



CHALLENGER HATCH DOOR
SERIES 3500
OEM INSTALLATION MANUAL

TABLE OF CONTENTS

Introduction	2
Safety	2
Resources Required	3
Prior to Installation	3
Installation	4
OEM Provided Inner Seal	4
Door Assembly onto Travel Trailer	5
OEM Provided Outer Seals	6
Gutter Trim	7
Threshold	7
Screw Cap Covers	8
End of Installation Steps	8
Operation	9
Opening the Challenger Hatch Door	9
Closing the Challenger Hatch Door	9
Maintenance	9

Introduction

The Challenger Hatch Door Series 3500 is a unique hybrid of a rear door with a baggage storage type of design, to be installed on travel trailers. The wide door opening gives easy access to store and remove larger items. Shocks on both sides of the door allow for the hatch door to rise and lower with added ease.

For information on the assembly or individual components of this product, please visit:

<https://support.lci1.com/challenger-doors>

NOTE: Images used in this document are for reference only when assembling, installing and/or operating this product. Actual appearance of provided and/or purchased parts and assemblies may differ.

Safety

Read and understand all instructions before installing or operating this product. Adhere to all safety labels.

This manual provides general instructions. Many variables can change the circumstances of the instructions, i.e., the degree of difficulty, operation and ability of the individual performing the instructions. This manual cannot begin to plot out instructions for every possibility, but provides the general instructions, as necessary, for effectively interfacing with the device, product or system. Failure to correctly follow the provided instructions may result in death, serious personal injury, severe product and/or property damage, including voiding of the Lippert limited warranty.

WARNING

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

WARNING

Failure to follow instructions provided in this manual may result in death, serious personal injury and/or severe product and property damage, including voiding of the component warranty.

CAUTION

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

⚠ CAUTION

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

⚠ CAUTION

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

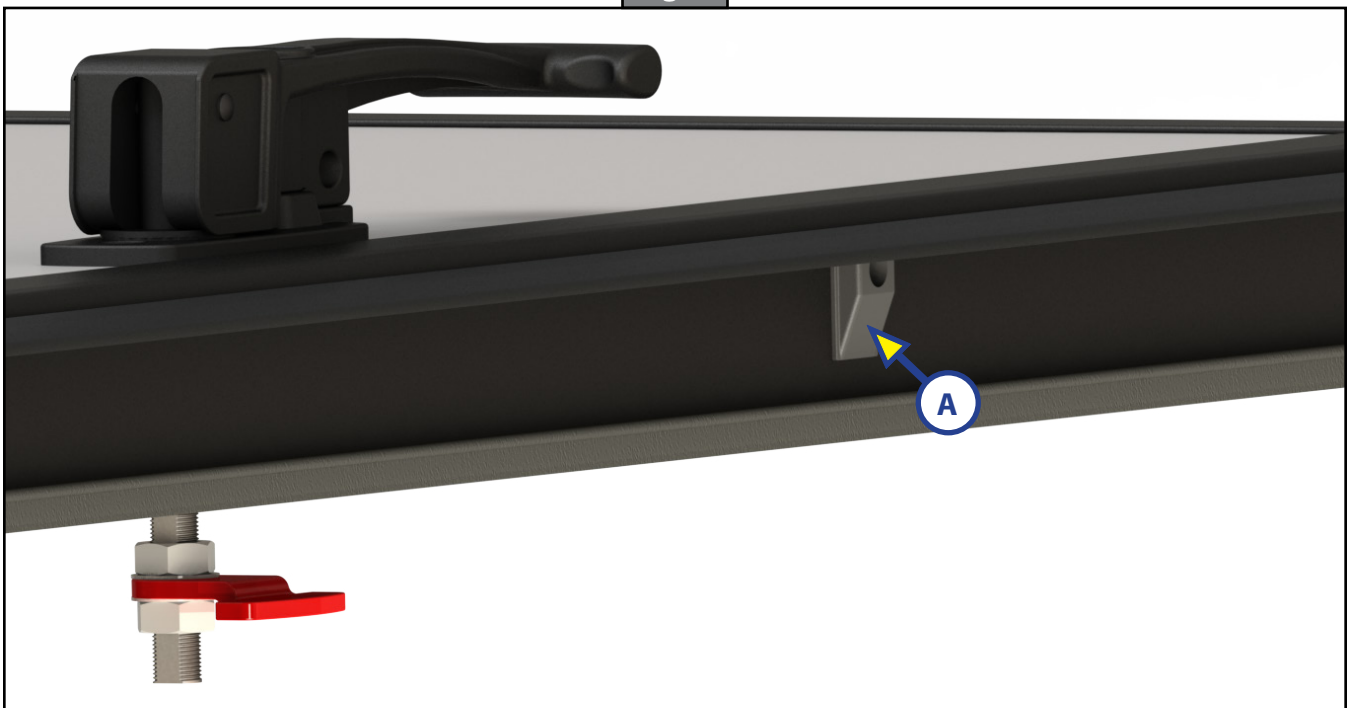
Resources Required

- 1-2 People, depending on task
- Cordless or electric drill or screw gun
- Appropriate drive bits
- Appropriate drill bits
- Caulk gun
- Gunnable sealant
- Closed cell foam tape or butyl tape
- Scissors or cutting tool
- 3/4" Wrench
- Cleaning cloths
- Alcohol based cleaner
- #8 X 1 1/2" Screws (4)
- #8 X 1" Screws, approximately (40-45)

Prior to Installation

NOTE: Spacer blocks (Fig. 1A) come installed in the door assembly to hold and properly space the door in the frame. Remove these **AFTER** installation.

Fig. 1



NOTE: Gunnable sealant may be used, as an option for putty tape or closed cell foam tape, if doors are prepped only as needed prior to individual installation to prevent premature curing. Dried sealant will not bond or provide proper water management.

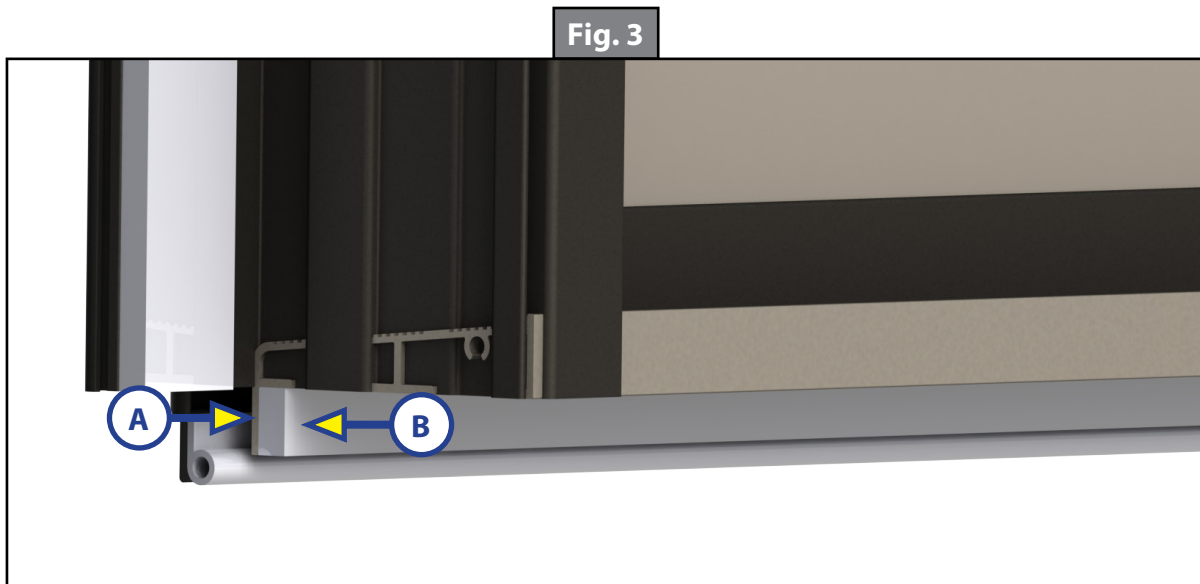
Installation

OEM Provided Inner Seal

Seals will be provided by the OEM. The Inner seal (Fig. 2A) used should be approximately 1" wide and 1/4" thick. Start with the top seal running all the way across the door frame opening, then for sides, make sure the seal is flush to the top seal and run all the way down the sides of the door frame.

Be sure to check that the rough opening measures to the size stated on the door label, and is square and even on all sides. The Challenger Hatch Door is 60" x 66" and manufactured to properly fit the smaller rough opening size. Be sure that the opening has proper framework supporting it, ie; aluminum, steel tubing or lumber.

1. Clean the back surface of the outside flange, of the outer frame of the door assembly.
2. Install OEM provided inner seal along the back inside perimeter (Fig. 2A) of the outer frame surface of the door assembly. This helps to create a tight seal once the door is completely installed inside the wall of the travel trailer. Apply seals:
 - A. Apply the seal (Fig. 2A) across the top of the entire door length.
 - B. Install the seal down the side (Fig. 2B) starting from below the top seal and ending at the bottom of the frame, repeat for the opposite side.
 - C. Bottom seal (Fig. 3B) should be applied at the bottom of the sill plate (Fig.3A).
3. Place door assembly in the rough opening of the travel trailer, centered side to side.



Door Assembly onto Travel Trailer

⚠ CAUTION

Use of an impact drill is NOT recommended and could cause damage to the door frame.

1. Install a #8 x 1" screw (Fig. 4A) in the highest pre-drilled hole, on the side of the frame, proceed to the opposite side and install screw at the same location.
2. Install a #8 x 1" screw (Fig. 5A) in the lowest pre-drilled hole, on the side of the frame. Adjust the reveal (space between the inner and outer frame), of the door assembly.
3. Install a #8 x 1" screw in the lowest pre-drilled hole, on the opposite side of the frame to hold the door assembly in a square position.
4. Install all the remaining screws (Figs. 6A, 7A)in the pre-drilled holes along both sides of the door frame.

Fig. 4



Fig. 5



Fig. 6

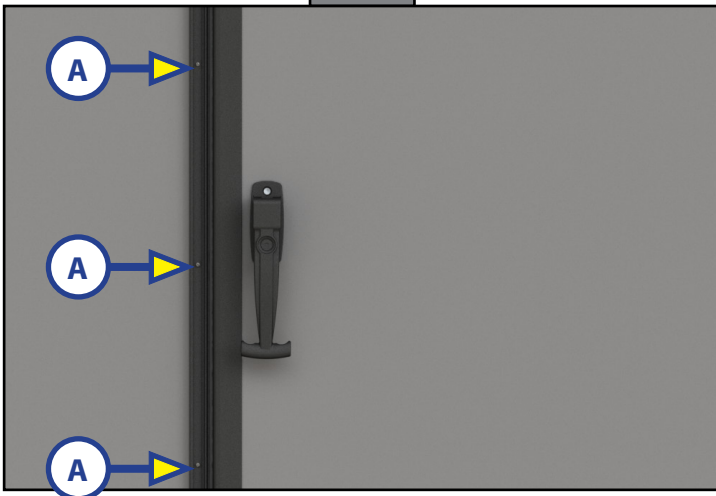
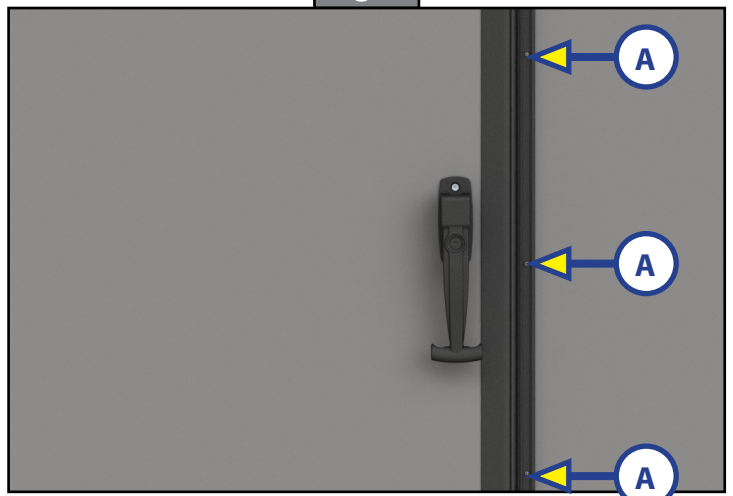


Fig. 7

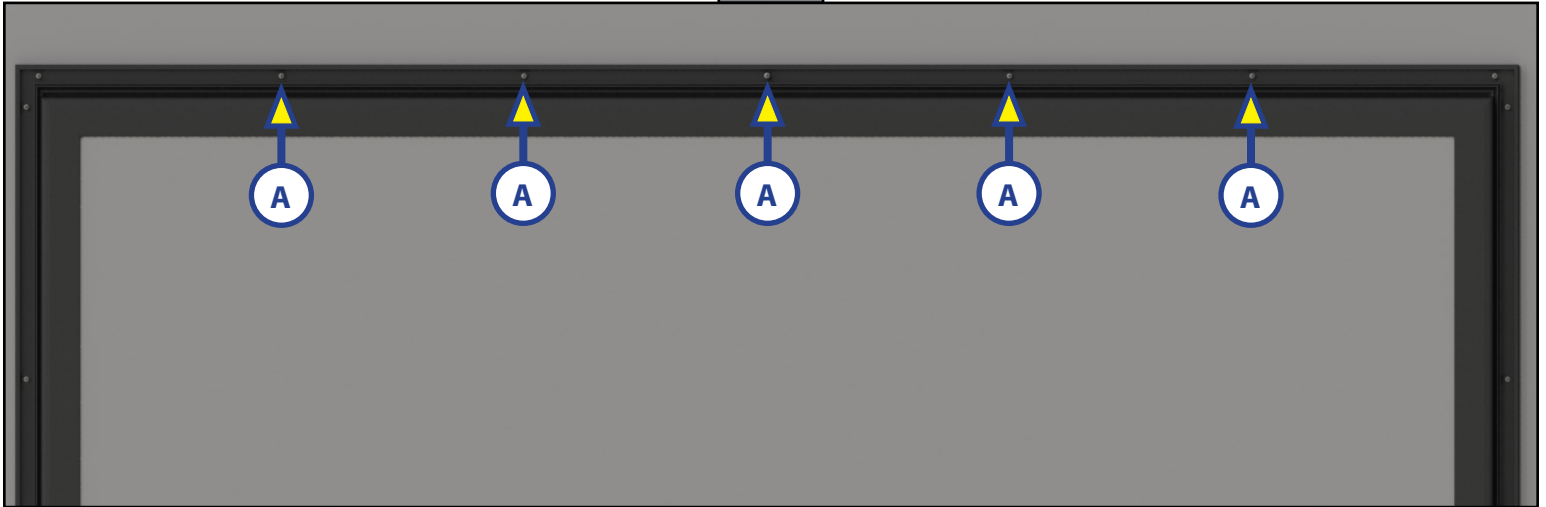


⚠ CAUTION

Observe caution to not over tighten the screws at the top hinge side of the door frame. Over-tightening screws can cause the frame to roll, adding excess pressure to the hinge.

5. Install the rest of the #8 x 1" screws (Fig. 8A) along the pre-drilled top hinge side of the door assembly.

Fig. 8



OEM Provided Outer Seals

The top outer bulb seal (Fig. 9A) should be slid into the grooves along the top first and then attach each side bulb seal (Fig. 10A) starting from the top down. Cut off any excess seal at the bottom.

Fig. 9

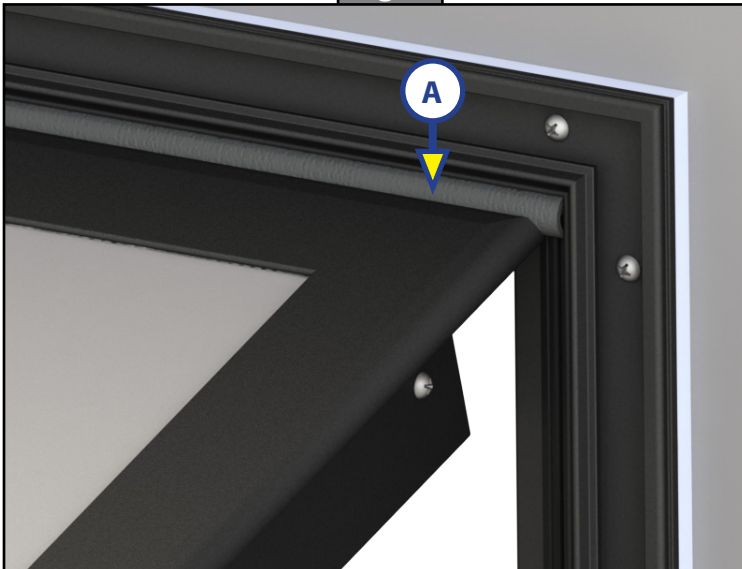
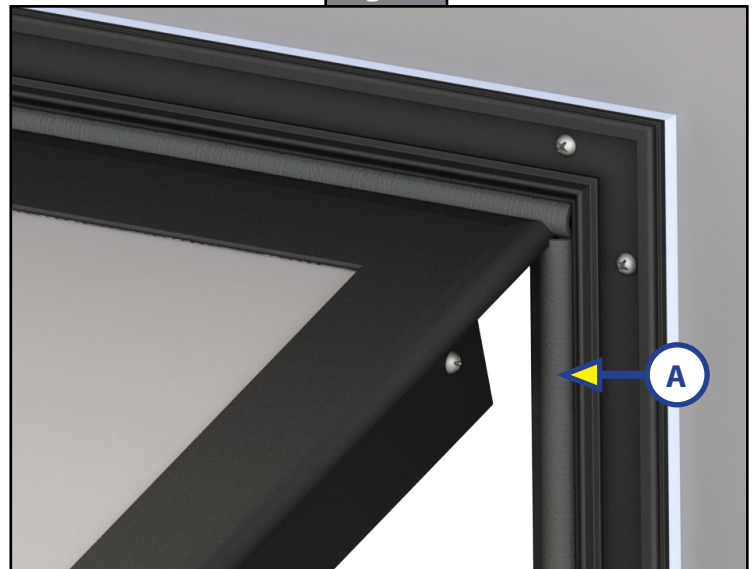


Fig. 10



Gutter Trim

1. Place the gutter trim tabs (Fig. 11B) into the top of the screw channel (Fig. 11A).
2. Secure within 1" of the ends of the screw channel with #8 x 1 1/4" screws (Figs. 11C, 12A, 13A).
3. Secure with two more #8 x 1 1/4" screws (Fig. 13B) evenly spaced between the two end screws.

Fig. 11

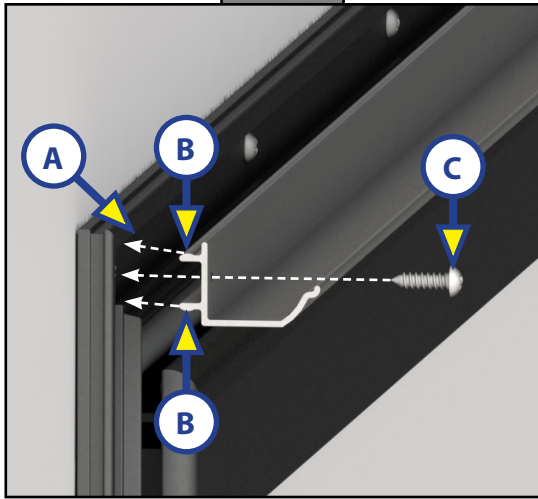
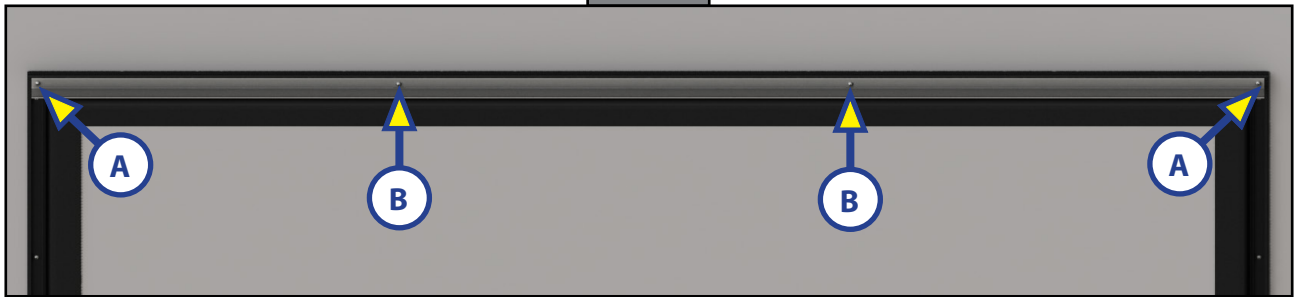


Fig. 12



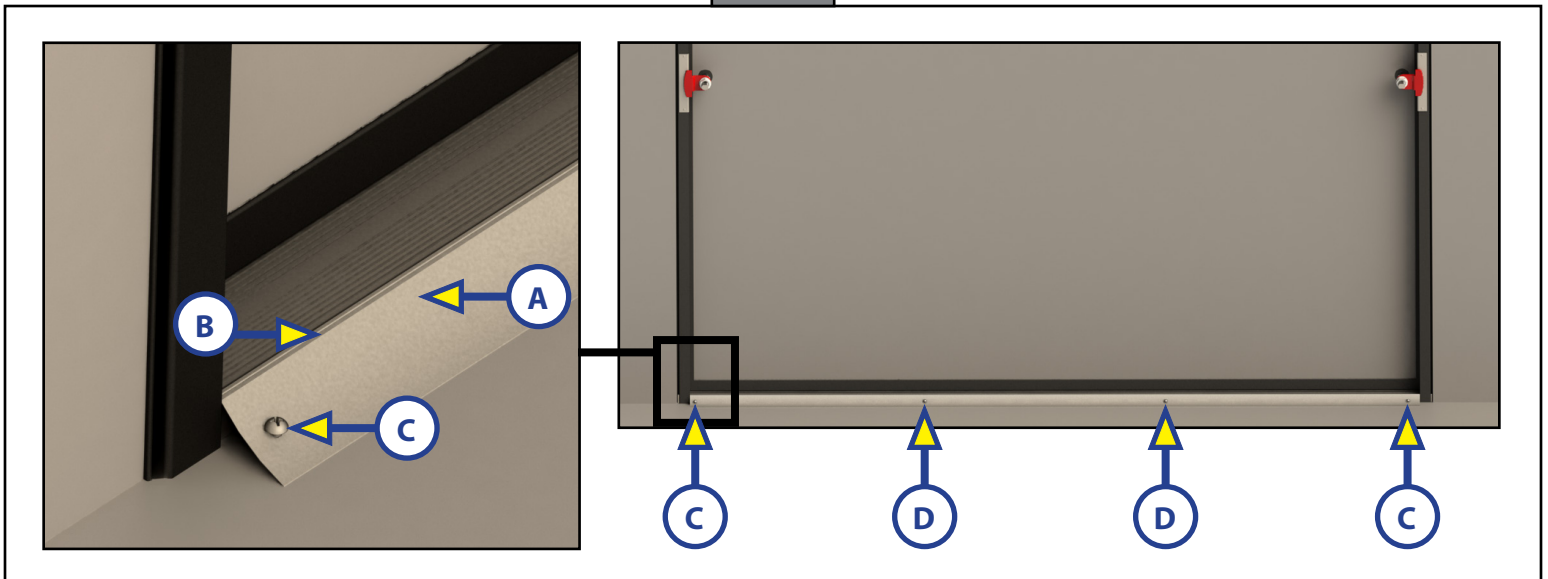
Fig. 13



Threshold

1. On the inside of the trailer, place the threshold (Fig. 14A) on the lip of the sill plate (Fig. 14B).
2. Secure within 1" of the ends of the threshold with #8 x 1" screws (Fig. 14C).
3. Secure with two more #8 x 1" screws (Fig. 14D) evenly spaced between the two end screws.

Fig. 14



Screw Cap Covers

1. Located on the outside of the door, push the screw covers (Fig. 15A) tight to the gutter rail (Fig. 13B).
2. Starting at the top, press in firmly to lock the screw cover (Fig. 16A) in place and work down to the bottom.
3. Repeat steps 1- 2 for the opposite side.

Fig. 15

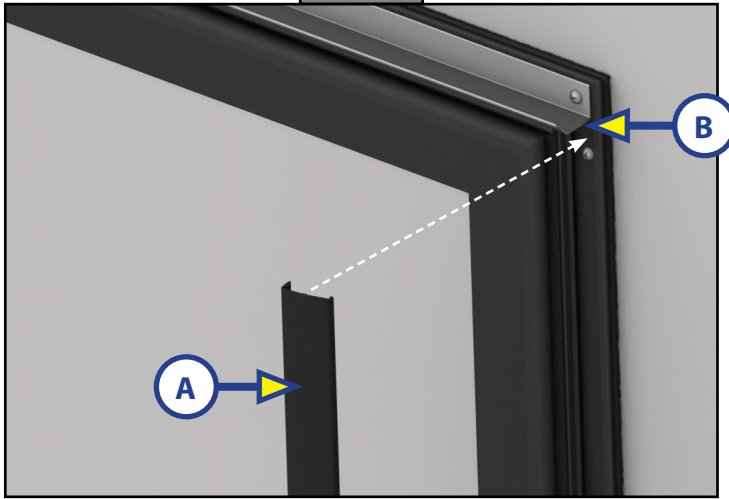
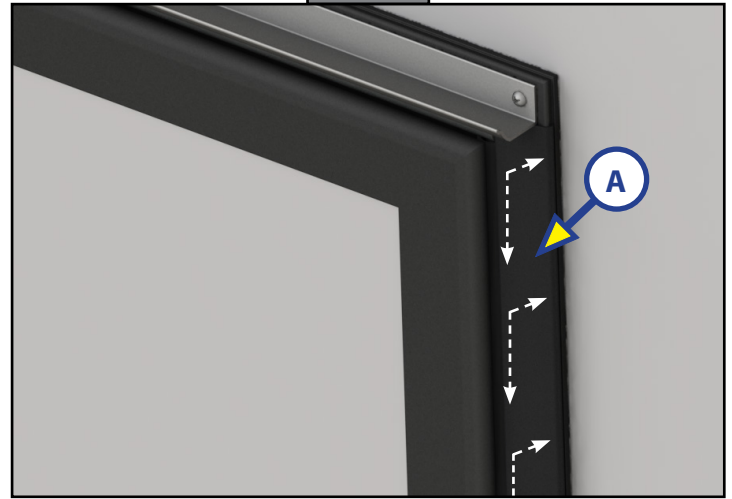


Fig. 16



End of Installation Steps

1. With the door in the open position, remove the spacer blocks (Fig. 17A) on either side of the door. The spacer blocks are attached with putty and should come off with little force.
2. Run a bead of gunnable sealant around all sides of the door (Fig. 18A - red line) to create a weather resistant barrier between the outer frame and sidewall.

⚠ CAUTION

Use caution when adjusting the Challenger Hatch Door handles. Over-tightening the latch will bend the outer frame.

3. If any adjustment's are needed, move the 3/4" nuts (Fig. 19D) on the back of the latch, in or out on the latch bolt to achieve proper compression with the seal.
4. If the door is routed for a window, install it now. Refer to the Lippert window installation guide for proper installation.

Fig. 17

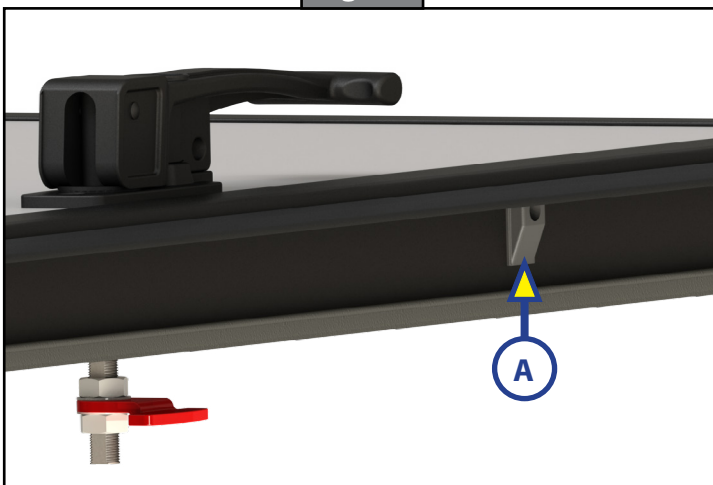
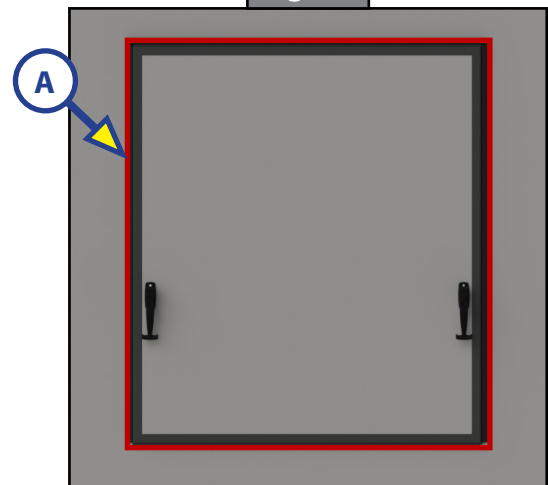


Fig. 18



Operation

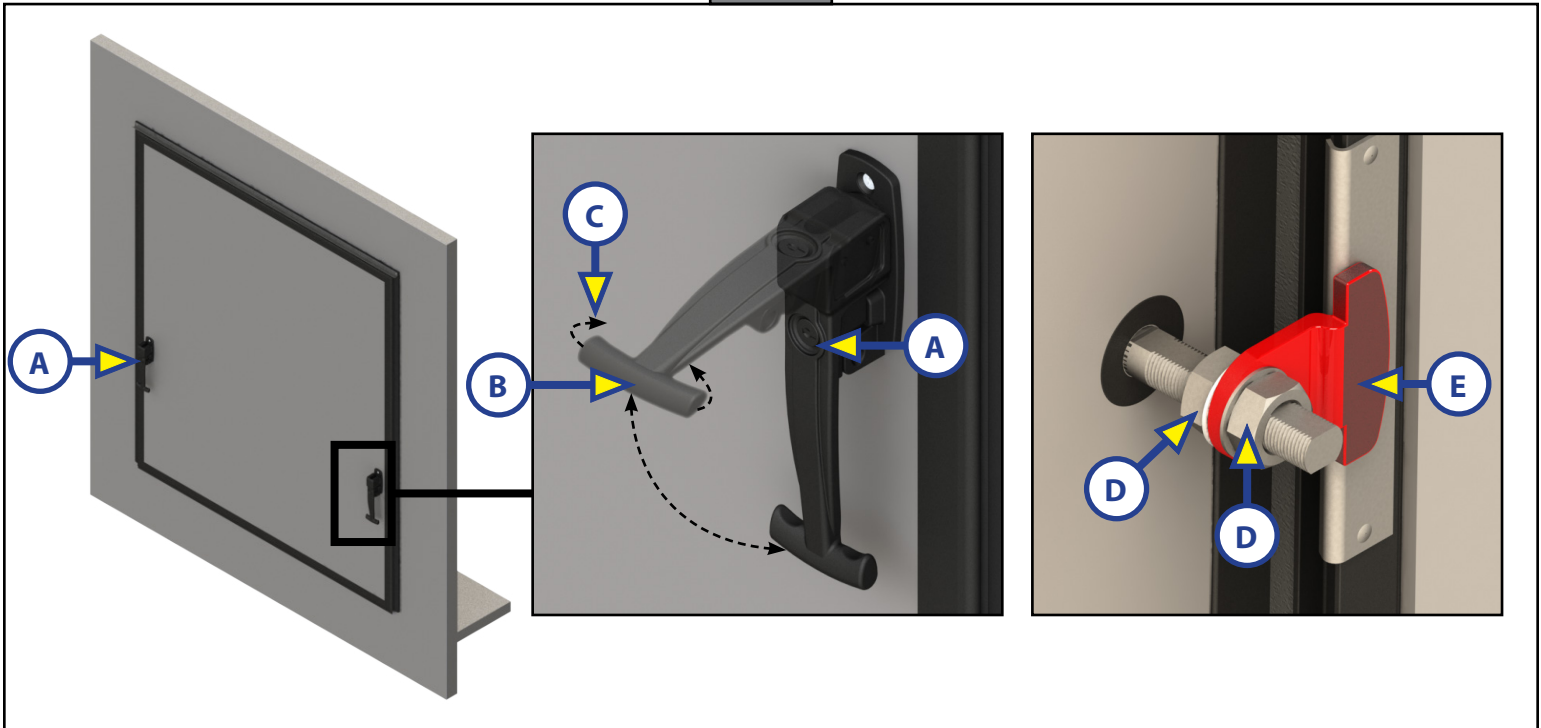
⚠ CAUTION

The Challenger Door Hatch opens to an 85 degree angle to the ground. DO NOT force the door open any wider than what the shocks will allow the door to rise.

Opening the Challenger Hatch Door

1. To open the door, first verify the compression latch is unlocked (Fig. 19A).
2. For both sides, raise the handle of the compression latch (Fig. 19B) so that it is parallel with the ground.
3. Twist the compression latch handle 90° in either direction (Fig. 19C). This will release the locking tab (Fig. 19E) from the door jamb, allowing the door to be lifted up.
4. Slowly lift the door, letting the shocks assist in your movement, until it rests at the 85 degree position, parallel to the ground.

Fig. 19



Closing the Challenger Hatch Door

1. Gently lower the hatch door into the doorjamb. Before completely closing make sure the locking tab's (Fig. 19E) are in the open position.
2. Once the Challenger Hatch Door is completely closed, twist (Fig. 19C) and lower the handle (Fig. 19B). Lock the compression latch (Fig. 19A) for both sides.

Maintenance

In order to clean the door, use only an alcohol-based cleaner. Other chemicals and cleaners may result in the degradation of the seal and cause de-lamination to the door.



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