

## SLIDE-OUT

### Purpose

This document details the steps necessary to utilize an international modular In-Wall Slide-Out system and build a system to meet a unique system design.

### Safety

Read all instructions and safety labels before beginning any component replacement.

#### **WARNING**

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

#### **CAUTION**

Always wear eye protection when performing this modification procedure. Other safety equipment to consider would be gloves and possibly a full face shield, depending on the nature of the installation procedure.

#### **CAUTION**

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

### Resources Required

- Cordless or electric drill or screw gun
- Appropriate drive bits
- Tape measure
- Non-permanent marker
- Needle nose pliers
- Adhesive tape
- 4-inch power grinder
- Fine file or emery paper
- Chop Saw

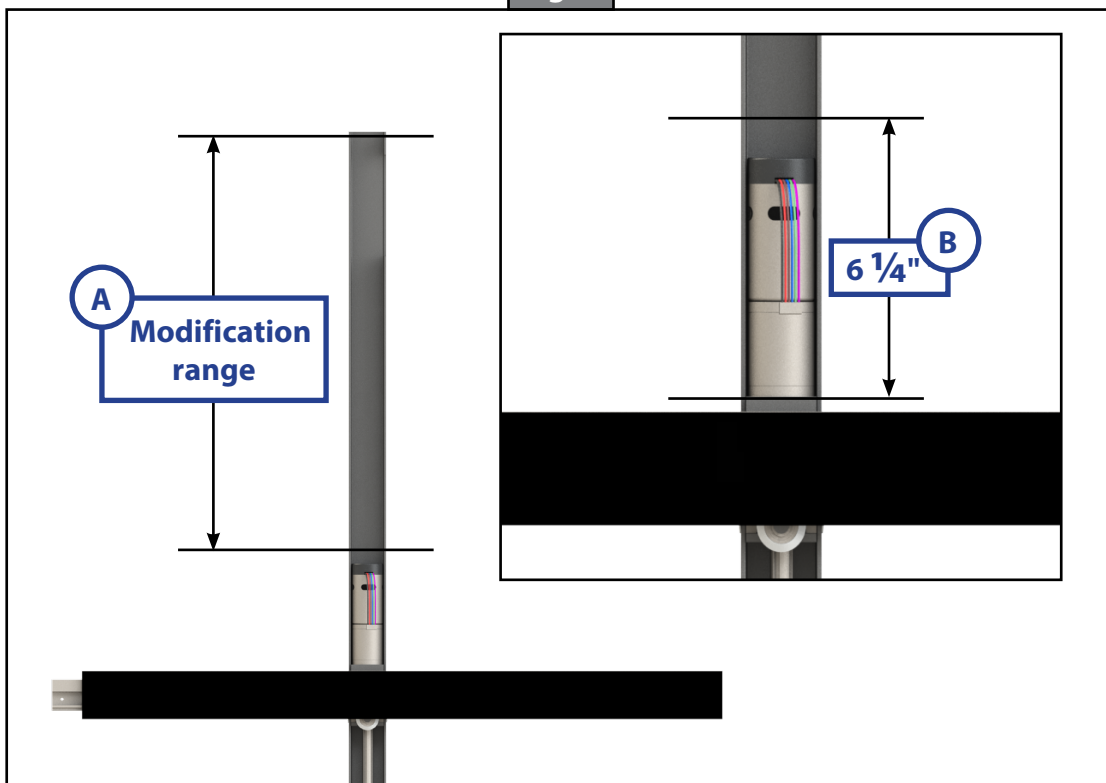
## SLIDE-OUT

### Preparation

The Modular International In-Wall Slide-Out system is designed with excess column and rack material that can be cut as needed to allow the system to fit a variety of applications. When modifying these system specifications by cutting excess materials, note that only certain portions may be removed, or system integrity and function will be compromised.

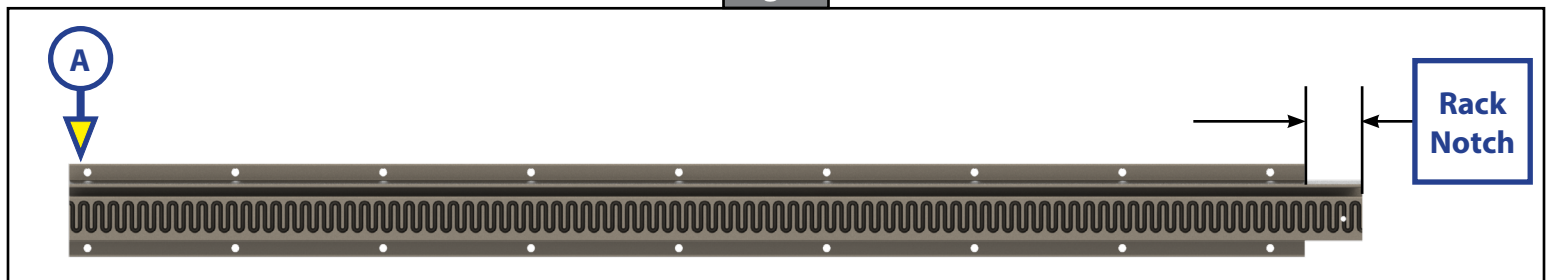
1. When making modifications to the columns, only the top portions of the columns may be cut (Fig. 1A). Additionally, no cut may be closer than 6 1/4" to the top of the upper bearing block (Fig. 1B) to allow for proper motor operation and access as well as column integrity once a new motor notch has been cut.

Fig. 1



2. When making modifications to the racks, only the non-notched side (Fig. 2A) of the racks can be cut. The notch must be left intact for the racks to interface with the T-molding fascia of the slide room.

Fig. 2



## SLIDE-OUT

### System Disassembly

Depending on the method of shipping, the In-Wall Slide system may ship assembled with shipping angles in a large box or disassembled in a tube. If your system arrives assembled, it must be disassembled prior to altering the columns and racks. Do not discard shipping angles, they are used in system installation. If your system arrived assembled, follow these instructions to disassemble it. Otherwise, proceed to the "Cutting the System to Size" section of this manual.

**NOTE:** Lippert recommends that system modification and reassembly be done on a clear workbench to prevent damage to the system. Set all removed screws and parts aside for system re-assembly.

1. Remove screws securing shipping angles to racks. Set the screws and shipping angles aside for system installation.
2. Carefully peel back the wipe seal on the outside of the column (Fig. 3). It is not necessary to peel back the wipe seal lower than the rivets (Fig. 3A). Keep the adhesive side of the seal clean and clear of debris so it can be reattached. Repeat with the seal on the inside of the column.

**NOTE:** It may be necessary to use double sided adhesive tape to reattach the seal to the column after the notch has been cut and the column has been sized.

3. Locate and remove the motor retention screw on the outside of the column near the motor ventilation holes (Fig. 4).

Fig. 3

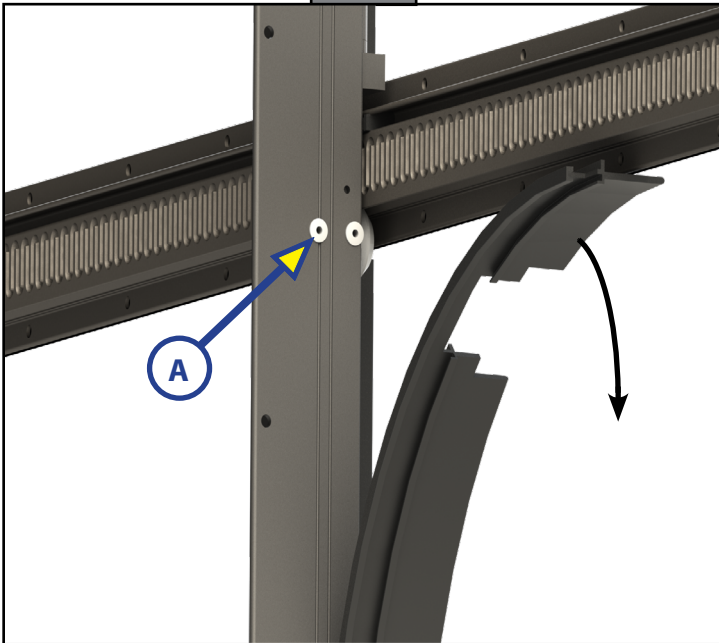
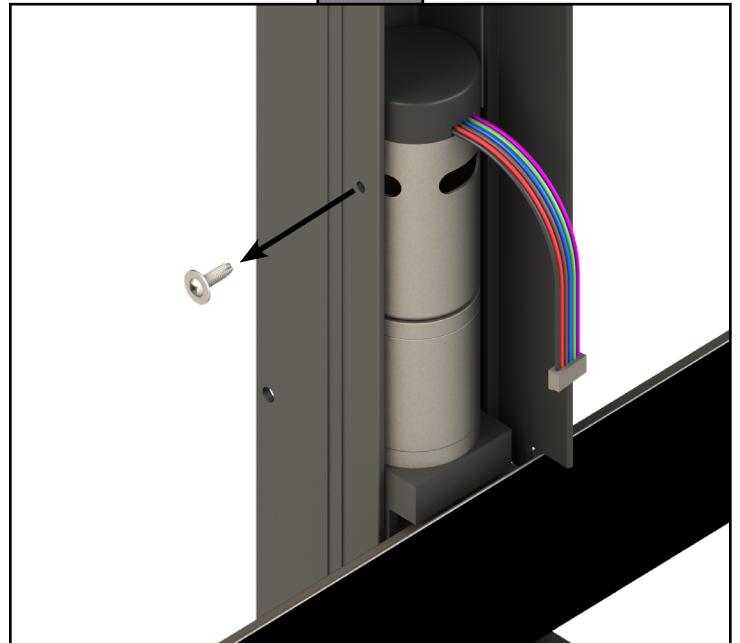


Fig. 4



## SLIDE-OUT

4. Remove the motor (Fig. 5A) by pulling it straight up and out of the bearing block.
5. Using a pair of pliers, pull the torque shaft coupler (Fig. 5B) out of the bearing block.
6. Slide the racks off of the system (Fig. 6). Racks should slide easily off the assembly at the same time.
7. Repeat steps 1-6 with the other column.

Fig. 5

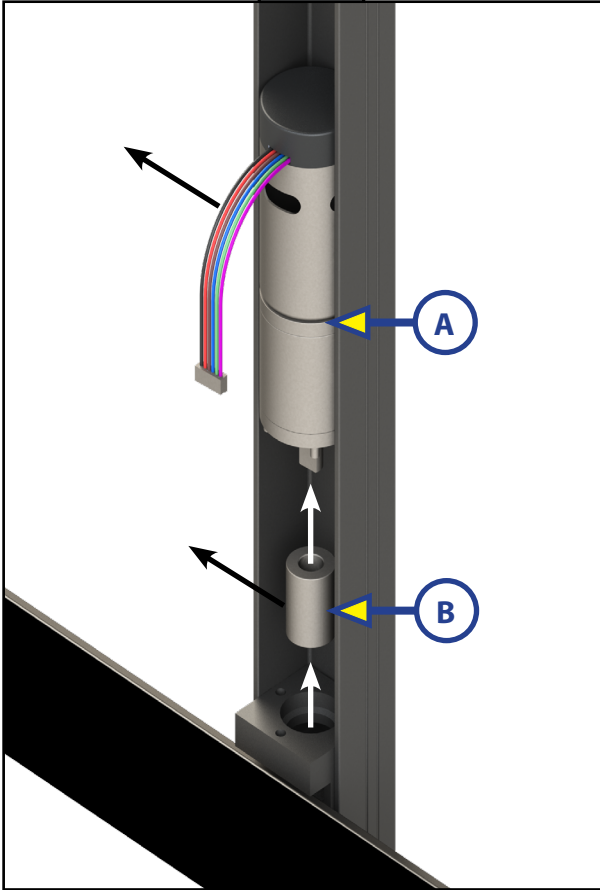
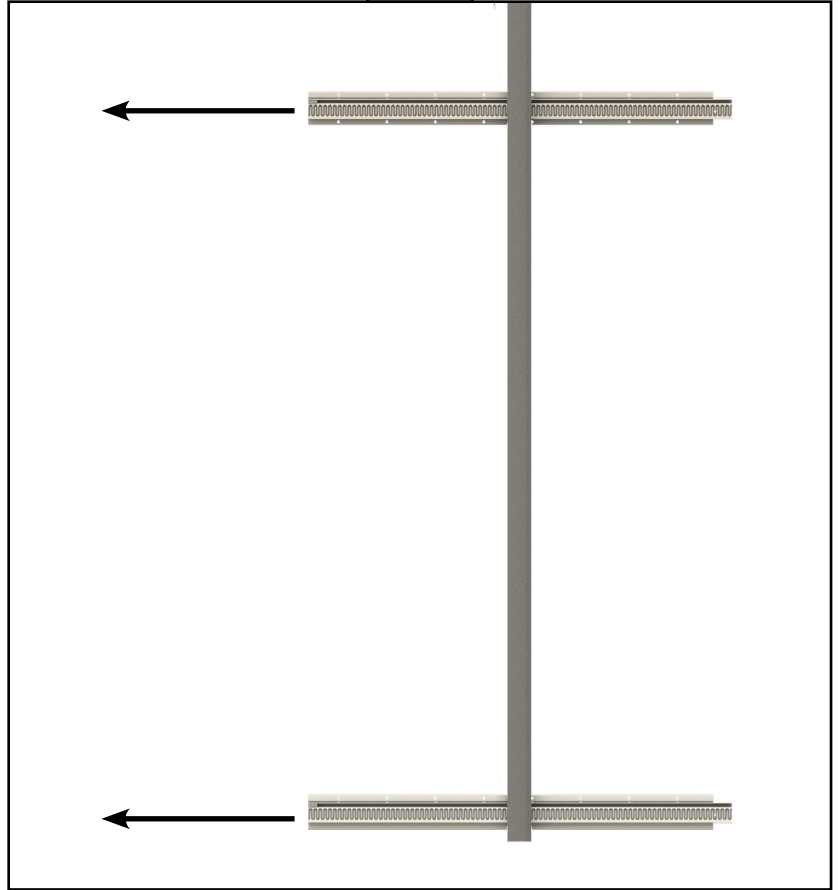
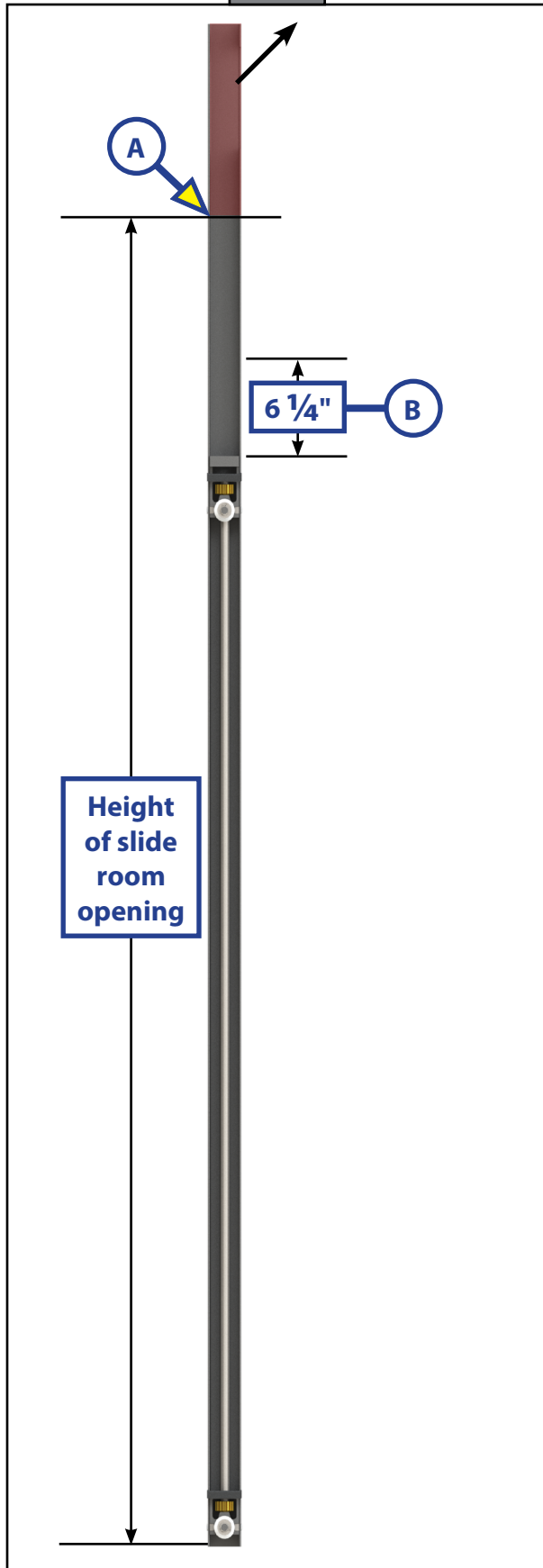


Fig. 6



## SLIDE-OUT

Fig. 7



### Cutting the System to Size

#### Cutting the Columns to Size

1. Measure the height of the room opening on the RV and record this measurement.
2. Measure the depth of the slide box and record this measurement.
3. Measure from the bottom of the column and make a mark at the top of it corresponding to the measurement of the height of the slide room opening (Fig. 7A).

**NOTE:** There must be 6 1/4" above the top of the upper bearing block (Fig. 7B) for proper motor access and column integrity. If the mark made does not allow for 6 1/4" above the top of the upper bearing block, consult Lippert Engineering.

4. Using a chop saw, cut the column at the mark made.
5. De-burr the cut end with a fine file or emery paper.
6. Repeat steps 1-5 on the other column.

## SLIDE-OUT

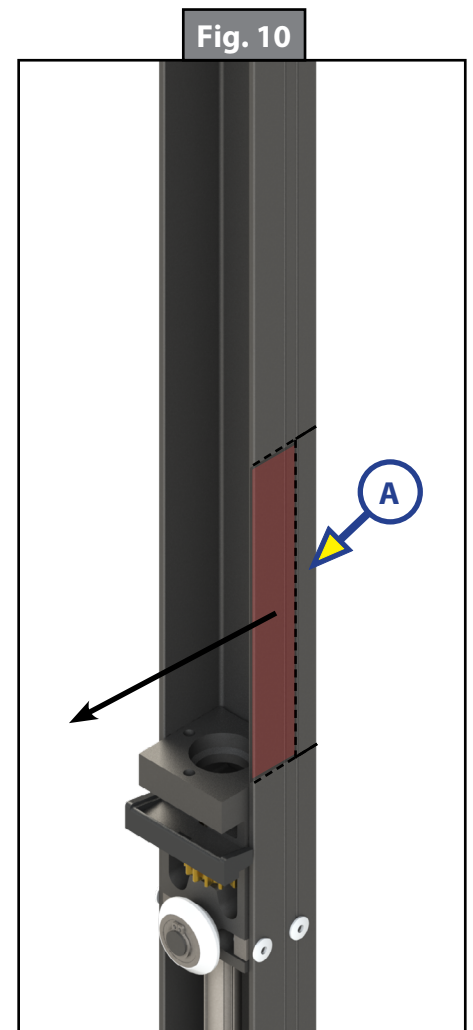
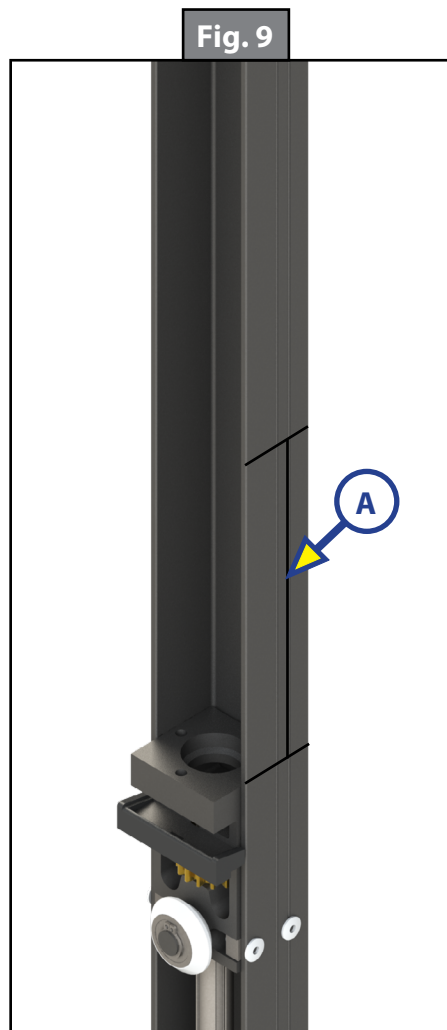
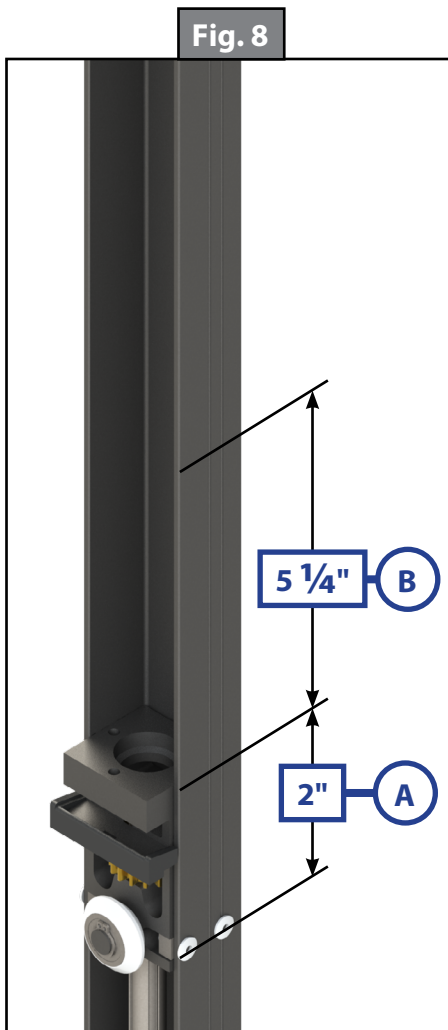
### Cutting A New Motor Notch In the Columns

**NOTE:** The system will ship from the factory with a 5 1/4" notch cut out at the top of each of the columns. To allow for motor access once the system is installed a new 5 1/4" motor notch must be cut adjacent to the motor on each column prior to installing the system. The motor notch is added to the interior of the H-Column to allow for best access to the motor.

1. Measure 2" above the top gib and make a mark across the width of the column (Fig. 8A).
2. Measure 5 1/4" up from that mark, and make another mark across the width of the column (Fig. 8B).
3. Follow the groove on the column closest to the corner and make a mark connecting the two previous marks (Fig. 9A).
4. Using a 4-inch power grinder, cut out the motor notch following the marks you made, and discard the excess material (Fig. 10).

**NOTE:** When marking and cutting a motor notch in the column, make sure to leave a small edge (Fig. 10A). This helps retain rigidity of the column.

5. De-burr the cut end with a fine file or emery paper.
6. Repeat steps 1-5 on the other column.



## SLIDE-OUT

### Cutting the Racks to Size

1. Measure from the notched end of each rack and make a mark corresponding to the measurement of the depth of the slide room (Fig. 11A).
2. Using a chop saw, cut the racks at the marks made and discard the excess material (Fig 11).

**NOTE:** Racks MUST be cut on the NON-NOTCHED end. The rack notch must be left intact on the racks for installation.

3. De-burr the cut end with a fine file or emery paper
4. Insert the corresponding foam plugs into each end of the rack to ensure that water infiltration is prevented prior to installation (Fig. 12 and Fig. 13).
5. Repeat steps 1-4 with the remaining racks.

Fig. 11

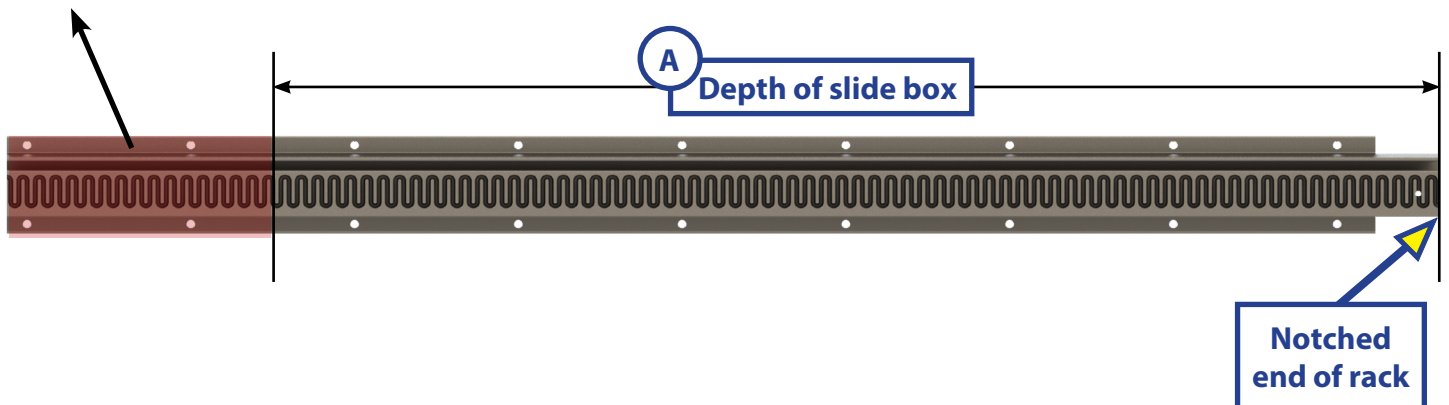


Fig. 12

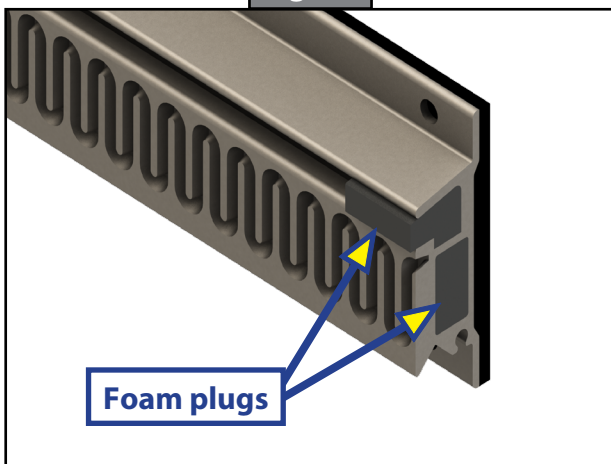
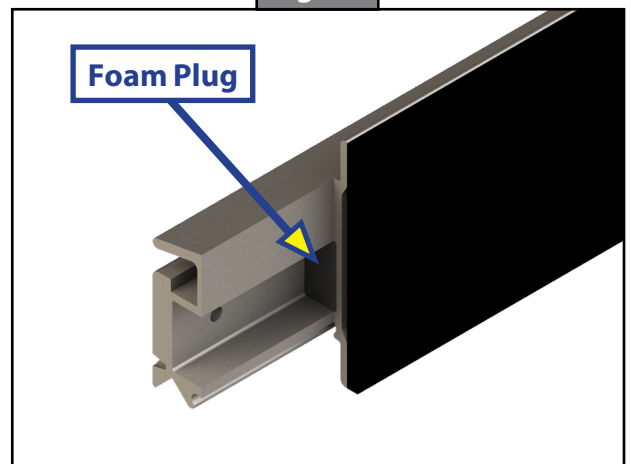


Fig. 13



## SLIDE-OUT

### System Re-Assembly and Timing

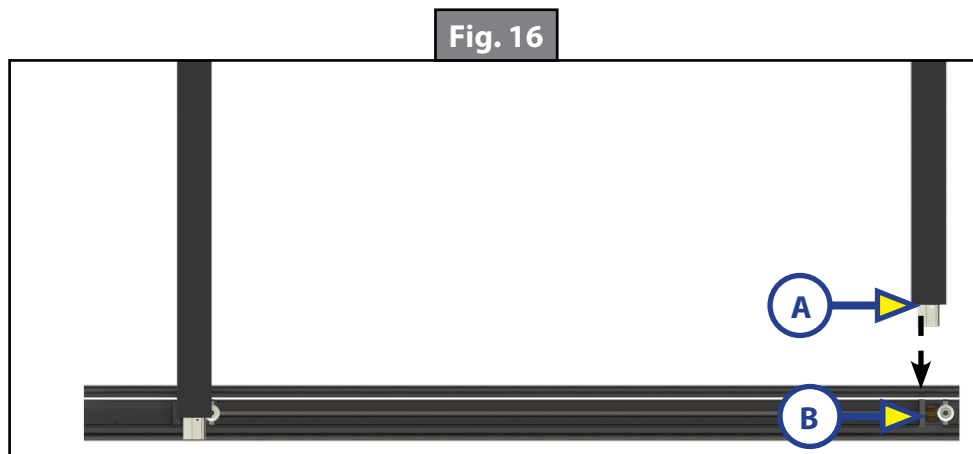
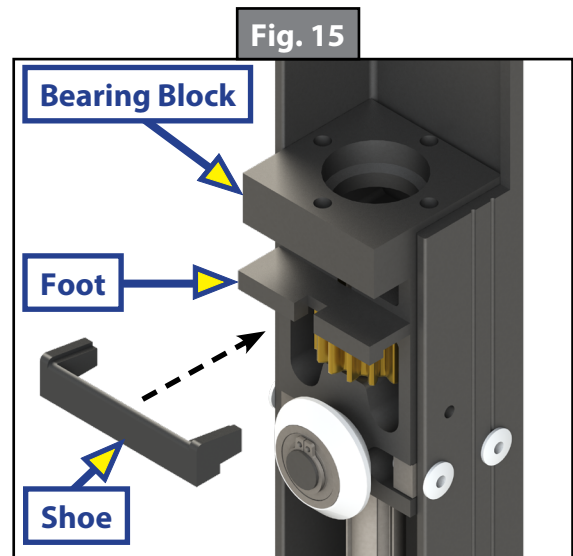
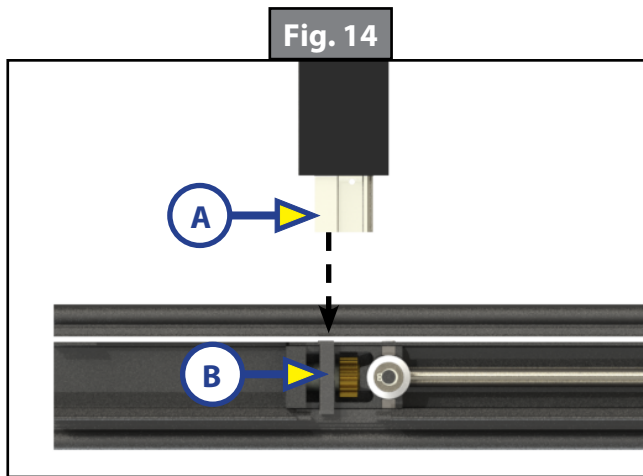
The upper and lower gear racks on each side of the In-Wall Slide-Out System are connected by a torque shaft that runs from the upper bearing block to the lower bearing block. The bearing blocks and torque shaft are mounted inside of the column. The column will be fastened to the side wall opening of the unit. When re-assembling the system after making modifications, the timing of the system from top to bottom is considered to be adjustment free as it is essentially locked in correct time when done properly.

1. Place the wider side of the H-column flat on a level surface.
2. On the upper (motor side) bearing block, slide the notched side of the gear rack (Fig. 14A) onto the shoe of the upper bearing block (Fig. 14B) until the spur gear is engaged.

**NOTE:** Add the shoes if not installed or if they have dislodged. If not installed or dislodged, slide shoe onto the foot of the bearing block (Fig. 15).

3. For the lower gear rack, slide the notched side of the gear rack (Fig. 16A) onto the shoe of the lower bearing block (Fig. 16B) until the spur gear is engaged.

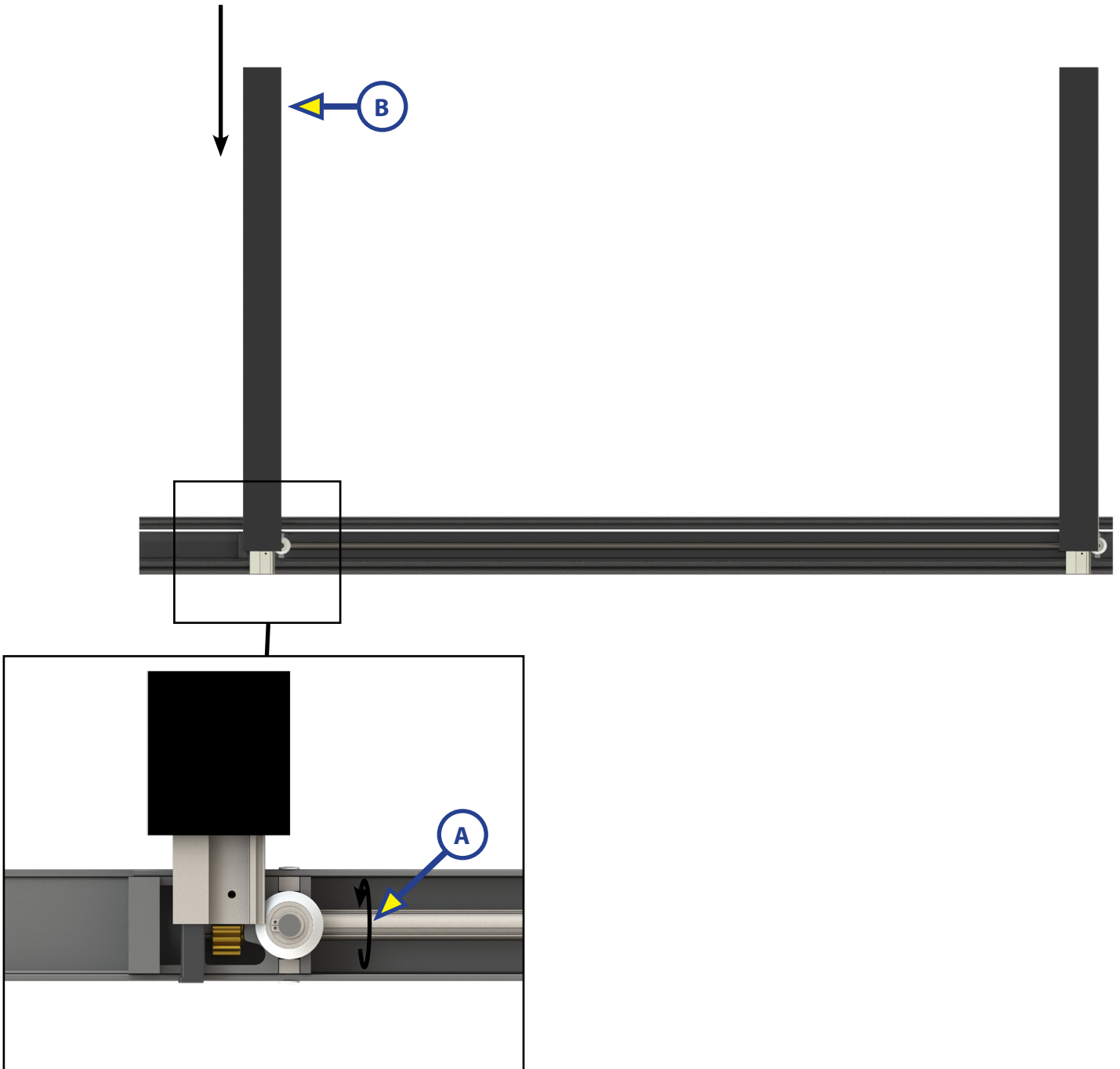
**NOTE:** The lower gear rack will have the angle shape to allow for the gear rack to be butted up to the bottom of the slide room during installation.



## SLIDE-OUT

4. Hand turn the torque shaft upwards (Fig. 17A) until both gear racks move up and both gear racks are located at the initial stage on the spur gear.
5. Apply downward pressure to one of the gear racks (Fig. 15B). This will cause both gear racks to move simultaneously on their respective spur gear. At this point, the gear racks will be synchronized.

Fig. 17



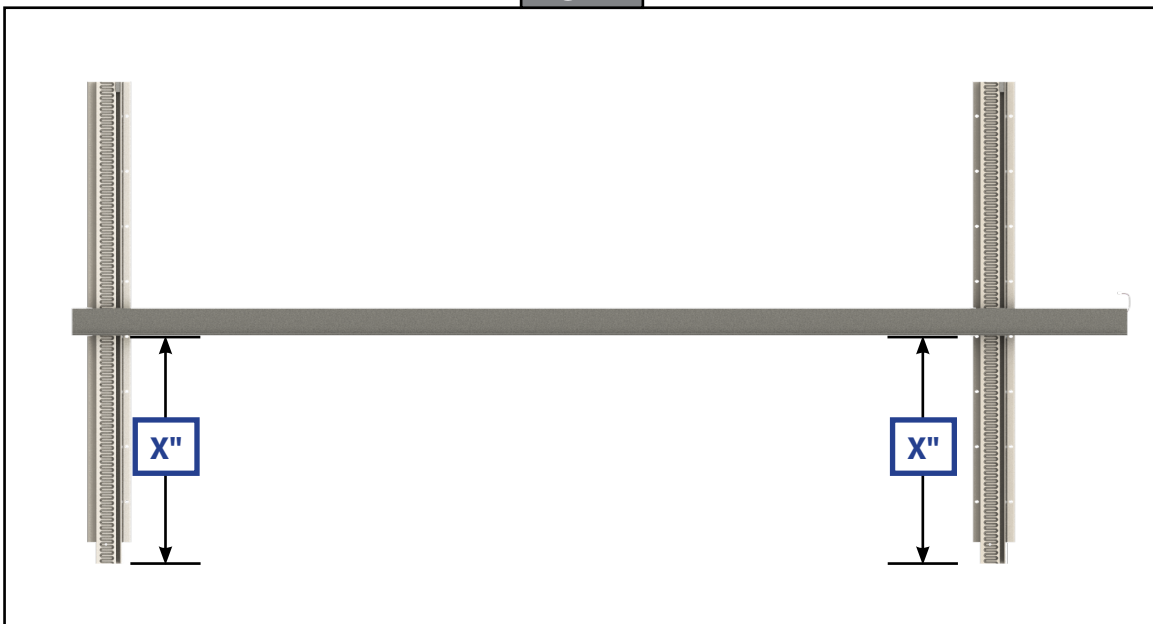
## SLIDE-OUT

6. Move the gear racks on the H-column to an approximate center location. Make sure the H-column is not covering any screw holes of the gear racks.

**NOTE:** Once both gear racks are engaged, use a tape measure and measure from the column to the end of each gear rack (Fig. 18). The measurements must be the same to ensure that the slide room will be timed correctly. Once the motor is installed this will lock the racks in place until the motors are engaged.

7. Re-install the motor and retention screw into the H-column.
8. Re-install the wipe seal. Use double sided adhesive tape to reinstall wipe seal, if necessary.
9. Repeat steps 1-8 for the other side of the In-Wall Slide-Out assembly.

Fig. 18

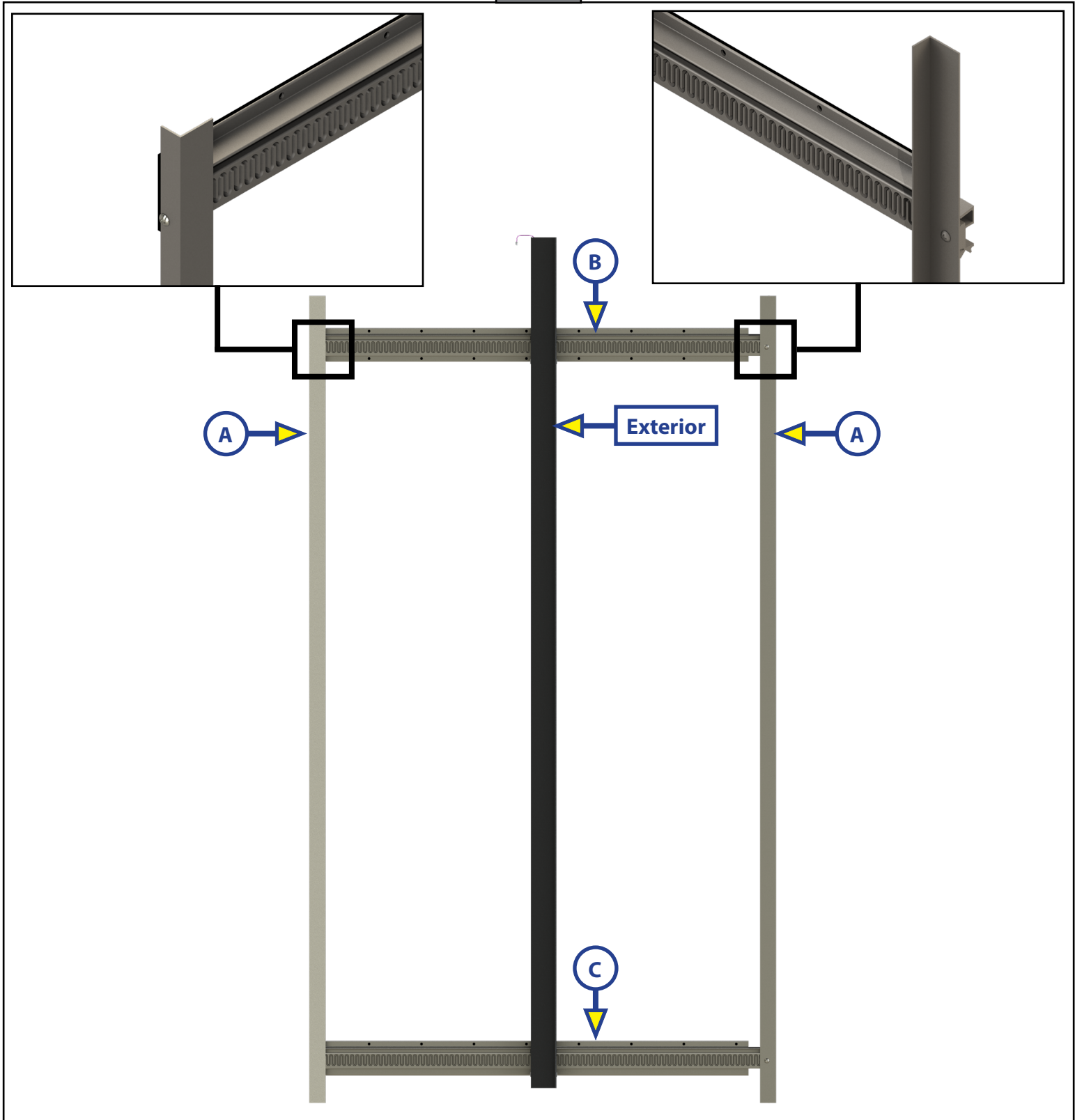


## Installing Shipping Angles

1. On the exterior side of the system, place a shipping angle (Fig. 19A) at both ends of the upper (Fig. 19B) and lower gear racks (Fig. 19C).
2. Align the pre-drilled holes in the shipping angle with the pre-drilled hole on the face of the notched end and the extruded hole on the end of the non-notched end.
3. Secure the shipping angles to the gear racks with provided screws.
4. Repeat steps 1-3 with the other column and rack assembly.

## SLIDE-OUT

Fig. 19



As a supplier of a broad array of highly-engineered components in the recreation and transportation product markets, safety, education and customer satisfaction are our primary concerns. Should you have any questions, please do not hesitate to contact us at 432-LIPPERT (432-547-7378) or by email at [customerservice@lci1.com](mailto:customerservice@lci1.com). Self-help tips, technical documents, product videos and a training class schedule are available at [lippert.com](http://lippert.com) or by downloading the LippertNOW app.

---



---

# This manual is provided courtesy of **RV Tech Cheat Sheet**



**Professional resources for the whole RV industry — free.**

We put manuals, wiring diagrams and hard-won tech knowledge in every technician's hands, so repairs get done right the first time, techs work faster, and RV owners everywhere get better service.

---



---

**[rvtechcheatsheet.com/manuals](https://rvtechcheatsheet.com/manuals)**

**Find thousands more RV manuals, wiring diagrams and parts lists**

**RV techs:** share fixes, ask questions and learn from each other.

**Join our free Facebook group →**

---



---

Follow proper safety practices. If in doubt, consult a professional RV technician.