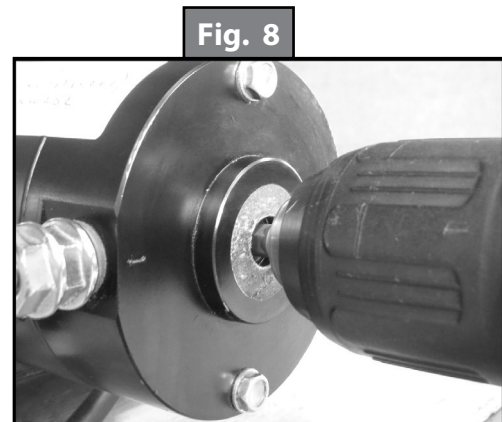
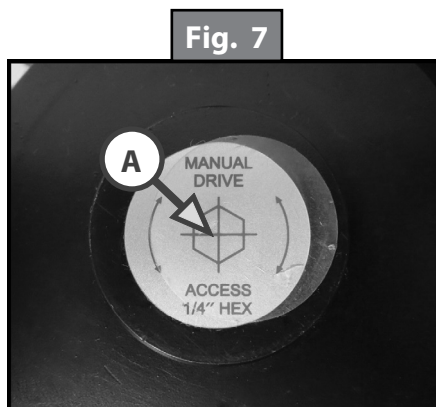
1. Extend the slide-out about halfway out.
2. Measure the active side from the "T"-molding on the slide-out back to the outside wall of the coach.
3. Then, measure the passive side in the same manner.
4. Loosen bolts (Fig. 6B) on top of the passive slide tube (Fig. 6A).
5. Push or pull room (on passive side) to align the passive side with the active side.
6. Tighten bolts (Fig. 6B) to secure the passive side position.
7. Retract room and run as normal.



Manual Override

The Lippert Hydraulic Slide-out System can be run with an auxiliary power device like an electric or cordless drill. In the event of electrical or system failure, this manual method of extending and retracting the slide-out room can be used. A standard hand-held drill is all that is required. A standard 38" room will take approximately 45 seconds to retract. See the instructions below.

1. Remove protective label (Fig. 7A).
2. Using a standard hex bit and auxiliary drive device (cordless or electric drill), insert hex bit into coupler found under protective label (Fig. 8).
3. Run drill counterclockwise to extend slide-out room and clockwise to retract slide-out room.



F.A.S.T. TRACK® SLIDE-OUT

SLIDE-OUTS

System Information

The F.A.S.T. (Fast Assembly Self Tensioning) Track® Slide-out is a cable-driven system that is operated by a 12V DC electric motor. The system is designed to actuate rooms up to 2,000 pounds and 40" of stroke. Room slide-out systems rated for higher weight or longer strokes can be obtained. Please act LCI for application assistance.

Major Components

- Vertical column that mounts into the side wall opening
- Horizontal cables that actuate the room
- A 12V DC gear motor that operates the room using power from the battery
- A specially designed control box that gives the user full control of room movement. The control box has programmable stops. When programmed, the stops limit extend and retract and have the ability to detect faults for ease in troubleshooting.
- Harnesses to connect the rocker switch and motors to the control box

Safety

WARNING

The F.A.S.T. Track Slide-out is intended for the sole purpose of extending and retracting a slide-out room. Its function should not be used for any other purpose. To use the system for any purpose other than its original design may result in death, serious personal injury, severe product or unit damage.

WARNING

Failure to act in accordance with the following may result in death, serious personal injury, severe product or unit damage.

Prior to Operation

1. To optimize slide-out actuation, the unit **MUST** be parked on solid, level ground.
2. Inspect all connections at the controller and verify they are securely attached.
3. Verify there are no obstructions that could hinder normal movement of the slide-out room.
4. Make sure there is ample voltage being supplied to the slide-out controller.
5. Set the parking brake, if applicable.
6. The ignition of the unit **MUST** be turned off in order to operate the slide-out system, if applicable.

WARNING

Failure to act in accordance with the following may result in death, serious personal injury, severe product or unit damage.

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 room is being operated to avoid possible serious personal injury.

Operation

Extending the Slide-Out Room

1. If equipped, remove the transit bars.
2. If equipped, turn "ON" the on/off switch or key.
3. Press and hold the "OUT" or "EXT" button.

NOTE: There will be a slight delay before the slide-out room will begin to move. This is normal.

4. Release the button when the slide-out room is fully extended and stops moving.
5. If equipped, turn "OFF" the on/off switch or key.

Retracting the Slide-Out Room

1. If equipped, turn "ON" the on/off switch or key.
2. Press and hold the "IN" or "RET" button.

NOTE: There will be a slight delay before the slide-out room will begin to move. This is normal.

3. Release the button when the slide-out room is fully retracted and stops moving.
4. If equipped, turn "OFF" the on/off switch or key.
5. If equipped, replace the transit bars.

Troubleshooting

The Error Code Chart in this section outlines some common problems, their causes and possible corrective actions. If any part or serial number information is available, provide it to the service technician when asking for assistance.

When something restricts room travel, system performance will be unpredictable. It is very important that the entire slide system be free of contamination and allowed to travel full distance (stroke). Ice or mud build-up during travel is an example of some types of contamination that can occur.

When you begin to troubleshoot the system, make sure the battery is fully charged, there are no visible signs of external damage to the system and that all connections are secure.

During troubleshooting, remember that if you change something, that change may affect something else. Make sure any changes you make will not create a new problem.

Fault Codes

The controller has the ability to detect and display several faults within the slide-out system. When a fault is detected, the room movement may stop and two different LED lights on the controller will flash in a particular pattern indicating the proper action needed to clear the fault, such as:

1. The Motor LED will flash GREEN 1 or 2 times, indicating which motor is experiencing the associated fault. For example, 1 GREEN flash indicates Motor 1 and 2 GREEN flashes indicates Motor 2.
2. The Fault Code LED will flash RED a number of times, indicating the determined fault. Refer to the troubleshooting chart below to best determine the cause of the fault.

| Error Code Chart | | |
|--------------------|--|---|
| What Is Happening? | Why? | What Should Be Done? |
| 1 Red Flash | 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. |
| 2 Red Flashes | 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 into 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 Red Flashes | Bad wire connection. | Refer to TIP Sheet 82-SO533 for troubleshooting. |
| | Bad motor. | |
| 6 Red Flashes | Supply voltage to control box is 17V DC or greater. | Consult manufacturer of unit charging system for troubleshooting assistance. |

NOTE: When motor movement is not detected by the control box in either direction during room actuation, the controller will automatically enter into "Emergency Jog" mode. When in Emergency Jog mode, the controller will jog both motors in the direction the switch is pressed, i.e. "IN" or "OUT". The 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.

NOTE: The control box will return to normal mode after five minutes of inactivity or by cycling power to the control box.

Manual Override

1. Disconnect the wire harness from the motor lead (Fig. 1A).
2. Remove the screws (Fig. 2B) anchoring the interior column clamp (Fig. 2C) to the wall.
3. Detach the interior column clamp from the column and set aside.
4. Remove the two screws (Fig. 2A) that hold the motor cover (Fig. 3A) to the column (Fig. 2D) and remove the motor cover.
5. Disengage the motor from the drive sprocket assembly (Fig. 4A).
6. Repeat steps 1-5 on the opposite column.
7. The slide-out system should be free to move manually.
8. Once fully, manually retracted, insert the motor into the drive sprocket assembly. This prevents the slide-out from moving freely while the unit is in motion.

Fig. 1

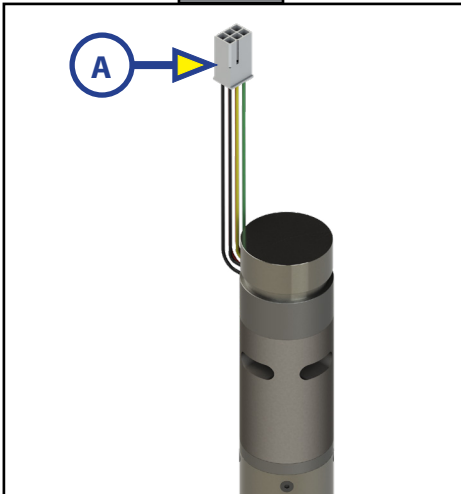


Fig. 2

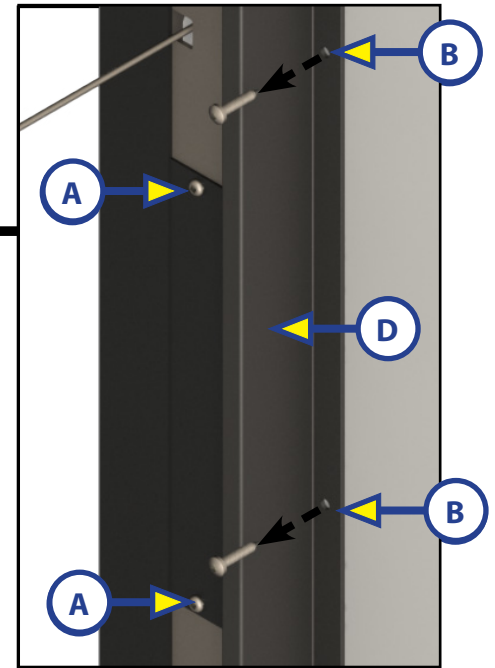
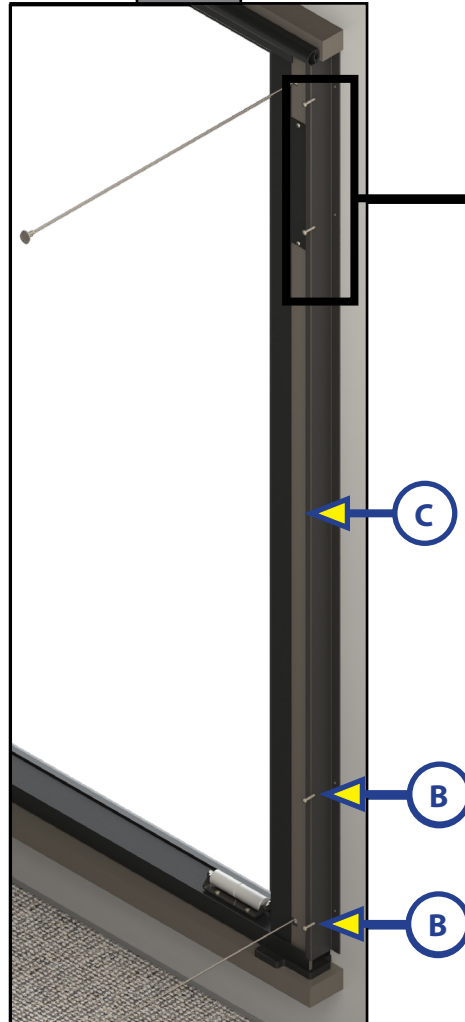


Fig. 3

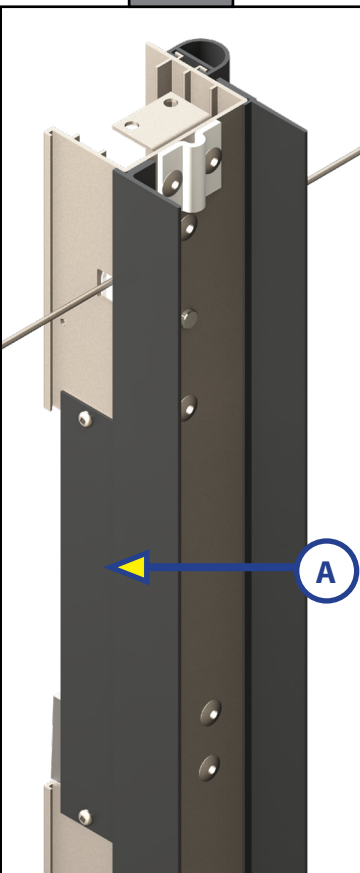
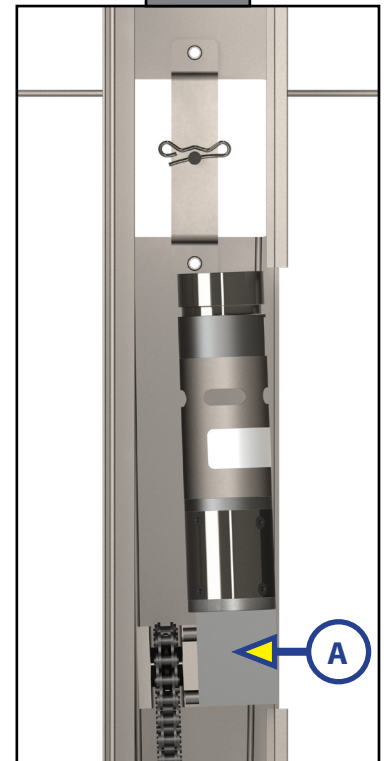
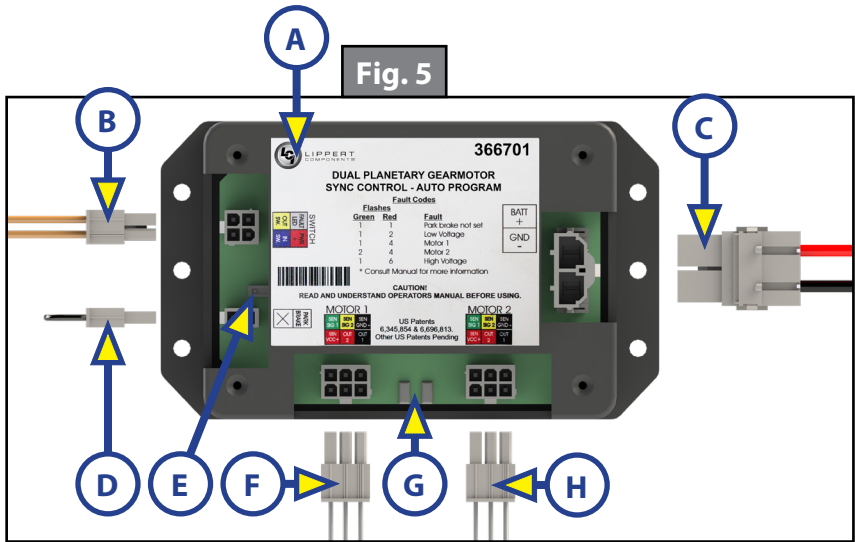


Fig. 4

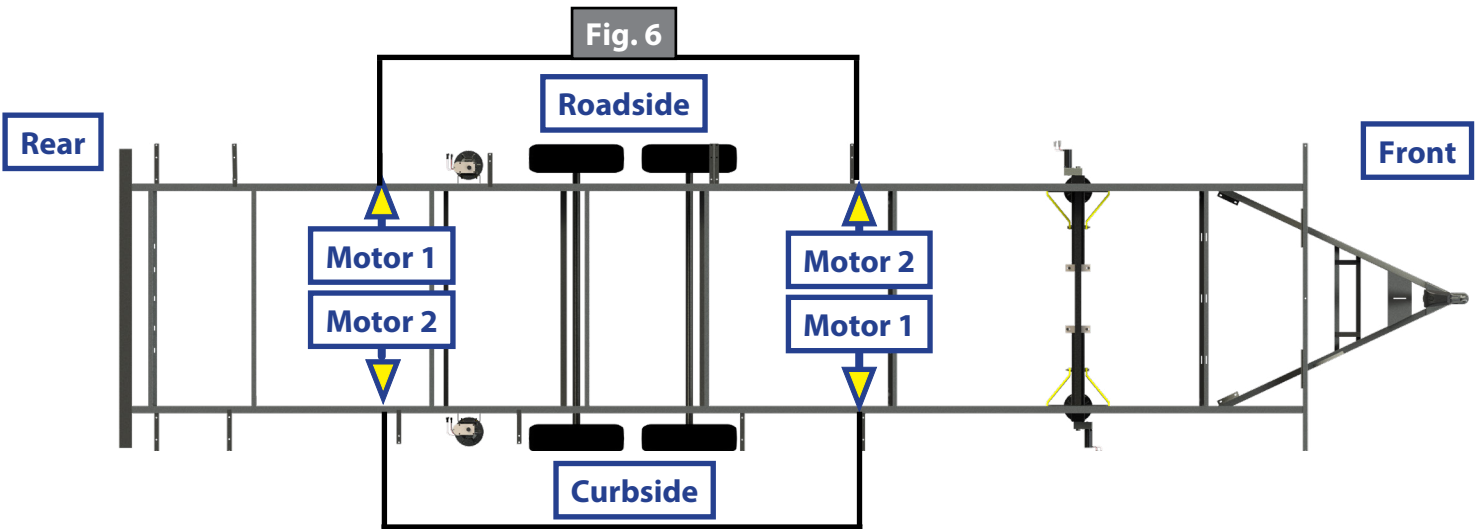


Wiring

- NOTE:** The controller (Fig. 5A) is **NOT** waterproof.
- NOTE:** When identifying Motor 1 and Motor 2, refer to figure 6.
- NOTE:** With the mode switch (Fig. 5E) in the left position, the controller will not operate the slide-out room unless a park brake signal is found. With the mode switch in the right position, the controller will bypass this safety feature. For all travel trailers, the switch will need to be in the right position.



| Callout | Description |
|---------|------------------------------|
| A | Controller |
| B | SWITCH Harness |
| C | Power Harness (BATT+ / GND-) |
| D | PARK BRAKE Input Harness |
| E | Mode Switch |
| F | MOTOR 1 Harness |
| G | Indicator Lights |
| H | MOTOR 2 Harness |



Maintenance

The F.A.S.T. Track® Slide-out has been designed to require very little maintenance. To ensure the long life of your slide-out system, read and follow these few simple procedures:

- When the room is extended, visually inspect the slide system assemblies. Check for excess buildup of dirt or other foreign material. Remove any debris that may be present.
- If the system squeaks or makes any noises, wipe off any debris or dirt from the cables.
- If a slide-out cable is fraying, contact a qualified service center technician.

Introduction

The Lippert Components (LCI) SlimRack® Slide-Out system maximizes interior RV space by providing added comfort and offering a practical solution for additional space needs. The LCI 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 www.lci1.com/support or by downloading the free myLCI app. The app is available on iTunes® for iPhone® and iPad® and also on Google Play™ for Android™ users.

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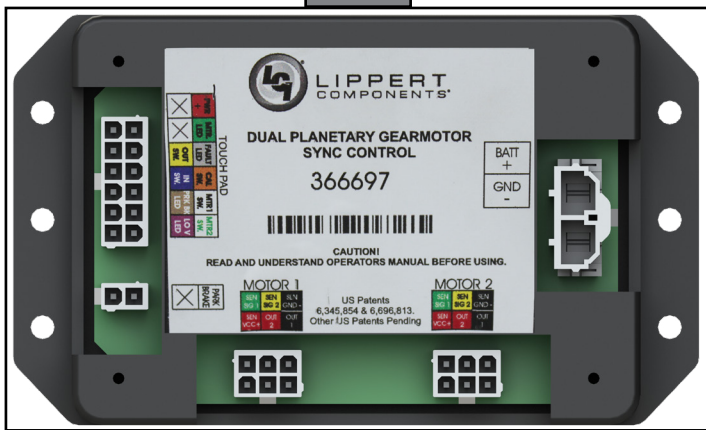
Product Information

The LCI 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 / LCI part number [366697](#) (Fig. 1), Power Gear part number 1510000236 / LCI part number [366701](#) (Fig. 2) or Power Gear part number 1510000276 / LCI part number 366703 (Fig. 3). Controller Power Gear part number 1510000199 / LCI part number [366697](#) connects to a touchpad. Controller part numbers (Power Gear / LCI) 1510000236 / [366701](#) and 1510000276 / 366703 connect to a rocker switch.

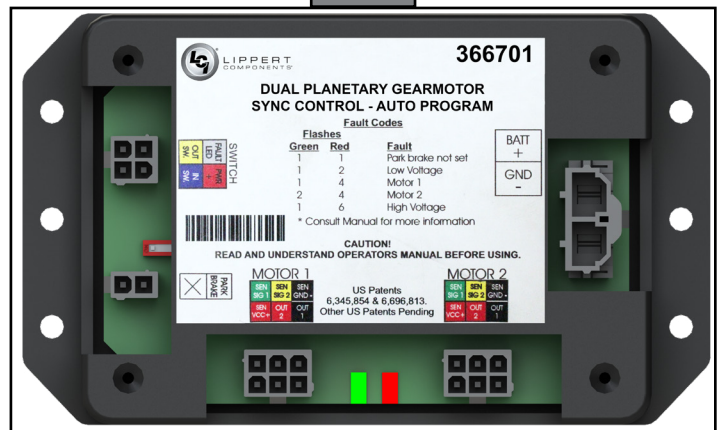
NOTE: Previously, some Winnebago models used controller Power Gear part number 1510000276 / LCI part number 366703 (Fig. 3) which required a wire harness with an 8-pin connector for connecting the controller to Motor 2 (Fig. 3A). For all new units, Power Gear part number 1510000276 / LCI part number 366703 has been replaced by Power Gear part number 1510000236 / LCI part number [366701](#). For servicing older Winnebago units, controller Power Gear part number 1510000276 / LCI part number 366703 has been replaced with controller Power Gear part number 1510000236 / LCI part number [366701](#) with an added adapter wire harness.

Fig. 1



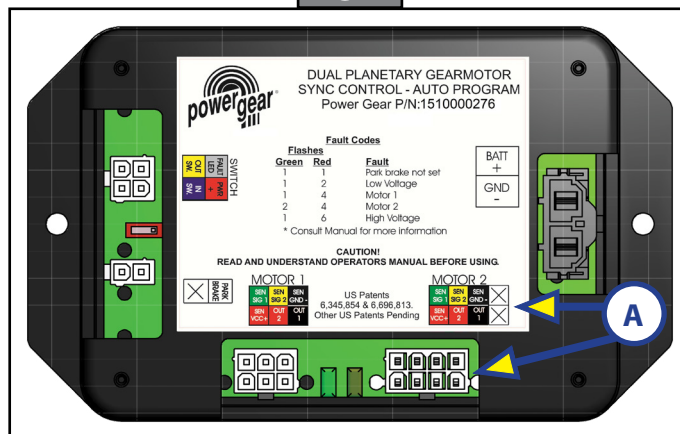
1510000199 / [366697](#)

Fig. 2



1510000236 / [366701](#)

Fig. 3



1510000276 / 366703 (Winnebago)
Discontinued - replaced by 1510000236 / [366701](#)

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

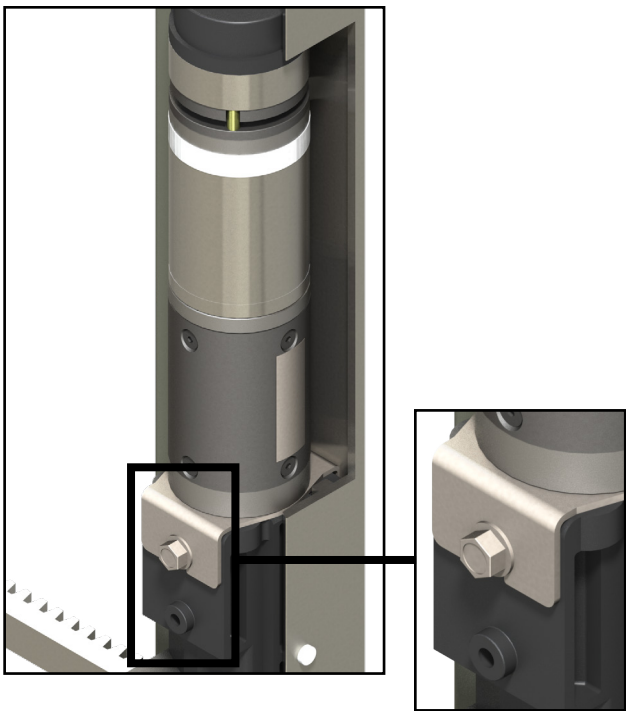


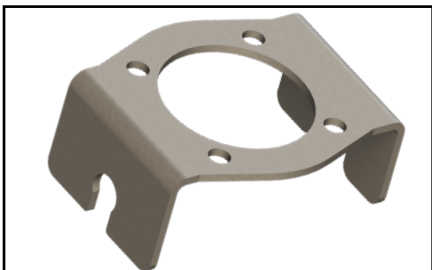
Fig. 5

Old Bracket 389061



Fig. 7

New Bracket 422671

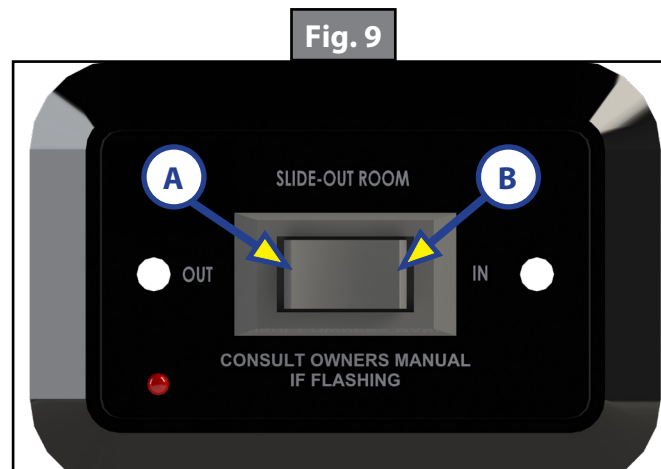
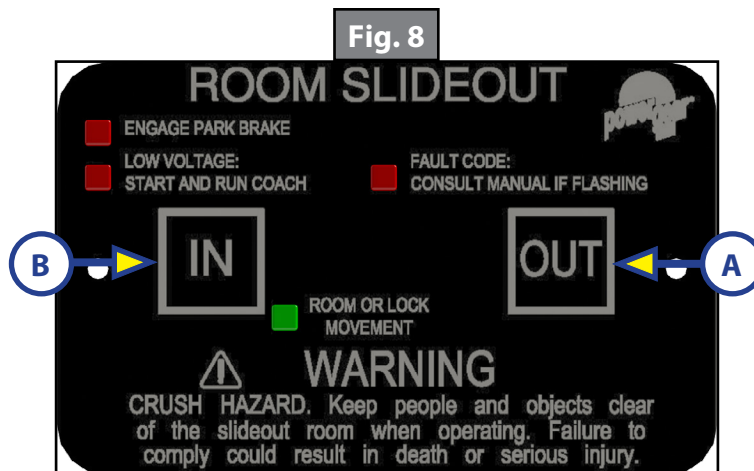


Component Descriptions

- A touchpad (Fig. 8), used with programmable controller Power Gear part number 1510000199 / LCI part number [366697](#), or a rocker switch (Fig. 9), used with auto-programmable controller part numbers (Power Gear / LCI) 1510000236 / [366701](#) 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 Components) that support the slide-out room's weight while extending and retracting the slide-out room. Only floor rollers approved by Lippert Components can be used with the system. Contact Lippert Components for recommended rollers.



Safety

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.

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

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

Troubleshooting

Controller 1510000199 / [366697](#)

Controller 1510000199 / [366697](#), 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](#) 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](#) 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.

Fig.10

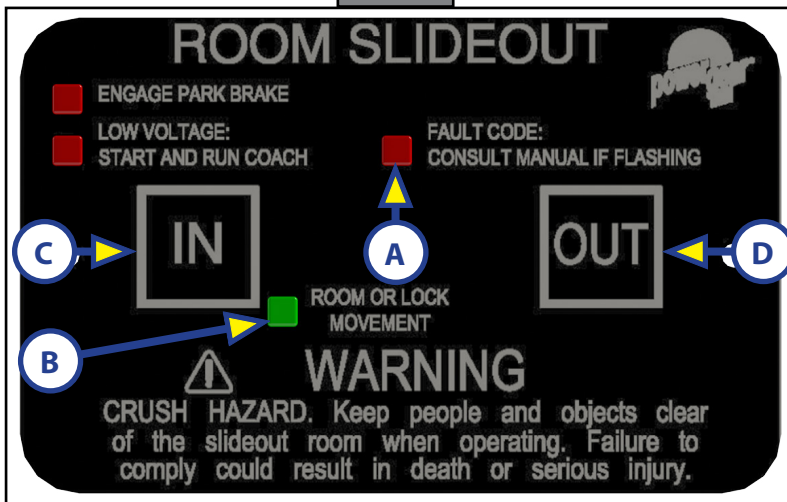
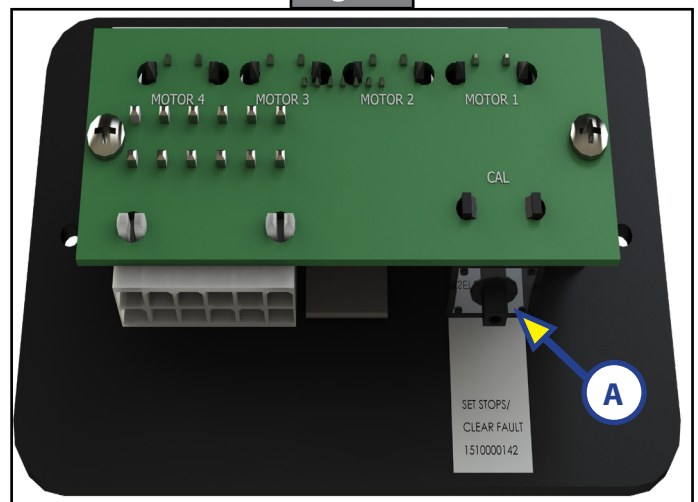


Fig. 11



| 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 . |
| | | | 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 . 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. |

Auto-Programmable Controllers

Auto-programmable controllers, 1510000236 / [366701](#) 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

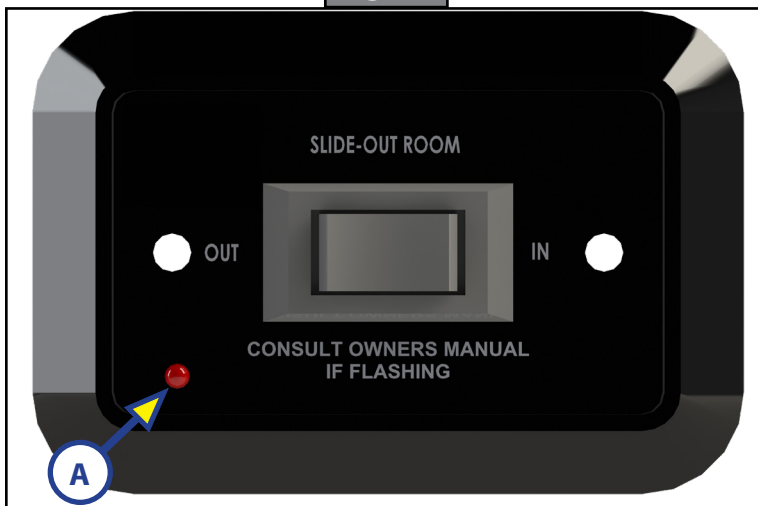
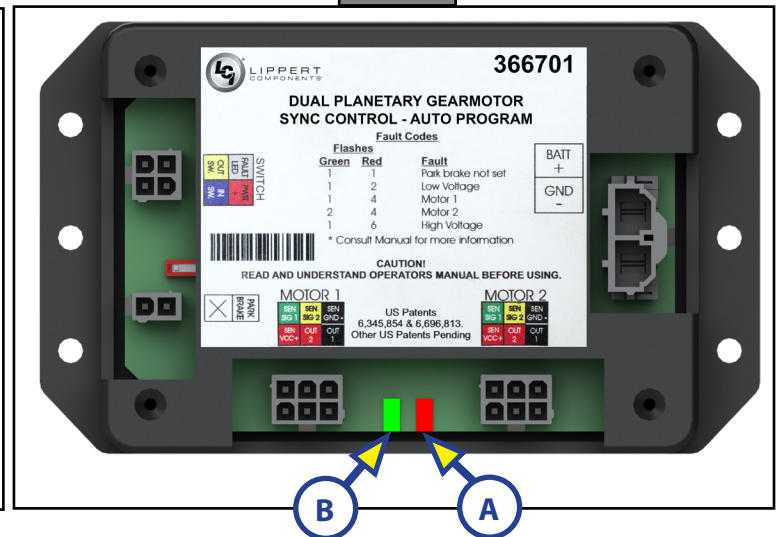


Fig.13



| Fault Code Table - Auto-Programmable Controllers | | | | | |
|--|-----------|------------|--------------------|--|---|
| Fault Code Flashes | | Fault Type | Description | Why? | What Should Be Done? |
| Green Flash | Red Flash | | | | |
| 1 | 1 | Minor | Park brake not set | Park brake not set if applicable | Set parking brake if applicable. |
| | | | | Ground signal lost at park brake receptacle at controller | Check for continuity to ground on wire plugged into park brake receptacle at controller. |
| 1 | 2 | Minor | Low voltage | Incoming voltage to controller is below 12V DC. The slide-out room will NOT move if voltage is 10.5V DC or below | Start vehicle, generator, or make sure coach is plugged into shore power. Use a multimeter to check 2-pin power connector at controller at BATT+ and GND-. Consult manufacturer of unit's charging system for troubleshooting assistance. |
| 1 | 4 | Major | Motor 1 fault | Bad wire connection | Refer to Troubleshooting Control Box for SlimRack Systems (82-S0533). To locate this document online, go to https://www.lci1.com/slide-outs-/support-slimrack . Go to the Technical Information Sheets tab. Look for: <i>Troubleshooting Control Box for SlimRack Systems (82-S0533)</i> in the document listing. |
| | | | | Bad motor | |
| 2 | 4 | Major | Motor 2 fault | Bad wire connection | |
| | | | | Bad motor | |
| 1 | 6 | Minor | High voltage | Supply voltage to controller is 17V DC or greater | Consult manufacturer of unit's charging system for troubleshooting assistance. |

Electrical Override Modes

Controller 1510000199 / [366697](#)

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. 14A) 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.

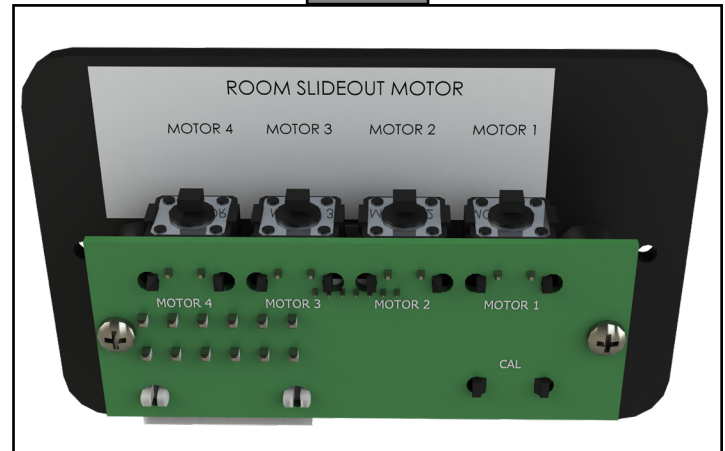
NOTE: The unit is now ready to retract the slide-out room.

4. Press and hold the ROOM SLIDEOUT MOTOR buttons 1 and 2 on the back of the touchpad (Fig. 15).

Fig. 14



Fig. 15



⚠ 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 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](#) 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.

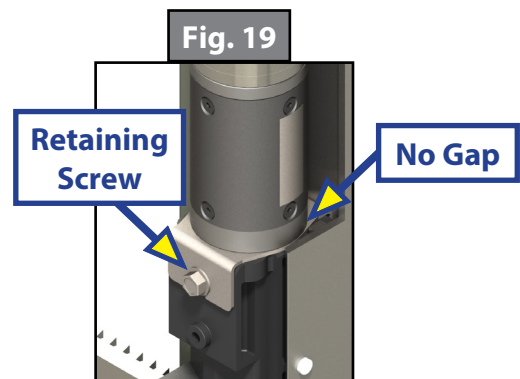
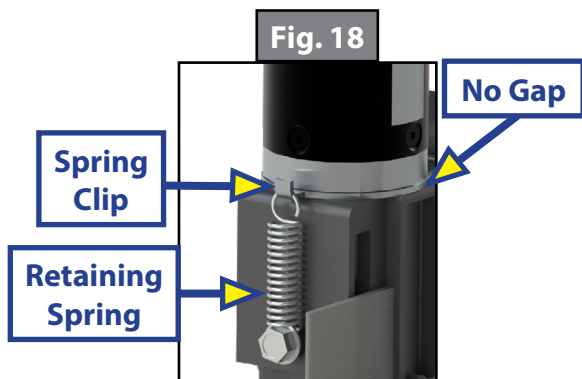
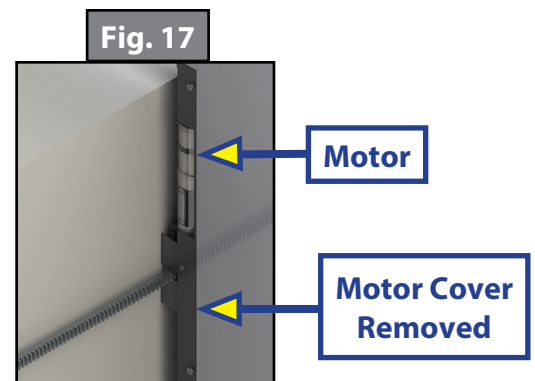
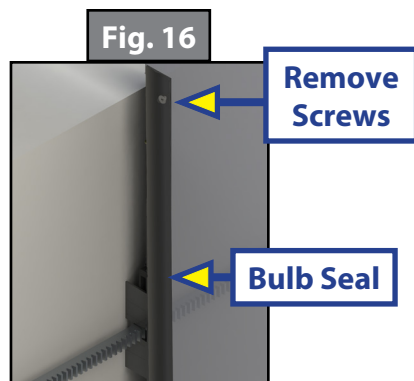
Manual Override Mode—All Controllers

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. 16).
3. Pull down the bulb seal and remove the motor cover (Fig. 17). The motor cover may stick to the bulb seal.
4. If there is a retaining spring (Fig. 18), 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. 19) 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 rehooked to the motor spring clip (Fig. 18).
 - B. Torquing the motor retaining screw to 40 in-lbs (Fig. 19) 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. 18 and 19).
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. 20) to move the slide-out room.
 - A. Remove the motor. Follow steps 1-6 under the Manual Override Mode section.

⚠ CAUTION

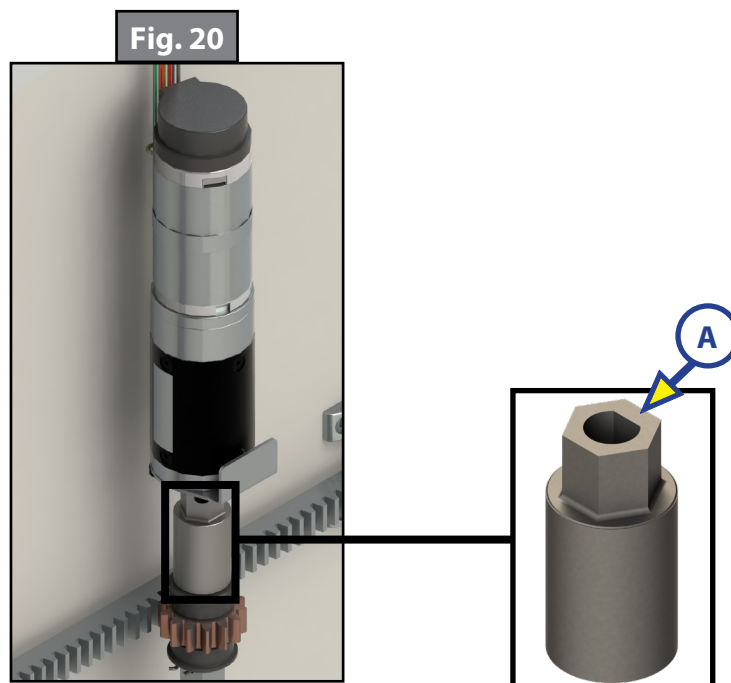
When manually retracting the slide-out room, make sure that both sides of the slide-out room move together. Damage to the slide-out room may result if movement is not uniform.

⚠ 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. 20A).
- 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.

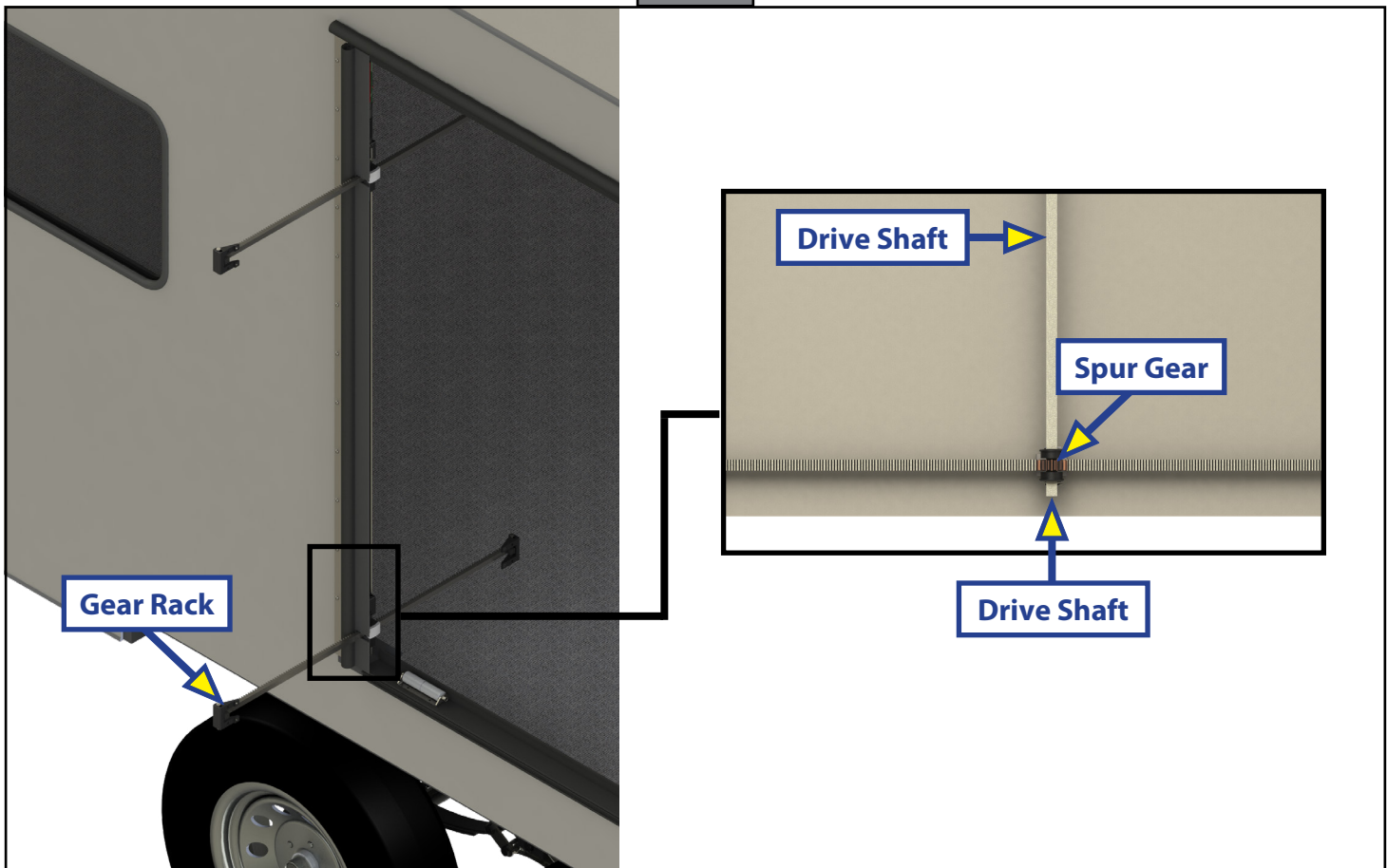


- D. Once the slide-out room is retracted, secure the slide-out room in-place by:
 - I. Re-installing the motors. If there is a retaining spring, make sure the end of the retaining spring is rehooked to the motor spring clip (Fig. 18).
 - II. Torquing the motor retaining screw to 40 in-lbs (Fig. 19) 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. 18 and 19).
- 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 rehooked to the motor spring clip (Fig. 18).
 - II. Torquing the motor retaining screw to 40 in-lbs (Fig. 19) 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. 18 and 19).
- 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. 21



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.

System Information

The F.A.S.T. (Fast Assembly Self Tensioning) Track® Slide-out is a cable-driven system that is operated by a 12V DC electric motor. The system is designed to actuate rooms up to 2,000 pounds and 40" of stroke.

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

iTunes®, iPhone®, and iPad® are registered trademarks of Apple Inc.

Google Play™ and Android™ are trademarks of Google Inc.

Major Components

- Vertical column that mounts into the side wall opening
- Horizontal cables that actuate the room
- A 12V DC gear motor that operates the room using power from the battery
- A specially designed control box that gives the user full control of room movement. The control box has programmable stops. When programmed, the stops limit extend and retract and have the ability to detect faults for ease in troubleshooting.
- Harnesses to connect the rocker switch and motors to the control box.

WARNING

The "WARNING" symbol above is a sign that a procedure has a safety risk involved and may cause death, serious personal injury, severe product or property damage if not performed safely and within the parameters set forth in this manual.

WARNING

The F.A.S.T. Track Slide-out is intended for the sole purpose of extending and retracting a slide-out room. Its function should not be used for any other purpose. To use the system for any purpose other than its original design may result in death, serious personal injury, severe product or property damage.

CAUTION

The "CAUTION" symbol above is a sign that a procedure has a safety risk involved and may cause personal injury, product or property damage if not performed safely and within parameters set forth in this manual.

CAUTION

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

Prior to Operation

WARNING

Failure to act in accordance with the following may result in death, serious personal injury, severe product or property damage.

WARNING

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 room is being operated to avoid possible serious personal injury.

1. To optimize slide-out actuation, the unit **MUST** be parked on solid, level ground.
2. Inspect all connections at the controller and verify they are securely attached.
3. Verify there are no obstructions that could hinder normal movement of the slide-out room.
4. Make sure there is ample voltage being supplied to the slide-out controller.
5. Set the parking brake, if applicable.
6. If applicable, the ignition of the unit **MUST** be turned off in order to operate the slide-out system.

Operation



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

Extending the Slide-out Room

1. If equipped, remove the transit bars.
2. If equipped, turn "ON" the on/off switch or key.
3. Press and hold the "OUT" or "EXT" button.

NOTE: There will be a slight delay before the slide-out room will begin to move. This is normal.

4. Release the button when the slide-out room is fully extended and stops moving.
5. If equipped, turn "OFF" the on/off switch or key.

Retracting the Slide-out Room

1. If equipped, turn "ON" the on/off switch or key.
2. Press and hold the "IN" or "RET" button.

NOTE: There will be a slight delay before the slide-out room will begin to move. This is normal.

3. Release the button when the slide-out room is fully retracted and stops moving.
4. If equipped, turn "OFF" the on/off switch or key.
5. If equipped, replace the transit bars.

Troubleshooting

The Fault Code Chart in this section outlines some common problems, their causes and possible corrective actions. If any part or serial number information is available, provide it to the service technician when asking for assistance.

When something restricts room travel, system performance will be unpredictable. It is very important that the entire slide system be free of contamination and allowed to travel full distance (stroke). Ice or mud build-up during travel is an example of some types of contamination that can occur.

When you begin to troubleshoot the system, make sure the battery is fully charged, there are no visible signs of external damage to the system and that all connections are secure.

During troubleshooting, remember that if you change something, that change may affect something else. Make sure any changes you make will not create a new problem.

Fault Codes

The controller has the ability to detect and display several faults within the slide-out system. When a fault is detected, the room movement may stop and two different LED lights on the controller will flash in a particular pattern indicating the proper action needed to clear the fault, such as:

1. The Motor LED will flash GREEN 1 or 2 times, indicating which motor is experiencing the associated fault. For example, 1 GREEN flash indicates Motor 1 and 2 GREEN flashes indicates Motor 2.
2. The Fault Code LED will flash RED a number of times, indicating the determined fault. Refer to the troubleshooting chart below to best determine the cause of the fault.

| Fault Code Chart | | | | | |
|--------------------|-----------|------------|--------------------|--|--|
| Fault Code Flashes | | Fault Type | Description | Why? | What Should Be Done? |
| Green Flash | Red Flash | | | | |
| 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. |
| 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. |

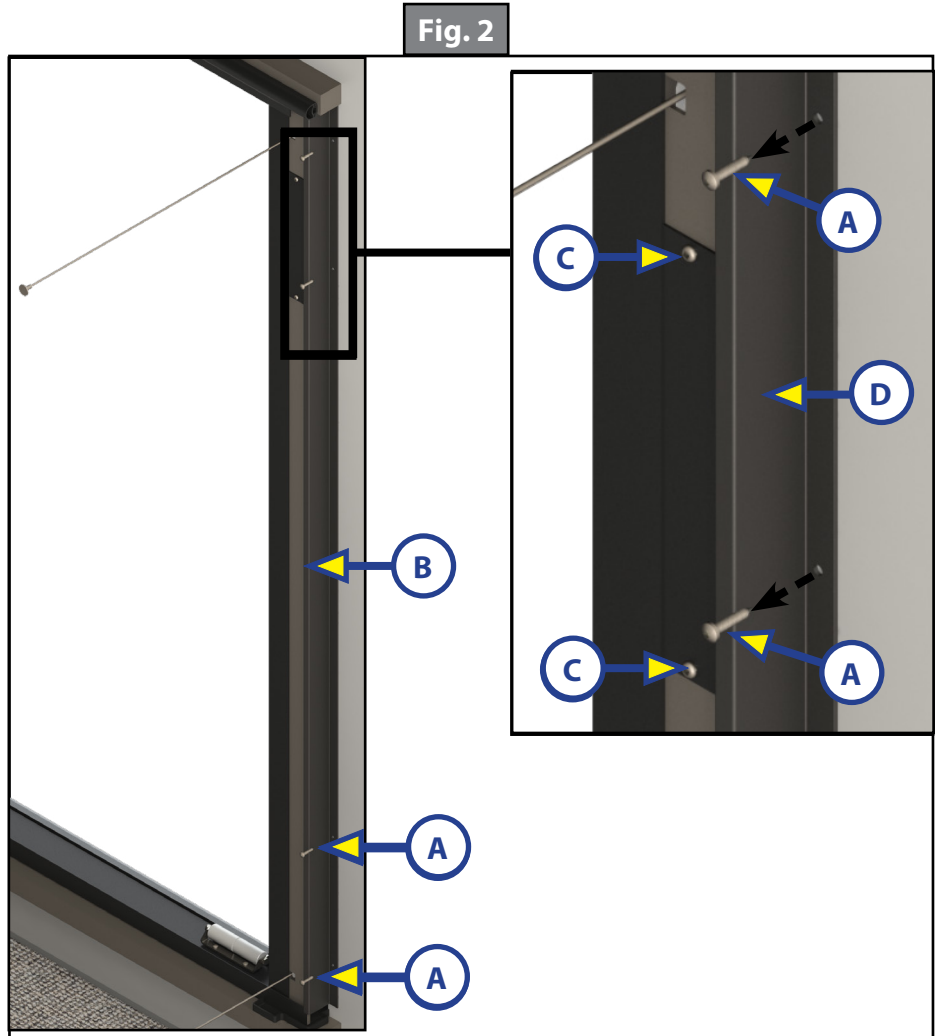
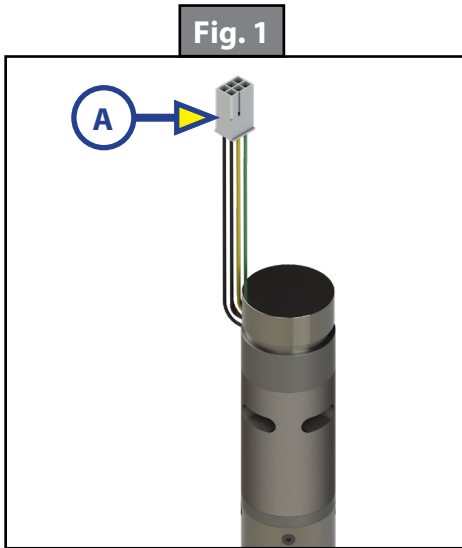
NOTE: When motor movement is not detected by the control box in either direction during room actuation, the controller will automatically enter into "Emergency Jog" mode. When in Emergency Jog mode, the controller will jog both motors in the direction the switch is pressed, i.e. "IN" or "OUT". The switch 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.

NOTE: The control box will return to normal mode after five minutes of inactivity or by cycling power (turning power off/on) to the control box.

Manual Override

In the event that power is lost to the slide-out motor(s), the slide-out room can be manually retracted by following these steps:

1. Disconnect the wire harness from the motor lead (Fig. 1A).
2. Remove the screws (Fig. 2A) anchoring the interior column clamp (Fig. 2B) to the wall.
3. Detach the interior column clamp from the column and set aside.
4. Remove the two screws (Fig. 2C) that hold the motor cover (Fig. 3A) to the column (Fig. 2D) and remove the motor cover.



5. Disengage the motor from the drive sprocket assembly (Fig. 4A).
6. Repeat steps 1-5 on the opposite column.
7. The slide-out system should be free to move manually.
8. Once fully, manually retracted, insert the motor into the drive sprocket assembly. This prevents the slide-out from moving freely while the unit is in motion.



Maintenance

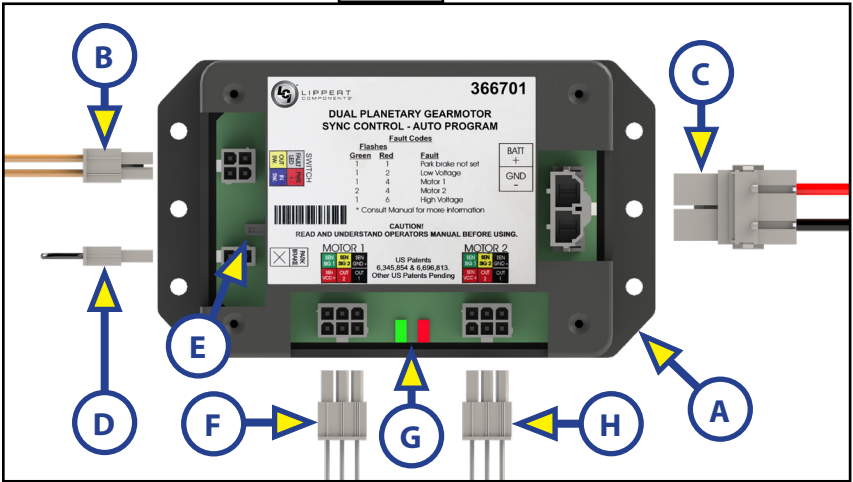
The F.A.S.T. Track® Slide-out has been designed to require very little maintenance. To ensure the long life of your slide-out system, read and follow these few simple procedures:

- When the room is extended, visually inspect the slide system assemblies. Check for excess buildup of dirt or other foreign material. Remove any debris that may be present.
- If the system squeaks or makes any noises, wipe off any debris or dirt from the cables.
- If a slide-out cable is fraying, contact a qualified service center technician.

Wiring

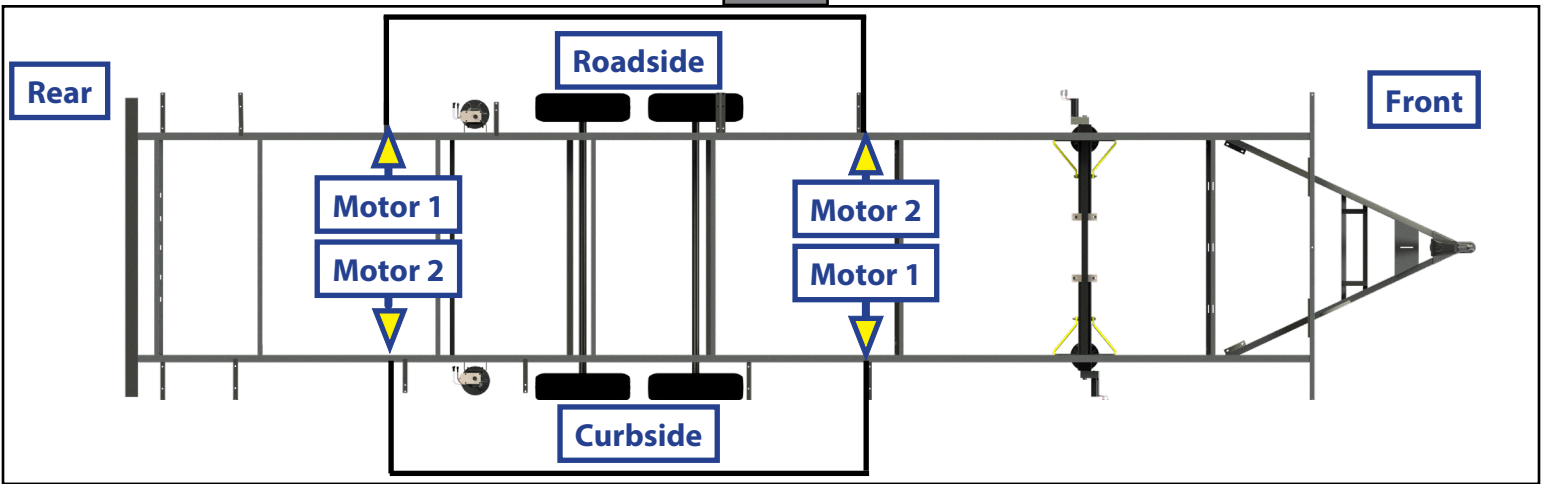
The controller (Fig. 5A) is not waterproof. When identifying Motor 1 and Motor 2, refer to figure 6. With the mode switch (Fig. 5E) in the left position, the controller will not operate the slide-out room unless a park brake signal is found. With the mode switch in the right position, the controller will bypass this safety feature. For all travel trailers, the switch will need to be in the right position.

Fig. 5



| Callout | Description |
|---------|------------------------------|
| A | Controller |
| B | Switch Harness |
| C | Power Harness (BATT+ / GND-) |
| D | Park Brake Input Harness |
| E | Mode Switch |
| F | Motor 1 Harness |
| G | Indicator Lights |
| H | Motor 2 Harness |

Fig. 6





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Lippert Components, Inc.

Ph: 574-537-8900 | Web: lci1.com | Email: customerservice@lci1.com