

The logo features a series of vertical bars of varying heights on the left, transitioning from dark grey to yellow. To the right, the text "SlimRack" is in a large, bold, yellow font, with a small "TM" superscript. Below it, "Slide-Out System" is written in a smaller, white, sans-serif font.

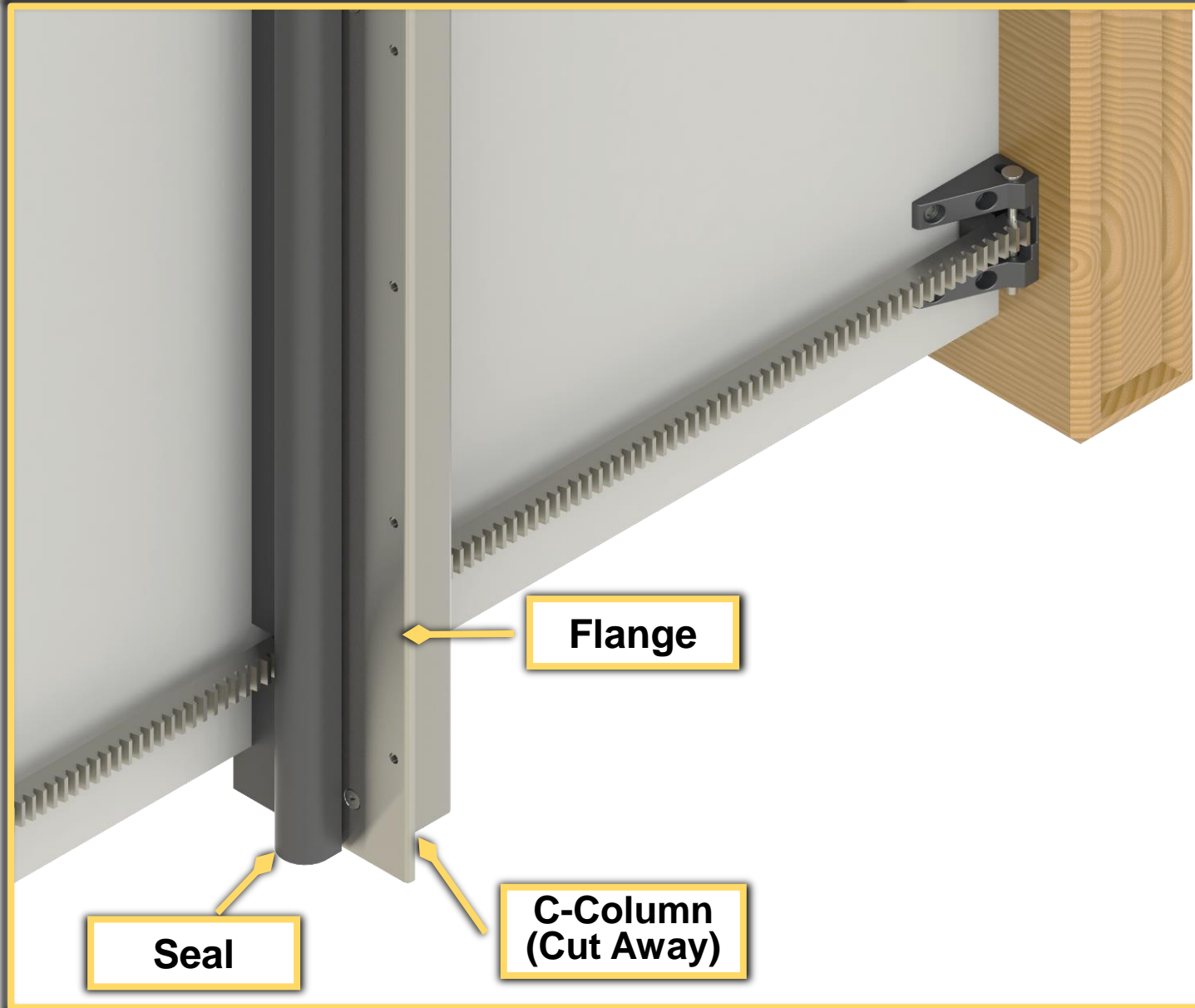
SlimRackTM

Slide-Out System

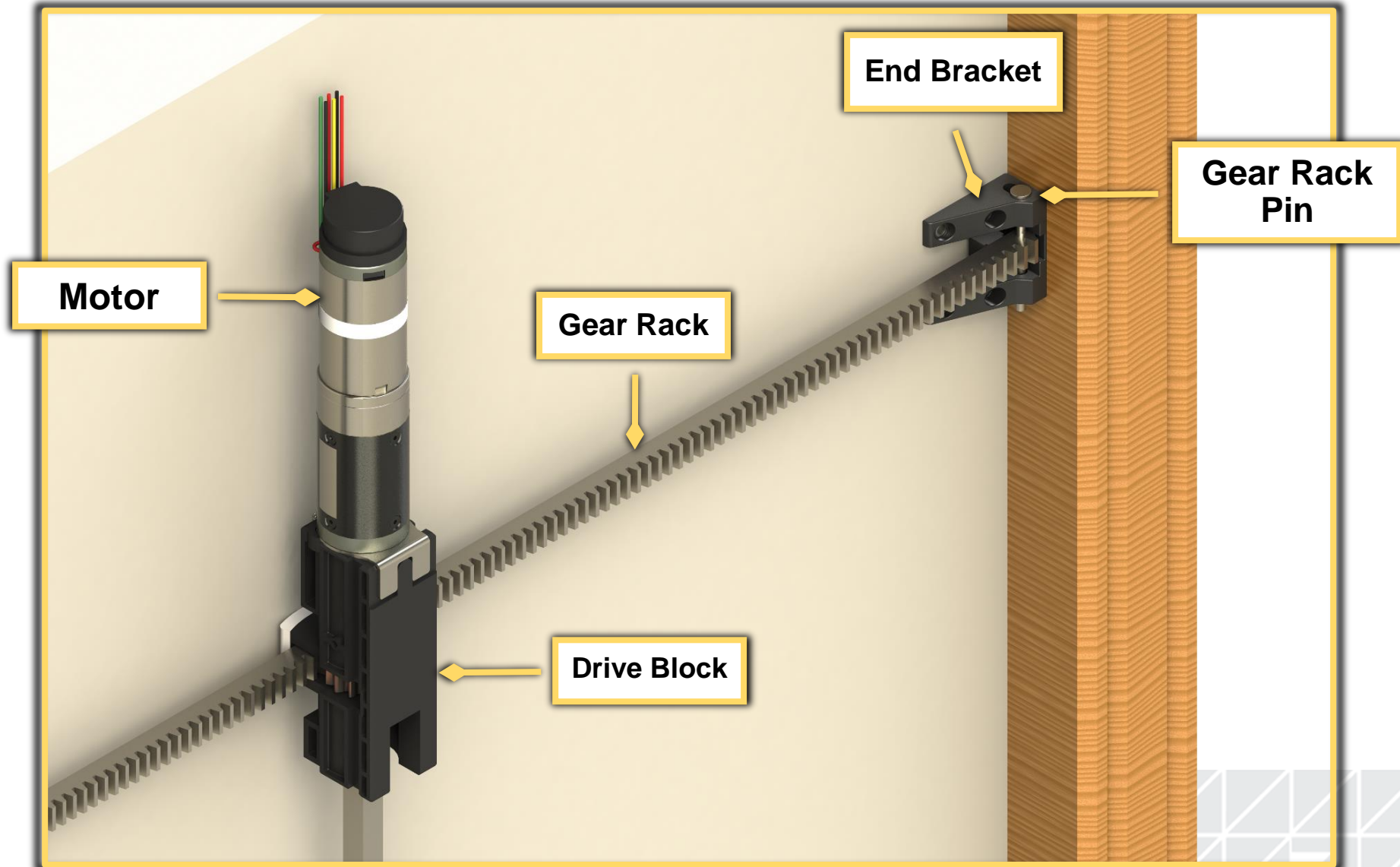


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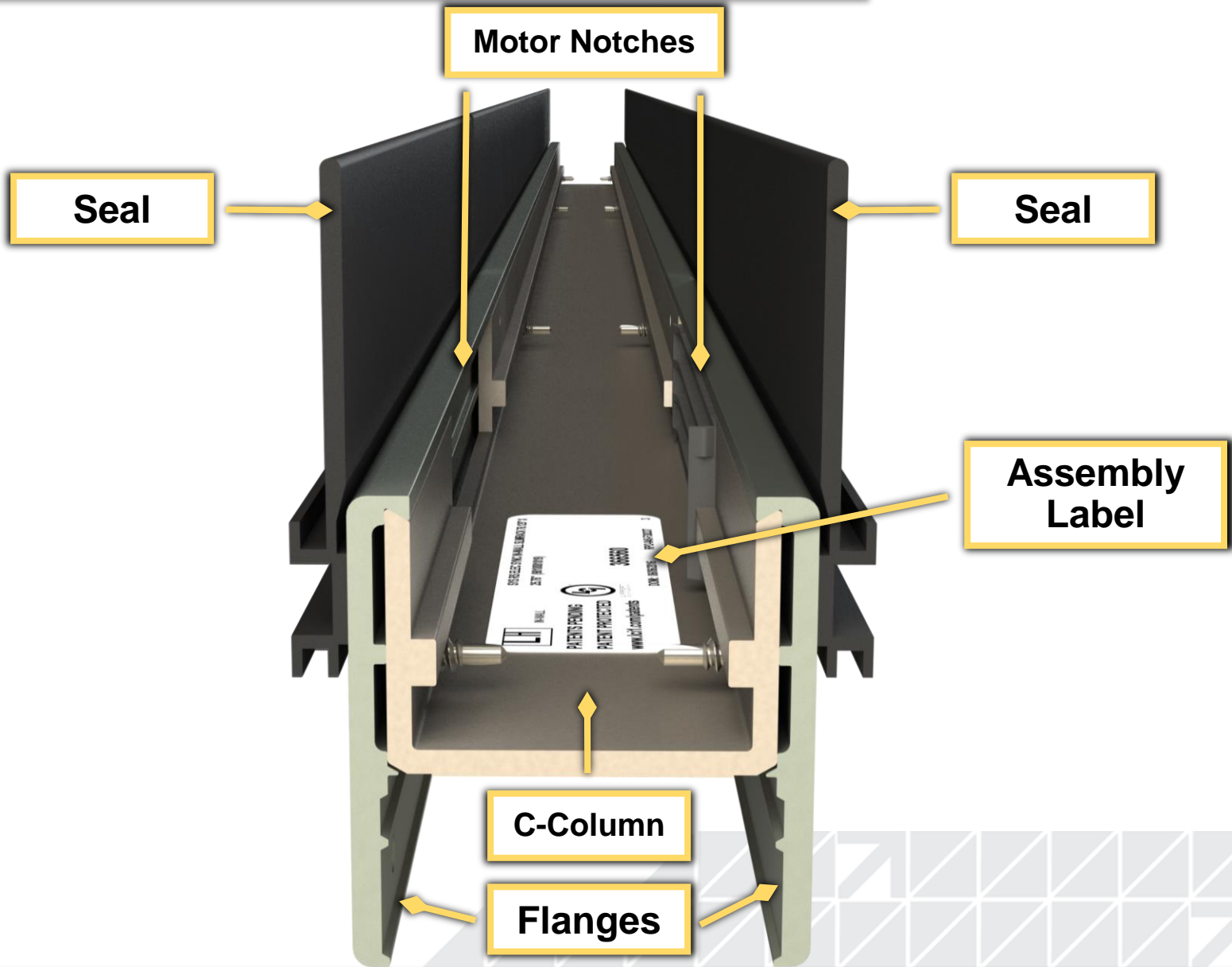
Lower Gear Rack Assembly



Upper Gear Rack Assembly



C-Column



Drive Blocks

Seal

Felt Pad

Left Side

Right Side

Coupler

Spring
Clip
Hole

Drive Shaft

Bearing Flange

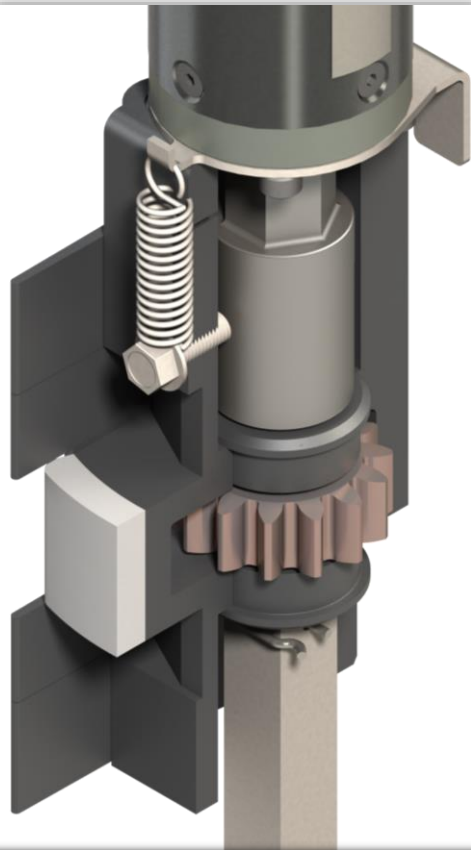
Spur Gear

Timing
Mark

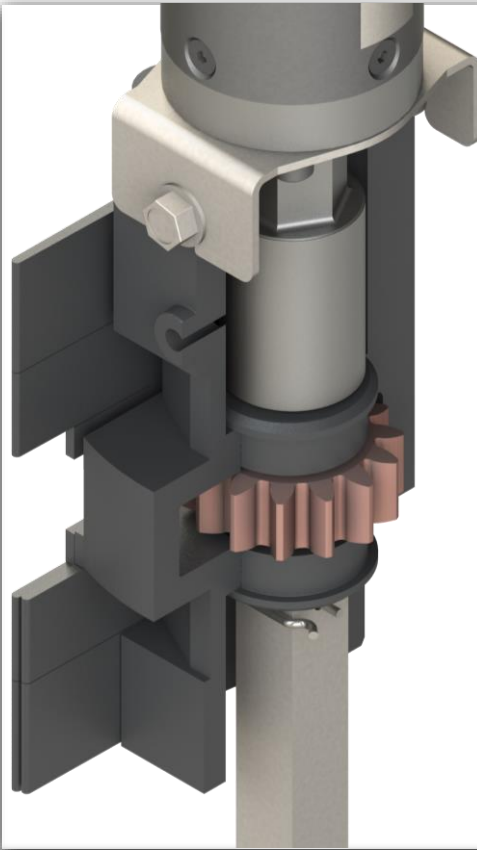
Spring Clip



Upper Drive Shaft Assembly



**Original Motor and
Drive Block**



**Current Motor and
Drive Block**

Motor

Coupler

Bearing Flange

Spur Gear

Bearing Flange

Spring Clip

Drive Shaft

Gear Rack Assembly

Grooved Pin



Push Nut



End Bracket



Grooved Pin

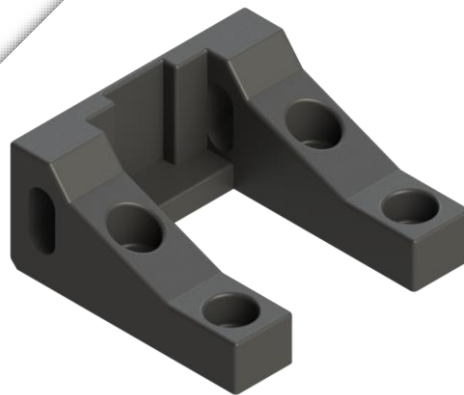


Gear Rack

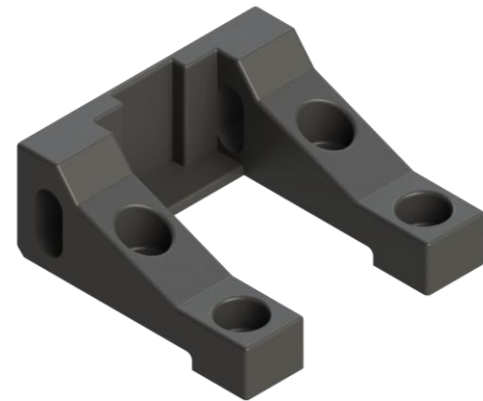
Push Nut



End Brackets

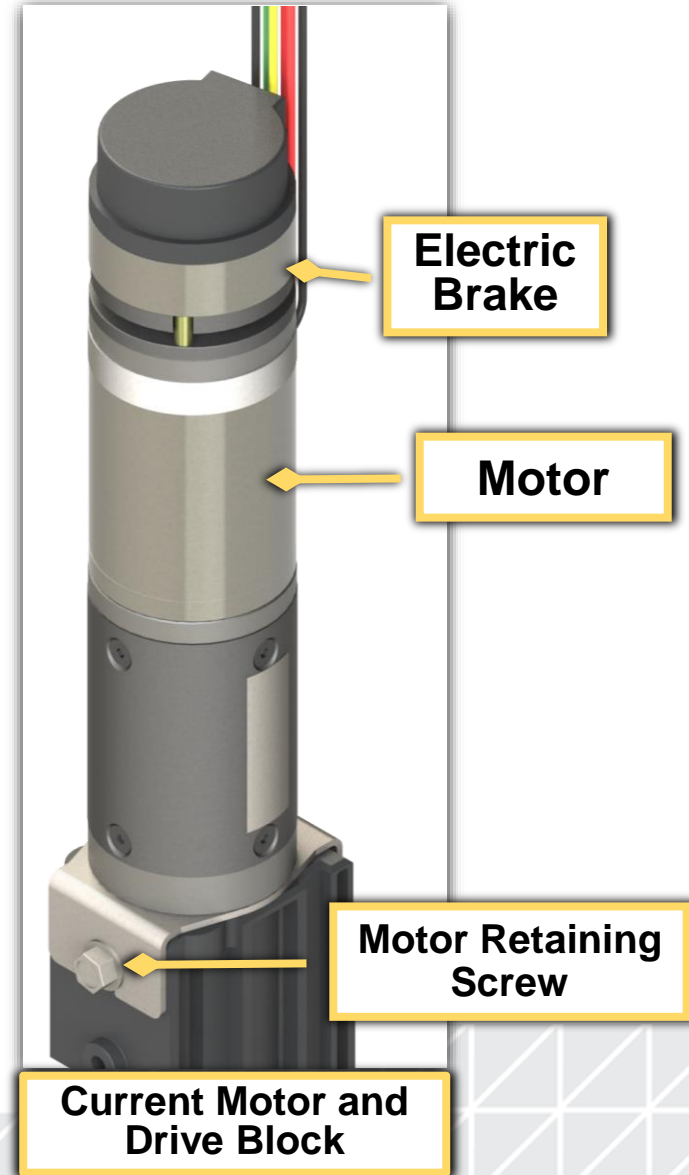


Flat

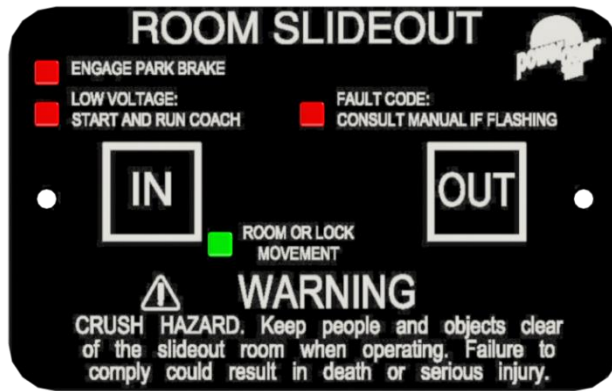


Notched

Motor



Programmable



Wall Switch

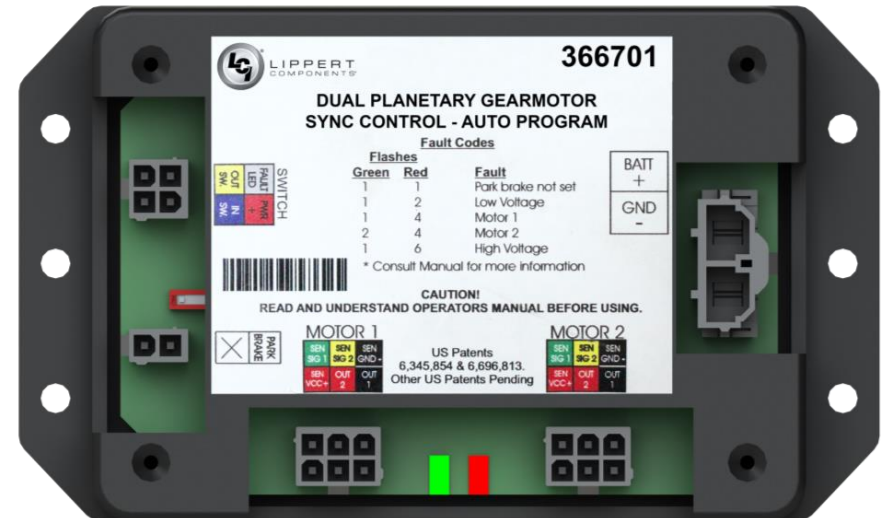


Controller

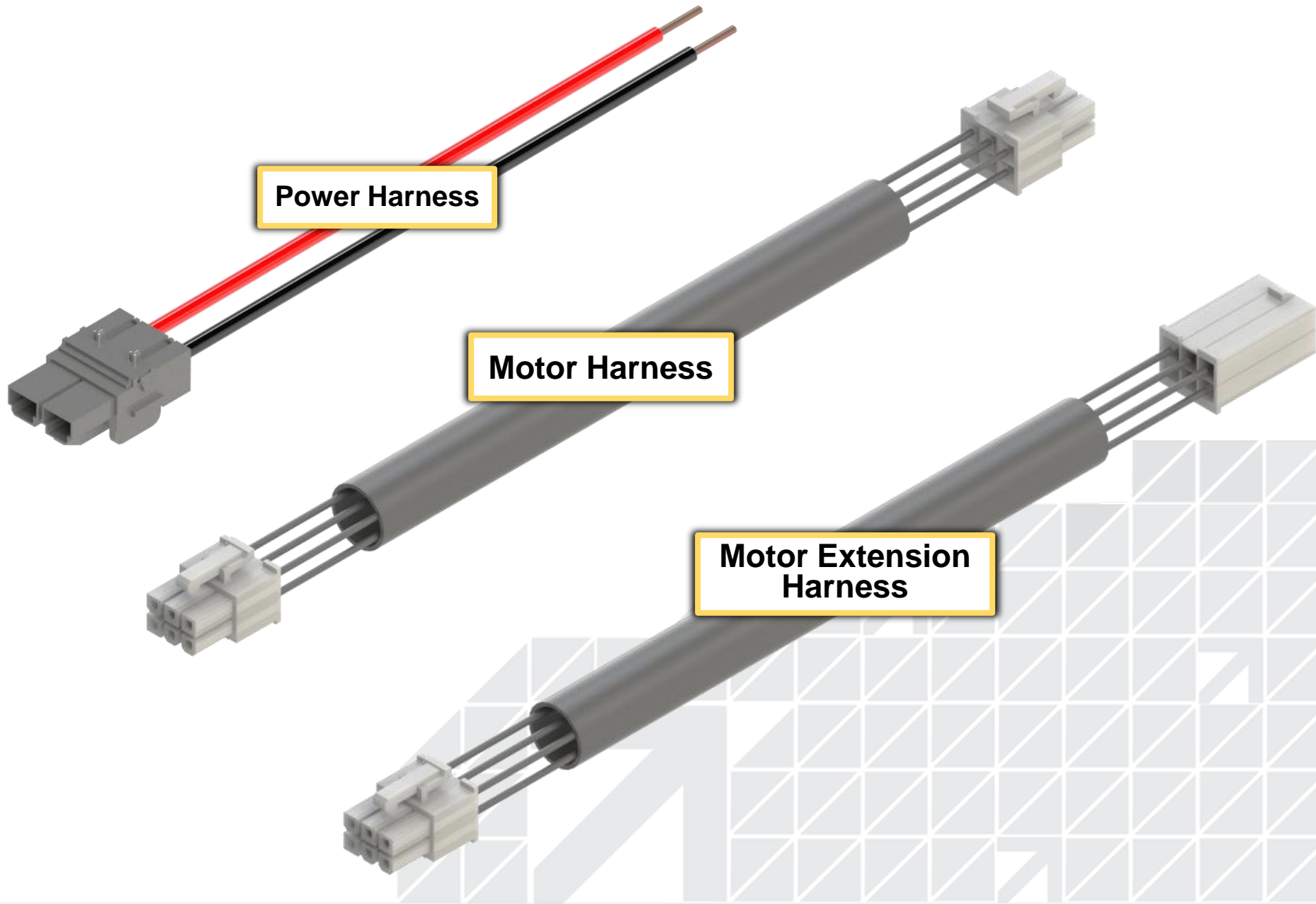
Auto Programmable

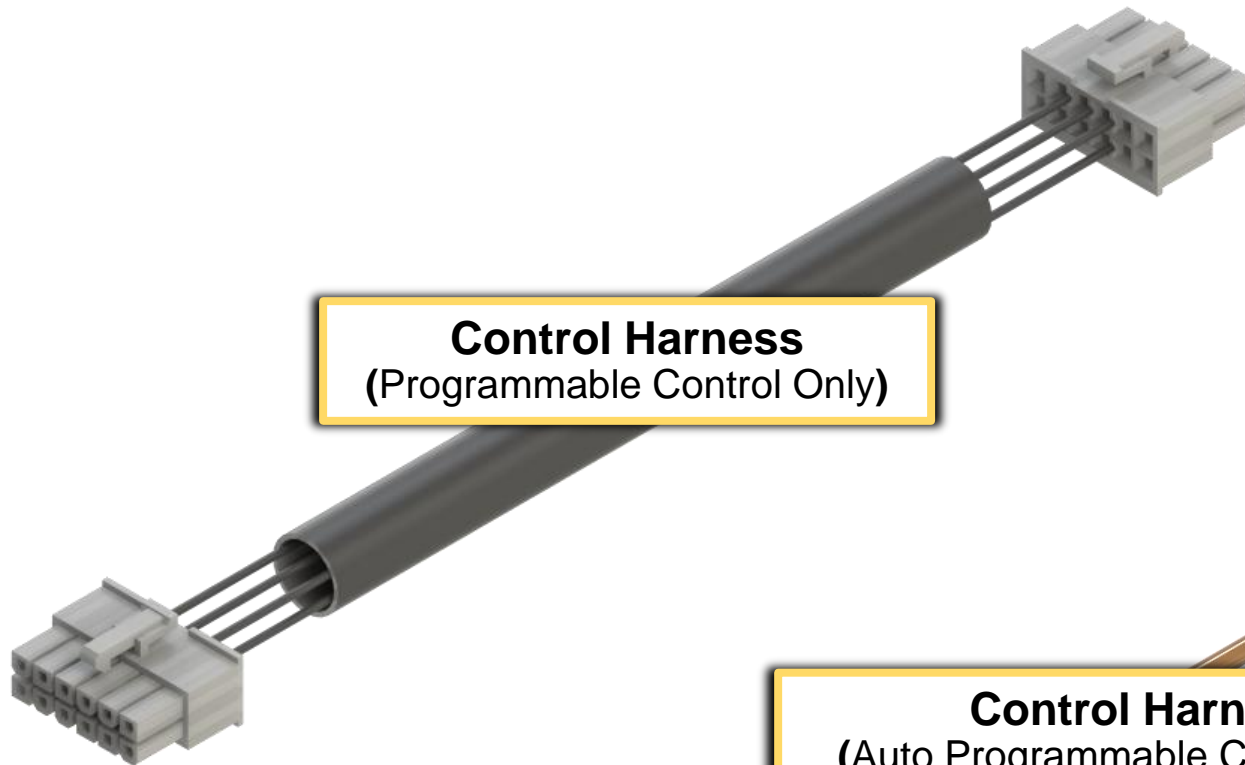


Wall Switch

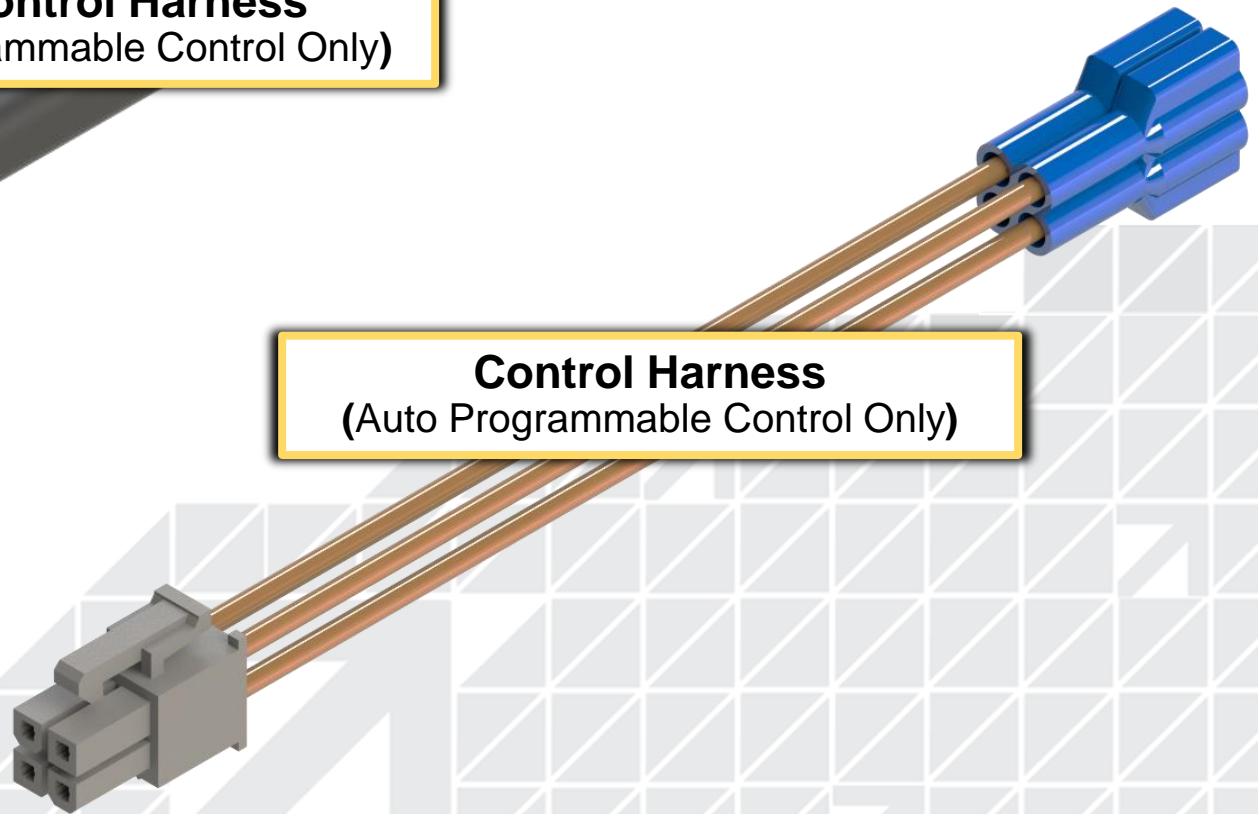


Controller





Control Harness
(Programmable Control Only)

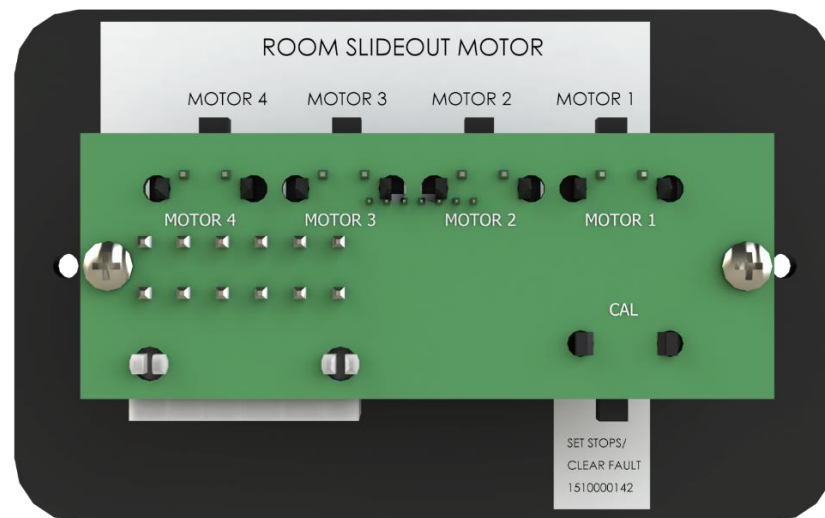


Control Harness
(Auto Programmable Control Only)

Programming

Programmable

1. Remove the touchpad from the wall to gain access to the buttons on the back.
2. Press and hold the SET STOPS/CLEAR FAULT button on the back of the wall touchpad for five (5) seconds.
 - The green LED should be flashing and the red LED will be lit up solid.
3. Press and hold the MOTOR 1 and 2 buttons on the back of the touchpad while pressing the IN button. The room will move in.
4. Move the room to the fully retracted position. Press and release the SET STOPS/CLEAR FAULT button on the back of the wall touchpad to program the retracted stop position.
 - The red LED will now start to flash and the green LED will remain lit.
5. Repeat steps 3 and 4, only this time pressing the OUT button to put the room in the fully extended position.
6. Press and release the SET STOPS/CLEAR FAULT button on the back of the wall touchpad to program the extended stop position.
7. Both LEDs will flash rapidly for one (1) second and then shut off.



LED Error Codes (Programmable)

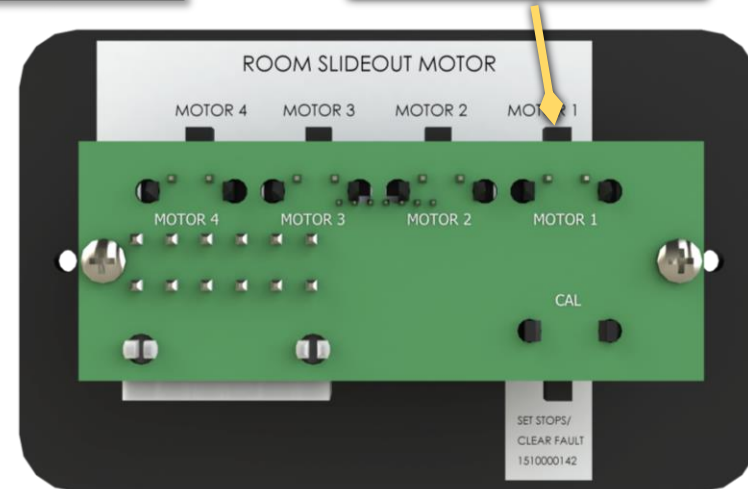
Fault Code	Fault Type	Description	Possible Cause	Possible Solutions
1	Major	Stop not programmed	<ul style="list-style-type: none"> Stops have not been set Stops were cleared Stops were improperly set 	Stops need to be programmed according to the PROGRAM MODE instructions.
2	Minor	System Fault	<ul style="list-style-type: none"> Obstruction present Excessive system drag 	Run room in opposite direction. If room continues to move in the opposite direction, remove obstructions, excessive weight in room or repair of damaged component. If room stops moving in the opposite direction, observe the fault code and refer to this chart.
4	Major	Motor Fault	<ul style="list-style-type: none"> Bad or loose connection(s) Defective harness Open or shorted motor 	<ul style="list-style-type: none"> Check all connections at control box and motor. Check the harness for broken wires. Put 12.0 VDC to the motor, if it does not run replace the motor.
6	Minor	Excessive Battery Voltage	Incoming voltage to control is 17.0 VDC or greater	Check 2-pin power connector at control. If voltage is 17.0 VDC or higher, contact OEM for power and ground supplies.
Park brake LED Flashing			<ul style="list-style-type: none"> Parking brake not set (if applicable) Ground signal lost at parking brake connector on control box 	<ul style="list-style-type: none"> Set parking brake (if applicable) Check for continuity to ground on wire plugged into park brake connector at control box.
Low voltage LED flashing			Incoming voltage to control box is below 12.0 VDC	Check 2-pin power harness at control box. If the voltage is below 12.0 VDC, contact OEM for power and ground supplies.

Electronic Manual Override

Programmable

If a major fault is detected on either motor 1 or motor 2, the control can be put into programming mode and the room can be retracted using the motor buttons on the back of the touchpad. If this is attempted and the control goes back to the major fault, then manual override will need to be performed.

Motor Button



Wiring



Programming

Auto Programmable

1. Press and hold the IN button on the wall rocker switch.
2. Move the room to the fully retracted position. Press and hold the IN button for 2 seconds after the room stops moving. Release the wall switch.
3. Press and hold the OUT button on the wall rocker switch.
4. Move the room to the fully extended position. Press and hold the OUT switch for 2 seconds after the room stops moving. Release the wall switch.



LED Error Codes (Auto Programmable)

Fault Code	Description	Possible Cause	Possible Solutions
Green Flash: 1 Red Flash: 1 Type: Minor	Park brake not set	<ul style="list-style-type: none"> Park brake not set (if applicable) Ground signal lost at park brake receptacle at control box. 	<ul style="list-style-type: none"> Set parking brake (if applicable). Check for continuity to ground on wire plugged into brake receptacle at control box.
Green Flash: 1 Red Flash: 2 Type: Minor	Low Voltage	Incoming voltage to control is below 12.0 VDC. The room will NOT move if the voltage is 10.5 VDC or below.	Start vehicle, generator, or ensure plugged into shore power. Check 2-pin power connector at control box at BATT + and GND -. Consult manufacturer of unit charging system for troubleshooting assistance.
Green Flash: 1 Red Flash: 4 Type: Major	Motor 1 Fault	<ul style="list-style-type: none"> Bad wire connection Bad motor 	<ul style="list-style-type: none"> Check wire harness. Check wire connections. Check motor.
Green Flash: 2 Red Flash: 4 Type: Major	Motor 2 Fault	<ul style="list-style-type: none"> Bad wire connection Bad motor 	
Green Flash: 1 Red Flash: 6 Type: Minor	High voltage	Supply voltage to control box is 17 VDC or greater.	Consult manufacturer of unit charging system for troubleshooting assistance.

Electronic Manual Override

Auto Programmable

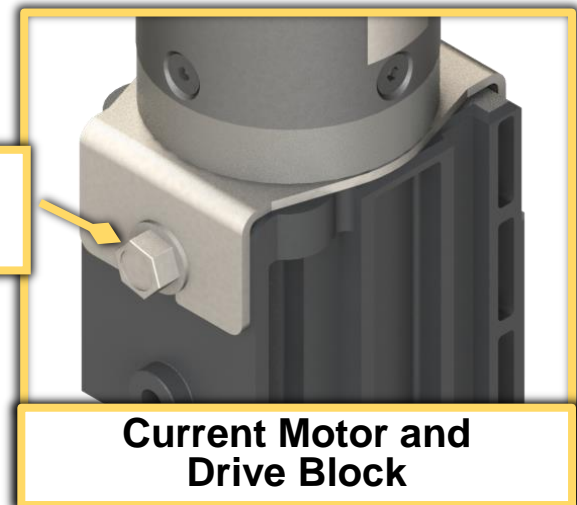
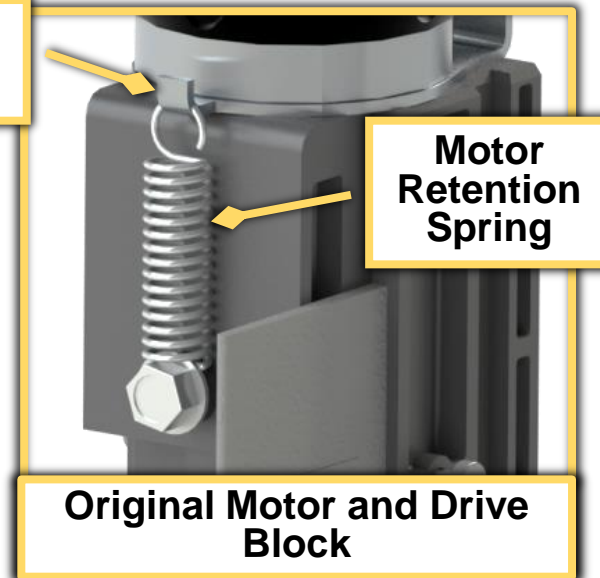
If a major fault is detected on either motor 1 or motor 2, the control will automatically enter "Emergency Jog" mode. When in this mode, the control will jog both motors in the IN direction. The rocker switch may need to be pressed multiple times to fully retract the room.

Wiring



Manual Override

1. Bend back the wiper seal.
2. Visually locate the motor and motor retention spring or screw.
3. **Motor Spring Clip:** Using a curved pick tool, remove the end of the retaining spring from the motor spring clip.
Motor Retaining Screw: Loosen motor retaining screw to free motor from drive block.
4. Pull the motor up until disengaged.
5. Repeat this process for both sides of the slide room.
6. Push or pull room back in to the opening while keeping the sides relatively even.
7. The room must be travel locked to keep room in place for road travel.



Manual Override

8. Remove the motor.
9. Use a socket wrench with a 3" extension and 5/8" deep well socket.
10. 1 person per side of the room (2 total).
11. Secure the room in place by either re-installing the motors or using a travel lock, 2 x 4 (cut to size), etc.



Visual Inspection

The room should set on the floor rollers. The system does not and cannot bear the weight of the room.

1. Check that the slide-out has the correct number and placement of floor rollers installed:

- One roller located 6" from each end of the slide-out
- One roller located every 24" to 36" across the width of the slide-out
- The weight of the slide-out box should be carried by the rollers
- The floor rollers should not spin freely



2. Check that seals are not getting caught in the rollers causing binding of the slide-out.

Visual Inspection

Critical measurements/dimensions are as follows:

- Vertical distance from the bottom of the slide out room to the lower gear rack, measured at the inner and outer end brackets should be same from the front to the back bracket. A small variance is allowable, but no more than $\pm 1/16"$.
- Vertical distance from the lower gear rack to the upper gear rack, measured at the inner and outer end brackets should be same from the front to the back bracket. A small variance is allowable, but no more than $\pm 1/16"$.
- The end brackets should be mounted squarely.

Exterior Obstructions

- Check proximity to other coaches, trees, etc.
- Make sure there are no branches or other objects on top of the slide room.
- Check for any obstructions that may be in the travel path of the room.

Interior Obstructions

- Items on top of the slide room on the outside can end up on the inside.
- Look for water bottles, remotes, blankets, etc.
- Look for toys, quilts, dressers, etc.
- Check for any obstructions that may be in the travel path of the room.
- Clean the gear rack with soap and water only.

If the system squeals or makes any noises, blow out debris from the gear rack arms and apply a dry lubricant to prevent and/or stop squeaking.

Visual Inspection

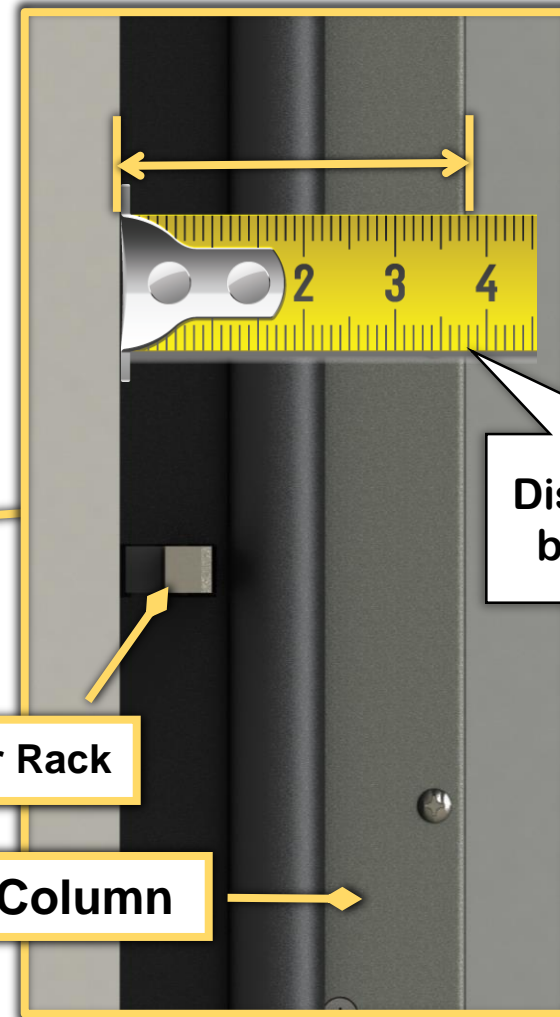
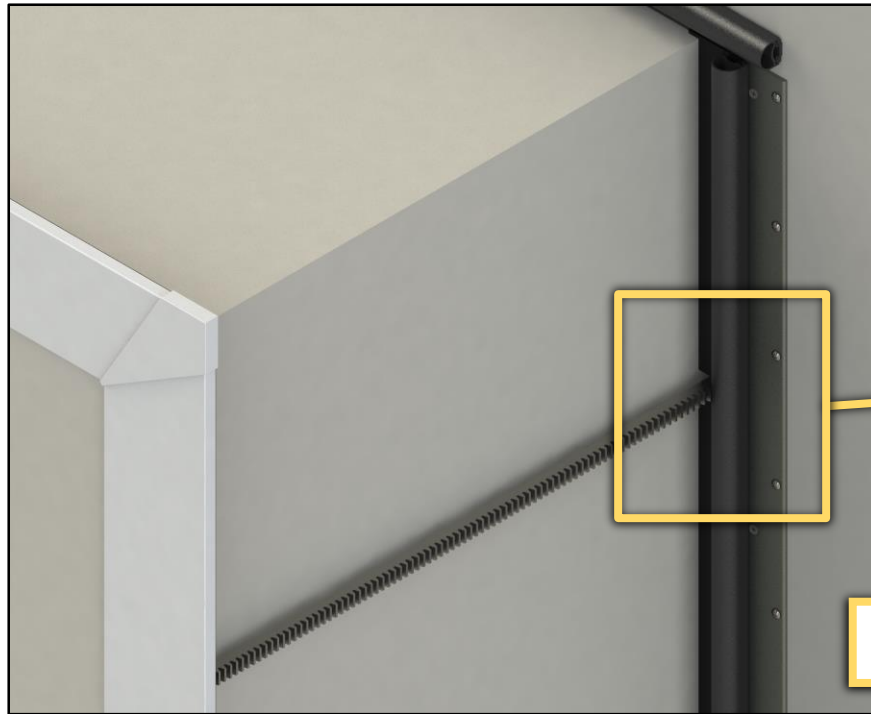
Seals

- Torn seals can cause drag.
- 50% of bulb seal compression is a good seal with the system.
- Look at the gapping on the seals around the gear rack for ideas of what may be causing the problem.

Gear Racks

- The gear rack is able to “float” back and forth and up and down within the end brackets.
- Check to make sure that the bulb or wiper seal is not being caught in the gear rack during room travel.
- The end brackets need to be mounted square to the room.

Visual Inspection



Distance should
be $3 \frac{3}{4}'' \pm \frac{1}{4}''$

Gear Rack

Column

Repair or Replace

These parts are available for the Power Gear slim rack system and may allow for replacement of individual components.

- A. Control
- B. Harnesses
- C. Motor
- D. Motor coupler
- E. End bracket
- F. End bracket/gear rack pin
- G. Torn or damaged bulb seal

Damages listed below will require disassembly of the column assembly.

- A. Broken gear
- B. Damaged gear rack
- C. Broken bearing flange
- D. Bent or broken drive shaft
- E. Damaged drive block

Gear rack needs to be ordered by assembly number due to the drilling of the holes for the end bracket mounting pins.

Power Gear Assembly Label (Original)



PAT: US 8,840,164

WNB #: 189396-03

Sys #: 9010001015

Assy #: 1010002990

Date: XX/XX/XXX

Op: XXX

LCI Assembly Label (Current)



IN-WALL

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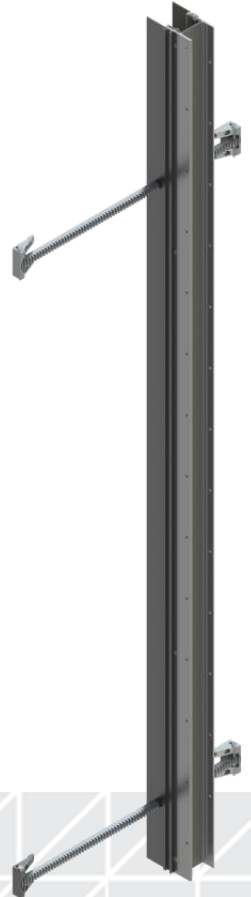
**SYS RS ELEC SYNC IN-WALL SLIMRACK 76.125" X
25.76" (9010001019)**

366560

DOM: 06/06/2016

RPO-045-F38337

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Question and Answer

If you have questions, please feel free to ask us now. Otherwise, we are available and happy to discuss anything presented with you.



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