

Lippert In-Wall Slide System

The information and instructions in a Keystone Service Bulletin (KSB) are intended to inform RV dealership Service Managers/Technicians of situations that may occur with some Recreational vehicles so dealership personnel can perform proper and efficient service. KSB's are intended to be used by trained RV technicians with the knowledge, tools and equipment to do the job properly and safely, not "do-it-yourselfers".

- Information is not presented as a repair guaranteed to be covered by warranty.
- Keystone's P & P (Policy & Procedures) must be followed for any requested warranty work.
- Do not assume this repair is covered by warranty.
- Not every unit listed requires a repair, only units exhibiting one or both sides that are jammed up or inoperable require further action.

This process describes the repair of In-Wall slide systems that have become inoperable on one or both sides. It has been determined the vehicles in this KSB population may have been manufactured with an In-Wall Slide-Out System that may have a damaged guide shoe in the slide mechanism.

Model and Serial Numbers Included:

Year	Model	Serial Number Range
2022	Alpine – 3220RL, 3720MD, 700FL, 3790FK, 3910RK, 3712KB, 3850RD	NE780302 - NE780918
2022	Arcadia – 3660RL, 3940LT	NL550260 - NL550781
2022	Avalanche – 378BH, 390DS, 312RS, 372MB, 352BH, 322RL, 338GK, 295RK	NE760296 - NE760983
2022	Cameo – 2901RL, 3201RL, 3701RL, 3891MK, 3921BR, 3961MB, 3975CK, 4031FL, 4051BH	N9310130 - N9310359
2022	Cougar – 23MLS, 24RDS, 25RES, 27SGS, 290RLS, 29MBS, 29RKS, 32BHS, 354FLS, 355FBS, 364BHL, 368MBI	N2501159 - N2505607 NV501660 - NV505336
2022	Fuzion – 369, 373, 379, 419, 424, 427, 428, 429, 430	NF810192 - NF810677
2022	HC Montana – 295RL, 331RL, 335BH, 351BH, 373RD, 377FL, 385BR	NA740622 - NA741889
2022	Hideout – 174RK, 176BH, 179RB, 186SS	NW242096 - NW247023
2022	Impact – 25V, 29V, 317	NF815103 - NF815348
2022	Montana – 3121RL, 3231CK, 3761FL, 3763BP, 3791RD, 3855BR, 3861BR, 3931FB	N4700835 - N4702268
2022	Redwood – 3401RL, 4001LK, 4150RD	N9340051 - N9340145
2022	Springdale – 1740RK, 1760BH, 1860SS	NW103056 - NW107655

Parts Required per Unit: Submit Unlisted Part Request on Key Express, include Schwintek In-Wall System tag in request

Local parts: Sealant as needed

Tools Required: Screw gun, Screwdriver, Caulk Gun, Nut Driver for mounting screws.

This KSB requires Pre-Authorization and Photograph of the Lippert In-Wall system tag and completed Lippert form QR-085D

When performing this KSB, please make certain that appropriate Personal Protective Equipment (PPE) is used.

This repair is only required if the slide system has failed, not all components used were defective. If the slide mechanism is inoperable or jammed up the remedy is to replace the mechanism using Schwintek In-Wall System both sides complete.

REPAIR INSTRUCTIONS

Step 1

Locate the trailer on a level, flat, hard surface. Chock the wheels.

Step 2

Follow the attached Lippert TSB.

Step 3

Once both new systems have been installed properly, verify a measurement of 2 ½" (+ or – 1/8") from gear rack face to edge of column in and out on all four corners, proceed to warranty reimbursement.

WARRANTY REIMBURSEMENT

This KSB is for repair purposes only. If this is a warranty repair, the flat rate code is **1214006B**

Submit a Pre-authorization and claim on Key Express with required photograph and measurements on Lippert form QR-085D, **Flat Rate Code # 1214006B** with **KSB # 220630** noted in the customer complaint section. The time authorized for this repair is **3.4 hours**.

No part return required.

If you have questions, please contact Customer Service:

<i>Luxury (LX) -</i>	866-273-1450
<i>Toy Haulers (TH) -</i>	866-273-1452
<i>Premium (PR) -</i>	866-273-1454
<i>Traditional (TR) -</i>	855-895-4422
<i>CrossRoads (CR) -</i>	844-361-8455



REPLACEMENT OF THE INVERTED GEAR RACK IN-WALL (SCHWINTEK) SLIDE-OUT SYSTEM

TSB Number:	146-001-2022C		
Product:	Inverted Gear Rack In-Wall Slide-Out System manufactured between October 2021 and January 2022		
Date:	August 7, 2024	Labor Rate:	3.4 Hours Allowed (1.7 hours per side)

NOTE: This bulletin supersedes service bulletin 146-001-2022 dated June 24, 2022, which should be removed from your files. This revision provides information for replacing the Inverted In-Wall Slide-out System as opposed to making repairs with a repair kit.

NOTE: This bulletin supersedes service bulletin 146-001-2022 dated June 22, 2022, which should be removed from your files. This revision provides clarification around the repair kits and corrects an error in kit "C" in the parts tables.

Purpose

This document is to address the concern of the increased frequency of Schwintek slide systems becoming inoperable in the identified time frame.

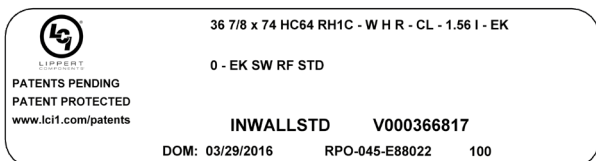
The primary cause has been determined to be damage to the guide shoe located within the slide mechanism. This can lead to premature system wear and in some cases reaching the point of rendering the system inoperable. While there are multiple contributing factors that can cause this to happen, we have identified a period between October 2021 and January 2022 when inconsistent handling at the Lippert production facility may have caused damage to some shoes. In addition to implementing corrective actions during the assembly process, Lippert made a design improvement to the shoe to provide additional strength. Systems that were subject to damage during this time may be more prone to breakage under certain conditions.

It is important to review the attached TI-177 IN-WALL® SLIDE-OUT TROUBLESHOOTING AND COMPONENT REPLACEMENT document and conduct an inspection of the system to determine the exact cause of the concern. Any obstructions in the system, any damage to wiper seals, any system measurements as referenced that fall out of specification **MUST** be addressed before proceeding with the system replacement. If needed, contact Lippert Customer Care Center for further direction.

NOTE: Lippert does NOT require any advance notification or pre-authorization from the Customer Care team if all required documentation is submitted with the request for reimbursement. If the documentation is not submitted with the request, there could be a delay in processing the claim for our dealer, repair center and OEM customers.

The necessary items for reimbursement processing include:

- Unit VIN.
- Clear photo of the Lippert In-Wall system tag (See location of tag on Page 3).
The tag shown below is only a sample picture and not the actual tag for an inverted gear rack slide-out.



- Submission of completed form QR-085D.



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Safety

The manuals referenced and attached to this TSB are general instructions for the various In-Wall systems. Many variables can change the circumstances of any procedure, i.e. the degree of difficulty involved in the service operation and the ability level of the individual performing the operation. This document cannot begin to plot out procedures for every possibility, but will provide the general instructions for effectively installing, removing or servicing the system. In the event the skill level required is too advanced or the procedure too difficult, a certified technician should be consulted before performing the necessary operation. Failure to correctly install, remove or service the system may result in inflicting injury or even death.

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 and/or property damage if not performed safely and within the parameters set forth in this document.



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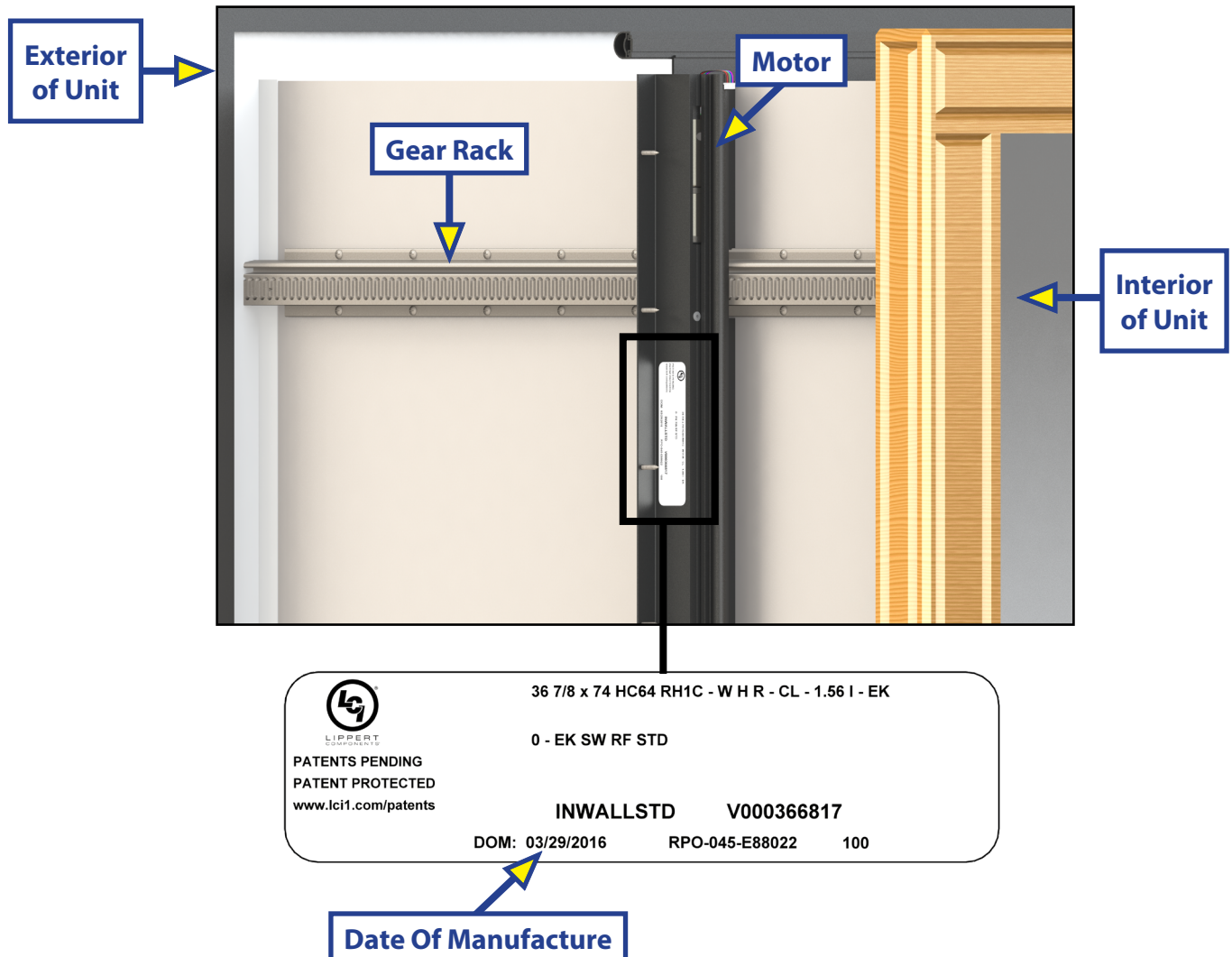
Inspection

The inspection will be to validate the system as being part of the Inverted Gear Rack In-Wall Slide-Out system. The profile of the gear rack will be as shown below under the subsection "Identifying The Inverted Gear Rack In-Wall Slide-Out System."

The specific inverted gear rack systems will have manufactured dates around Oct. 1, 2021, through Jan. 6, 2022. Dates are shown on the variant code tag located on the H-column. See location below.

NOTE: The tag featured is only a sample render and not the actual variant code tag for the inverted gear rack slide-out.

If the system has failed and has been verified as the Inverted Gear Rack In-Wall Slide-Out System, the replacement systems are available through Lippert Customer Care Center at (432) 547-7378. Have the Lippert In-Wall System tag handy as this will be needed to identify the correct replacement system.

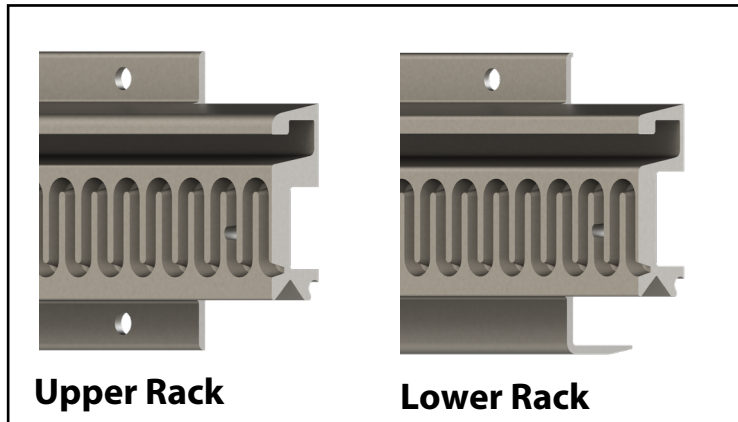


REPLACEMENT OF THE INVERTED GEAR RACK IN-WALL (SCHWINTEK) SLIDE-OUT SYSTEM

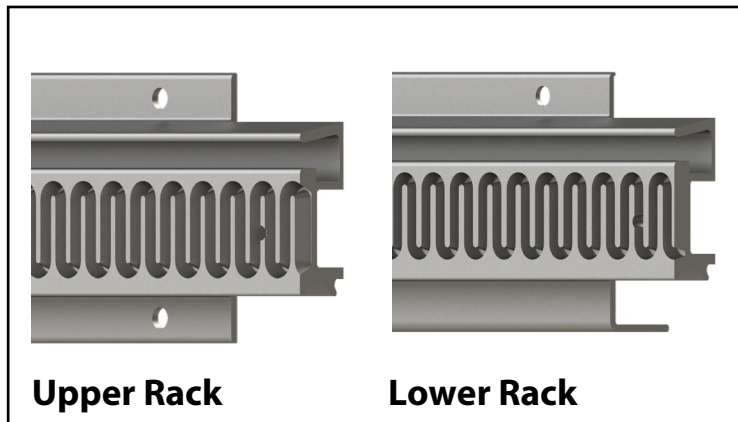
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Identifying the Inverted Gear Rack In-Wall Slide-Out System

Inverted Gear Rack



Standard Gear Rack





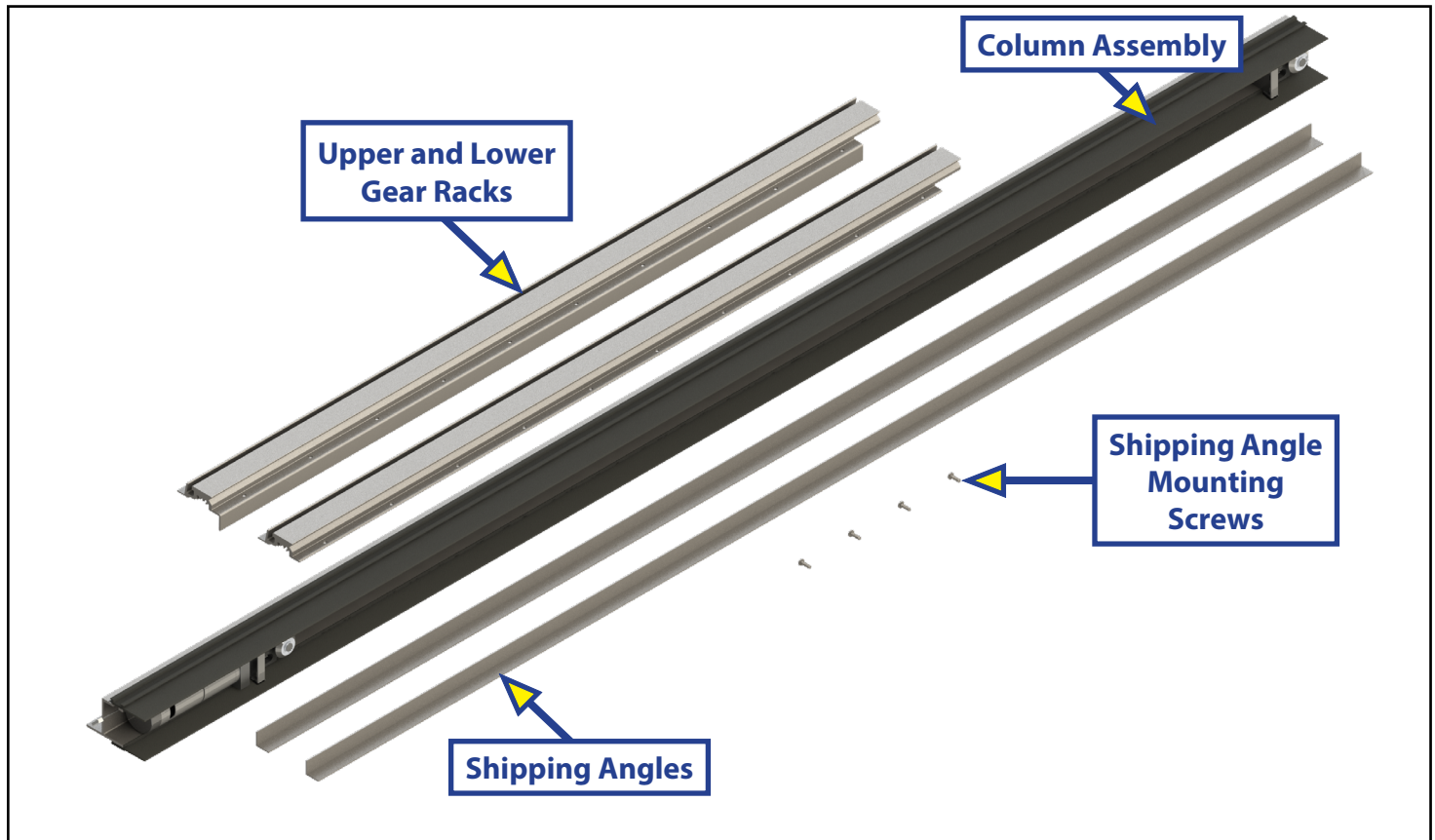
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Kit will include:

Systems will be shipped partially disassembled in a box or tube.

NOTE: Fixed side shown, kit will include Float side assembly as well.



Instructions on Removal and Replacement

For instructions on removal and replacement of the In-Wall Slide-out System, please see TI-177 In-Wall Slide-out Troubleshooting and Component Replacement manual attached to this TSB. Not all sections of the attached document are applicable.

NOTE: The kit includes replacements for both the fixed and float sides of the system. It is important to replace BOTH sides and use ALL of the components.

Videos and documents on replacement of slide-out systems are available at:

- Video: <https://view.vzaar.com/18646533/player>
- Document: <https://lci-support-doc.s3.amazonaws.com/manuals/slideouts/ccd-0001770.pdf>

Order Parts

Contact Lippert Parts at (432) 547-7378 for ordering assistance.



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Submission of Completed Form QR-085D

Upon completion of system replacement, please submit QR-085D In-Wall Slide-out Variance Measurement Form along with the proper documents for reimbursement from dealers, repair centers or OEMs, Lippert will be able to waive any advance contact to the Customer Care Center and process the claim with no delay.

[QR-085D In-Wall Slide Out Variance Measurement Form](#)

SLIDE-OUTS

Purpose

This document is intended to outline the tolerance measurement procedure for the In-Wall® slide-out. This interactive form may be filled out and retained for records or for customer service purposes. Once complete, press the "Submit" button on the last page. If an error occurred, press "Clear Form" to start over.

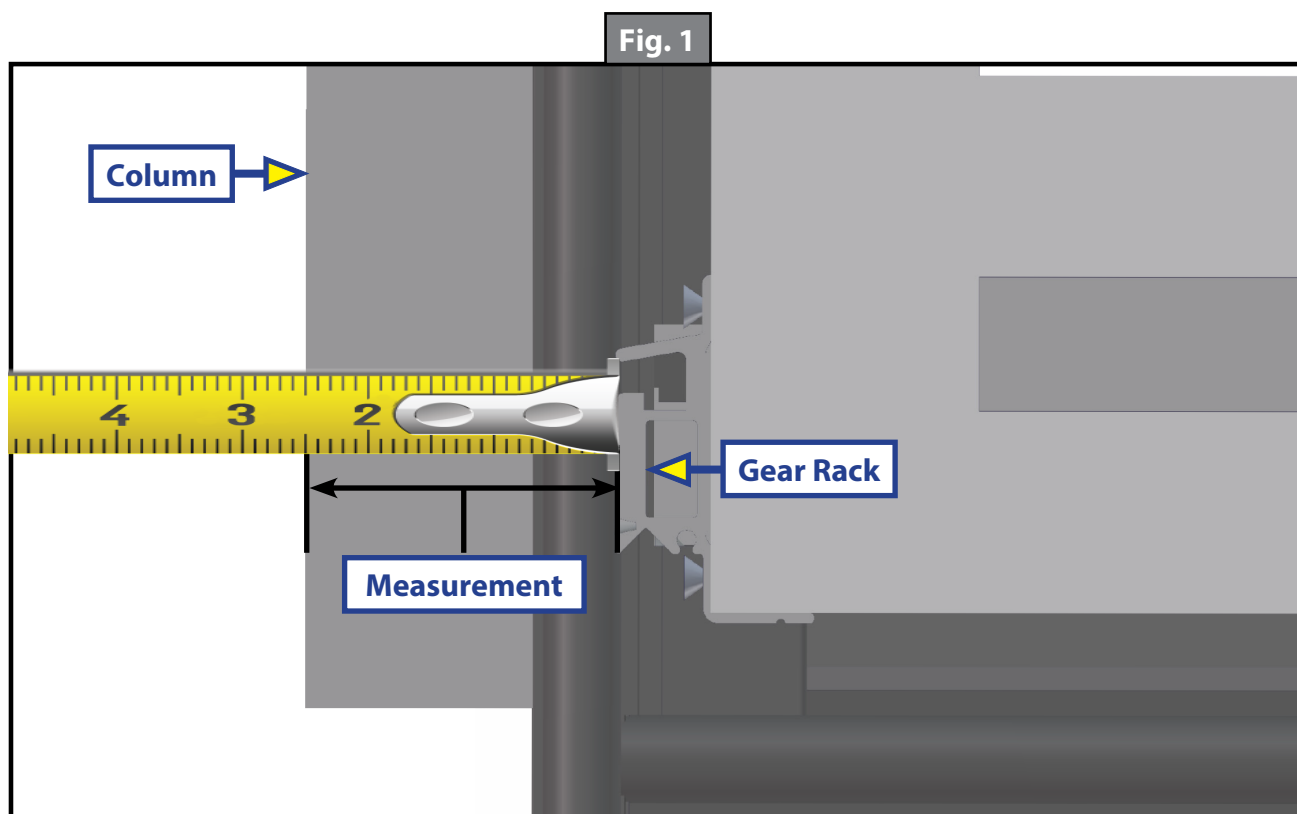
Visual Inspections

Measurements

1. Measure from the outside edge of the column to the face of the gear rack at all four gear racks. The standard measurement should be $2\frac{1}{2}"$ plus or minus $\frac{1}{8}"$. Take this measurement when the room is fully extended and again when the room is 3" from fully retracted.

NOTE: For units with non-standard installations, contact the OEM for their specific measurements.

2. Measure the gear racks for parallel. There should be less than $\frac{1}{8}"$ difference between the parallel measurements.
3. Check for proper seal engagement (no binding).
4. Check for damage to gear rack.



Allowable Tolerances

The measurement tolerance is $2\frac{1}{2}" \pm \frac{1}{8}"$ for slide-out units.

SLIDE-OUTS

Procedure

Take the measurements as previously outlined and as shown in Fig. 1. Press the tape measure or ruler against the gear rack. Make sure the measuring device is neither above nor below the gear rack (Fig. 1).

NOTE: Measurements should be taken from the exterior of the unit (with the exception of the units which, due to an alternate installation, should be measured from the interior of the unit).

1. Extend the slide-out 3 inches from its closed position.
2. Take a measurement at each corner, record each measurement in the appropriate location of the chart (Fig. 2A).
3. Fully extend the slide-out.
4. Take a measurement at each corner, record each measurement in the appropriate location of the chart (Fig. 2B).

Fig. 2

	A. 3" Extended	B. Full Extension		A. 3" Extended	B. Full Extension
Top Left			Top Right		
Bottom Left			Bottom Right		

NOTE: Include units of measure when recording.

Upon submission of this form, I affirm that the details provided are accurate and precise. I also accept responsibility for ensuring that the replacement system installation aligns with the specified tolerances.

Submit form to Customer Service

Notes / Comments