



REAR PATIO RAIL KIT 2.0

OEM INSTALLATION MANUAL

L I P P E R T
C O M P O N E N T S®

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Safety

WARNING

The maximum weight rating for the door in ramp mode is 3,000 pounds. The maximum weight rating for the door in patio mode is 1,500 pounds. Exceeding the maximum weight ratings can cause death, serious personal injury or severe damage to the unit. **DO NOT** allow the ramp door to fall while lowering into level position, this could cause serious personal injury or severe damage to the trailer or door.

CAUTION

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

Preparation

Make sure that the ramp door support cables are securely in the patio position prior to starting the installation. Installation will not be possible otherwise. See owner's manual for instructions on use of the adjustable cable.

WARNING

Do not remove set screw. Failure to follow this warning may result in death, serious personal injury and/or severe property damage.

NOTE: Cables are not shown in the images for clarity purposes.

NOTE: Some trailers are equipped with an optional adjustable cable system for the ramp door. Follow applicable set screw warning for use of the adjustable cable. The adjustable cable system allows for up to +/- 2.5" of adjustment in order to achieve a 90-degree angle for the ramp door while in patio mode.

Resources Required

- Tape measure
- Grease pencil/frame marker
- 4 C-clamps
- Cordless or electric drill or screw gun
- Appropriate drive bits
- 1/4" drill bit
- 5/32" hex wrench

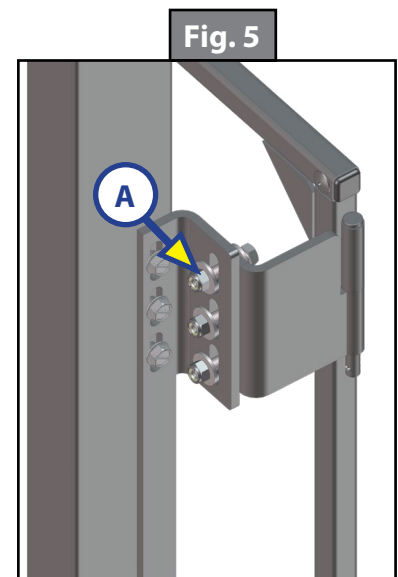
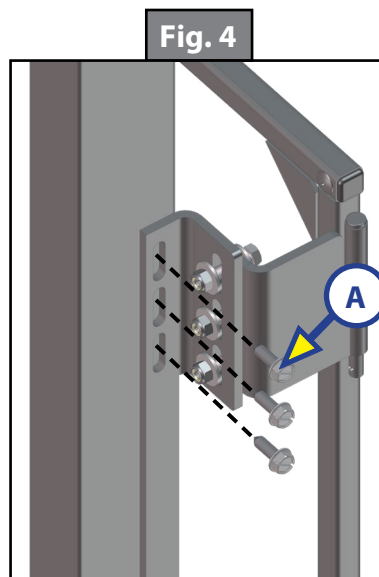
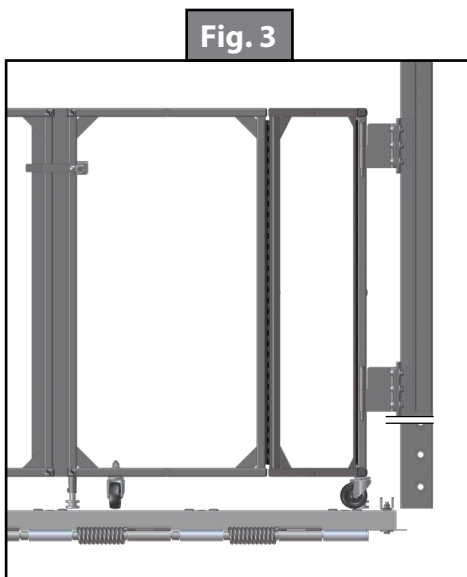
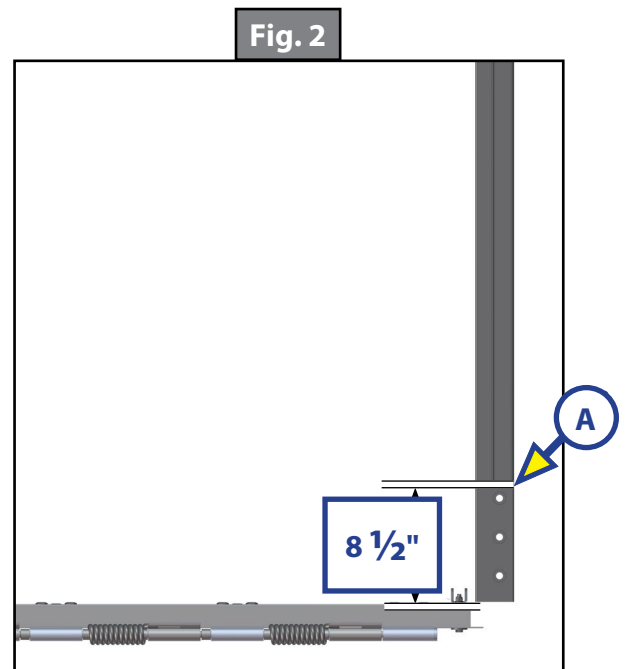
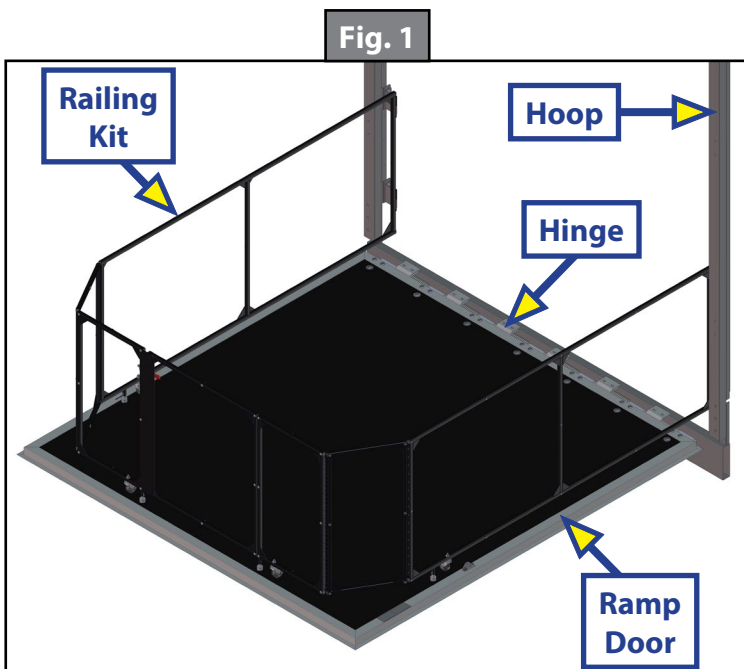
Patio Railing Installation

Hinge Bracket

1. Unfold the railing kit sections out to their approximate positions on the ramp door (Fig. 1).
2. Measure up $8\frac{1}{2}$ " from the floor on each side of the ramp door hoop and make a mark (Fig. 2A).
3. Align the bottom of the hinge bracket to the previously-measured mark and clamp the bracket in place (Fig. 3).
4. Drill pilot holes using a $\frac{1}{4}$ " drill bit.
5. Use the provided self-tapping screws (Fig. 4A) to secure the hinge brackets to the ramp door hoop. Remove the clamps.

NOTE: The hardware (Fig. 5A) keeping the railing attached to the railing bracket is shipped untightened for adjustments using the slotted holes in the bracket. If the nuts are tightened, loosen them for step 6.

6. Adjust the railing kit so that the bottom of the railing near the hoop is 3" from the ramp door.
7. Secure the railing to the railing bracket by tightening the hardware (Fig. 5A).



Keeper Bases

1. Attach the four keeper feet into the four keeper bases by sliding the feet into the bases until they snap into place (Fig. 6).

NOTE: The short keeper bases are for the sides and the longer keeper bases are for the rear near the gate area (Fig. 7).

2. Align the keeper bases to the frame of the ramp door so that the notched bottom of the keeper base sets flush against the inside edge of the ramp door frame (Fig. 8A).

NOTE: Some adjustment of the keeper bases may be needed to align the railing properly. Do not secure the keeper bases to the ramp door until the railing is aligned. The keeper bases will be aligned correctly when the gate on the railing functions correctly.

3. Clamp the keeper bases into place.
4. The distance from the ramp door to the bottom of the railing should be 3". Each keeper foot has a set screw for height adjustment (Fig. 9A). To attain the 3" distance, loosen each set screw with a $\frac{5}{32}$ " hex wrench as needed. Adjust the keeper foot height and re-tighten the set screw.
5. Test the gate to make sure it functions properly. If not, continue to adjust the keeper feet until the gate functions correctly.

NOTE: The front two panels of the railing kit on either side of the gate must be parallel to the ramp door's edge for the gate to function properly.

6. Once the keeper bases are aligned properly and securely clamped to the ramp door, attach them to the ramp door with the provided Tek® screws (Fig. 9B).

Fig. 6

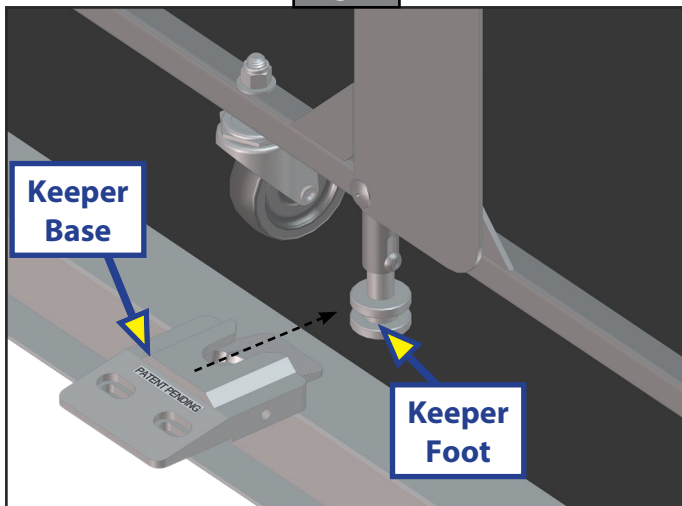


Fig. 7

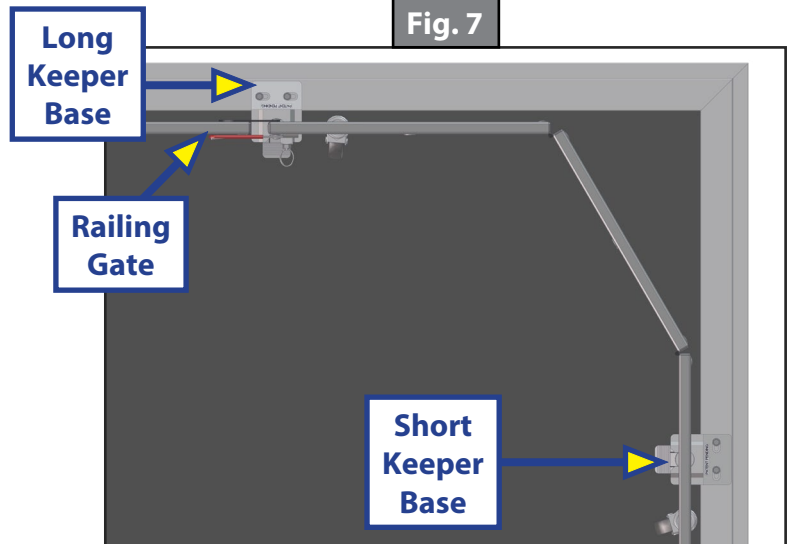


Fig. 8

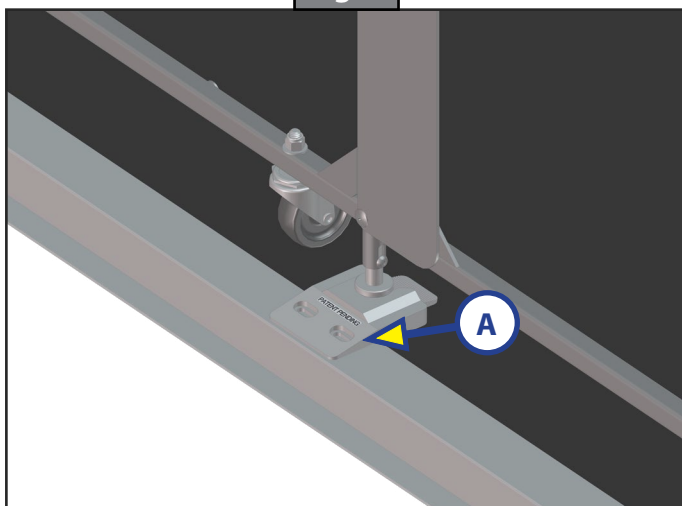
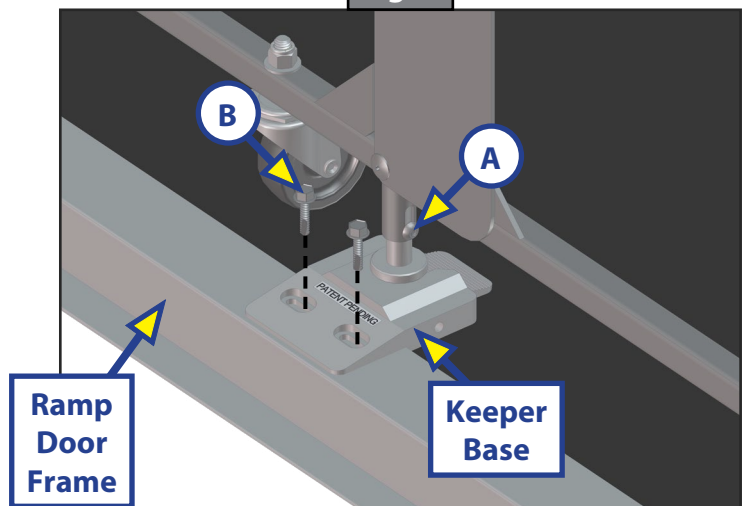


Fig. 9



Patio Railing Operation

Extending Patio Rail

1. Remove the hook and loop fabric strap securing the railing in the closed position.
2. Unfold the railing so that the keeper feet (Fig.10A) slide into the keeper bases (Fig. 10B) and lock in place.
3. Close and secure the gate with the latch.

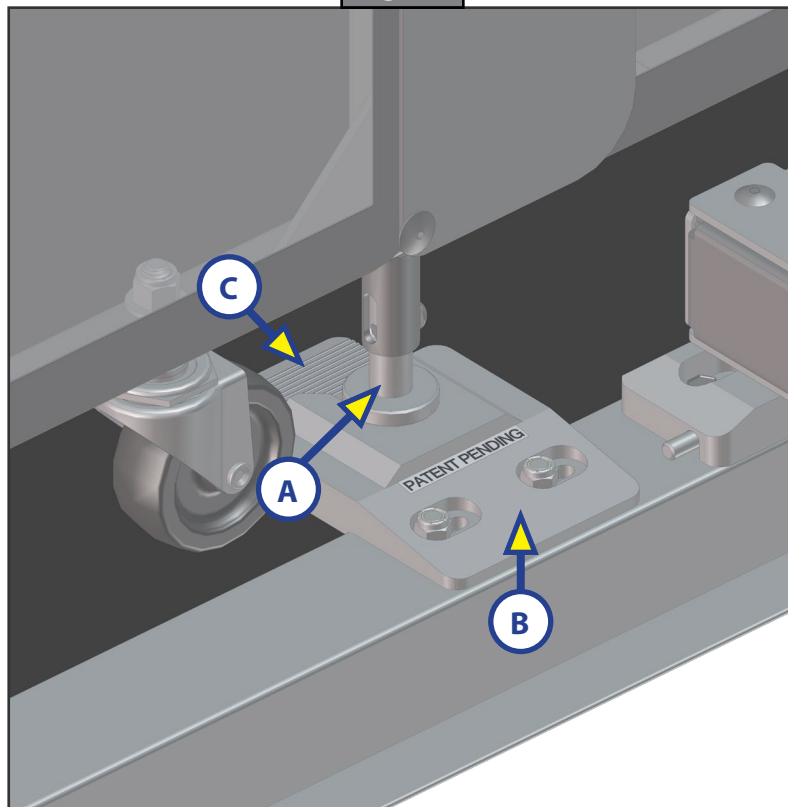
Retracting Patio Rail

⚠ CAUTION

Properly stow rails to make sure that patio door closure does not compromise caster wheels. If patio railing is not properly stowed, caster wheels may get caught and be damaged by the hinge of the patio door when door is closed. Damage to caster wheels due to improper stowage of the patio rail kit is not covered under warranty.

1. Open the latch on the gate.
2. Depress the foot release (Fig. 10C) on the keeper bases (Fig. 10B).
3. While facing the patio door opening, fold the right railing back onto itself so it rests flush inside the door opening.
4. Make sure no caster wheels are in the hinge space between the patio door and the door jamb.
5. Fold the left railing back onto itself so it rests flush inside the door opening.
6. Make sure no caster wheels are in the hinge space between the patio door and the door jamb.
7. When caster wheels are clear of the hinge area and the railings are folded inside the door opening, secure with attached hook and loop fabric strap to prevent shifting when railing is in the closed position.

Fig. 10



Optional Step Installation

NOTE: Steps are an optional component in Patio Railing Kits 2.0.

1. Attach the step keeper bases (Fig.11A) to the steps (Fig.11B) with the pins (Fig.11C) facing away from the steps.
2. Center the steps by measuring from the same point on each of the two step keeper bases to the edge of the door and adjust the steps until both measurements are even (Fig. 12).
3. Adjust the step feet (Fig.13A) by removing the cotter pin (Fig.13B) from the clevis pin (Fig.13C).
4. Extend the step foot to allow step keeper bases to set flush on door extrusion.
5. Once the keeper bases are aligned properly, attach them to the door with the four provided Tek® screws (Fig.14A).
6. To make sure that the steps are properly aligned, put the steps on and remove them to ensure good alignment and fit. To install the steps into the keeper base, just push into place. To remove the steps, push the pin (Fig. 11C) to move the slide out of the way. This will allow the step to be pulled out of the step keeper base.

Fig. 11

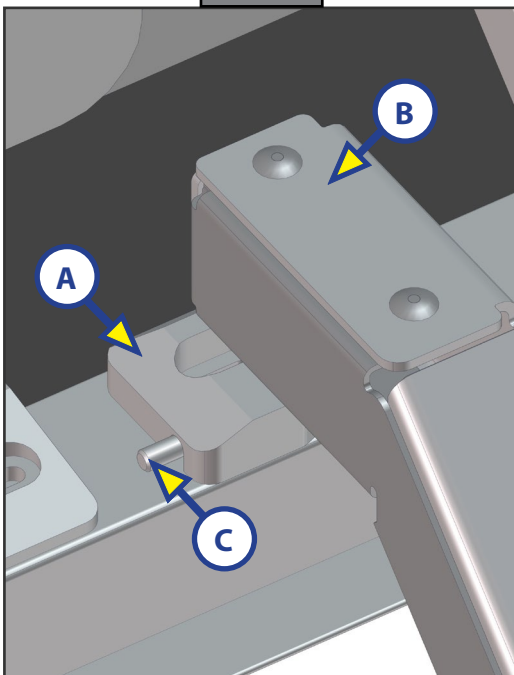


Fig. 12

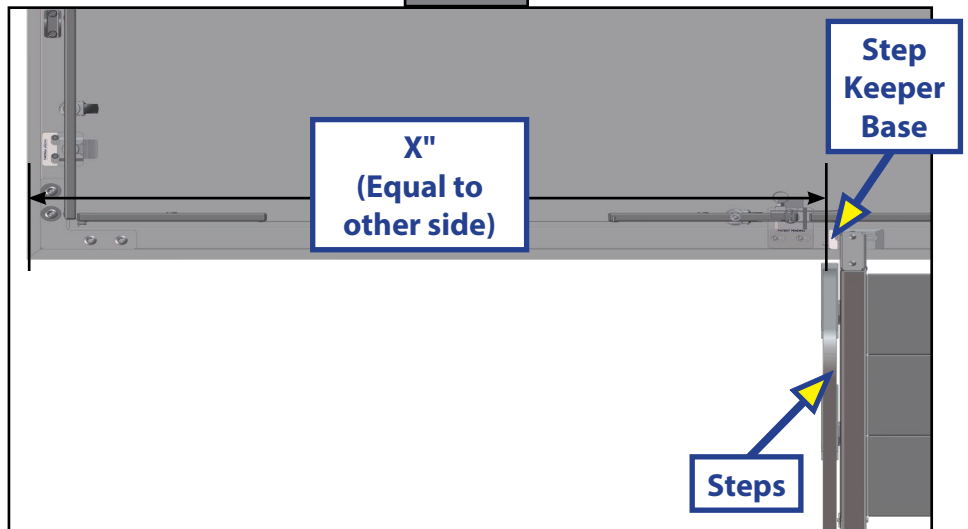


Fig. 13

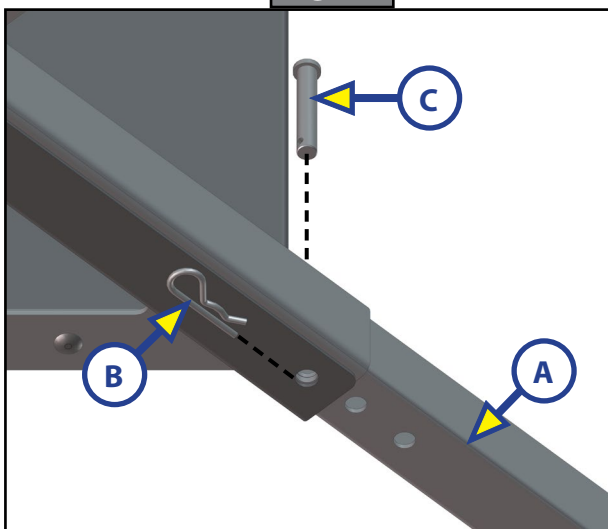
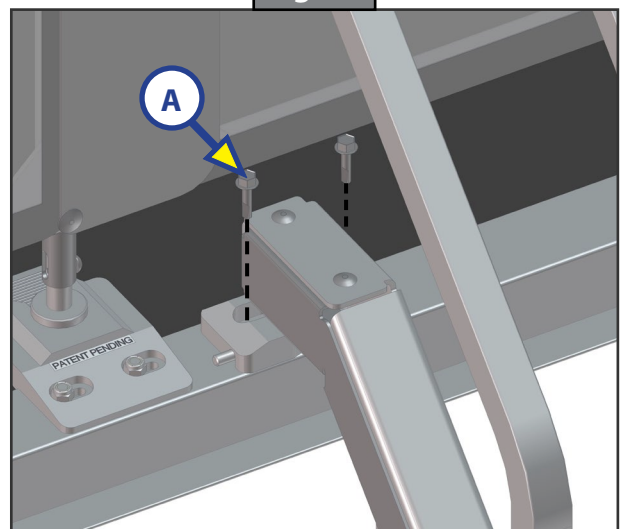


Fig. 14



Optional Step Operation

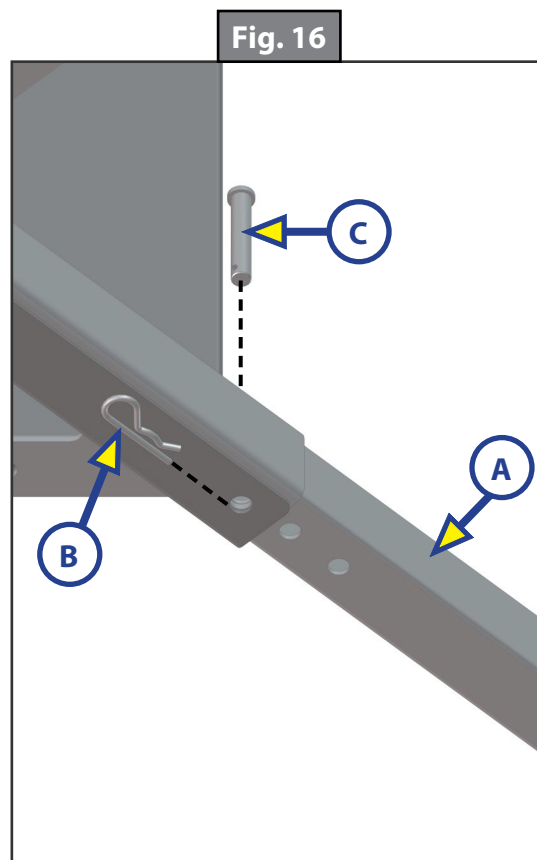
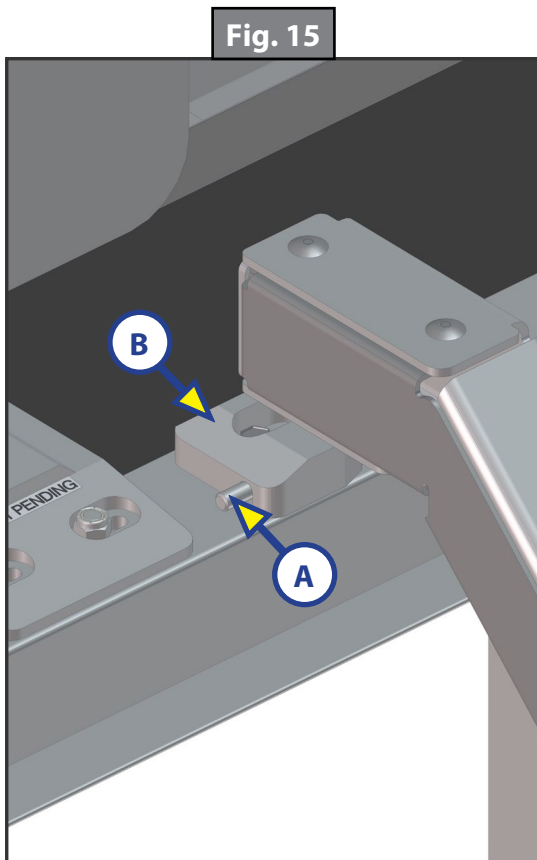
NOTE: Steps are an optional component in Patio Railing Kits 2.0.

Steps Set-Up

1. Attach the steps to the door by locking them into the step keeper bases (Fig. 15A).
2. Extend the feet (Fig. 16A) by removing the cotter pin (Fig. 16B) from the clevis pin (Fig. 16C).
3. Remove clevis pin from the foot rail.
4. Adjust the steps to a level position and secure by inserting the clevis pin into the nearest aligned foot holes, then insert the cotter pin into the clevis pin (Fig. 16).

Steps Storage

1. Remove the steps from the door by pushing in the pins (Fig. 15A) on the side of the step keeper bases (Fig. 15B).
2. Retract the feet (Fig. 16A) by removing the cotter pin (Fig. 16B) from the clevis pin (Fig. 16C).
3. Remove clevis pin from the foot rail.
4. Adjust the steps to a storage position and secure by inserting the clevis pin into the foot and the cotter pin into the clevis pin (Fig. 16).





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