



**STORAGE RACKS**  
**OEM INSTALLATION MANUAL**

L I P P E R T  
C O M P O N E N T S<sup>®</sup>

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## Introduction

The Storage Rack can be provided with either an under-bumper mounting configuration, or an over-bumper mounting configuration depending on the type of unit it is to be installed on.

## Safety

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 LCI limited warranty.

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

### **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.**

### **WARNING**

**Unit MUST be supported per manufacturer's recommendations before working underneath. Failure to do so may result in death or serious personal injury.**

### **WARNING**

**Lippert Components, Inc. Storage Rack should not be used for any other purpose or reason than its intended use. To use the Storage Rack for any reason other than what it was designed for, may result in death or serious personal injury.**

## **⚠ WARNING**

Failure to acknowledge Storage Rack weight ratings may result in damage to the product and/or unit.

## **⚠ 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.**

The Storage Racks were designed to have a maximum total load capacity of 200 lbs. Before using a Storage Rack, please note the following:

- Follow all Lippert Components, Inc. operation instructions. Failure to utilize the instructions provided may result in damage to the product and/or unit or cause death or serious personal injury.
- The Storage Rack **MUST NOT** be used for the mounting of electric or motorized equipment.
- Any additional welding modifications to the chassis or bumper will void the warranty.

### Storage Rack Weight Ratings

The Storage Rack weight rating is based on the height of the main rail tube. Weight ratings for the under-mounting and over-mounting brackets are as follows:

- Under-mount storage rack bracket - 200 lbs
- Over-mount storage rack bracket - 200 lbs

### **Resources Required**

- 1-2 people, depending on the task
- Cordless or electric drill or screw gun
- Appropriate drive bits,  $\frac{3}{8}$ " and  $\frac{9}{16}$ "
- $\frac{3}{4}$ " drivers or sockets
- $\frac{3}{4}$ " and  $\frac{9}{16}$ " wrench

# Installation

## Under-Mount Storage Rack

**NOTE:** The under-mount storage rack brackets are not interchangeable and are side specific.

1. Place the roadside bracket on the roadside chassis rail. The bottom flange of the storage rack bracket (Fig. 1A) will rest on the lip of the I-beam lip (Fig. 1B).

**NOTE:** Mount the bracket to extend past the frame between 16" and 17 1/2" (Fig. 2). It is important to maintain that distance as the storage rack will not stow properly in the upright position if the distance is less than 16".

Fig. 1

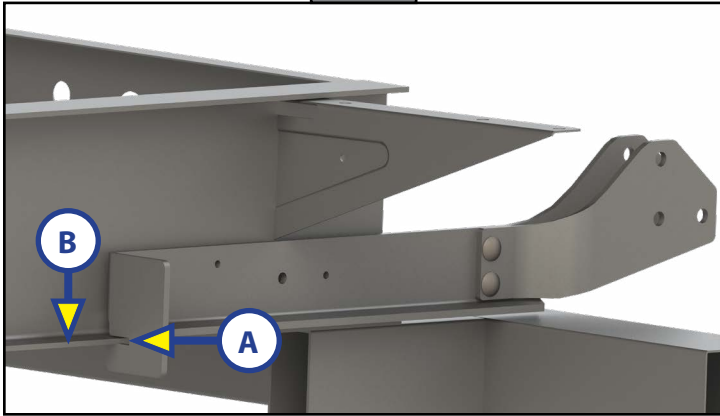
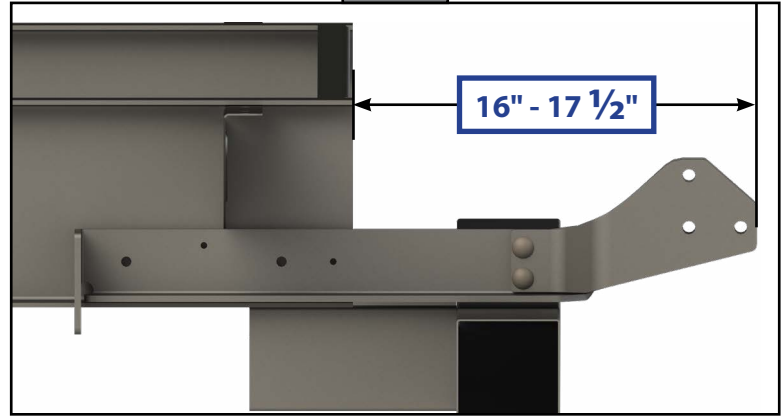
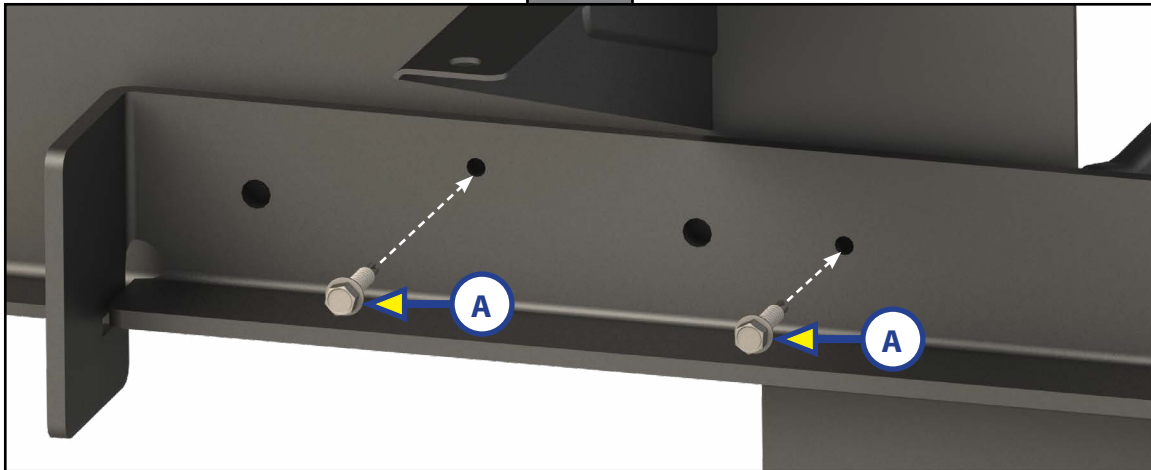


Fig. 2



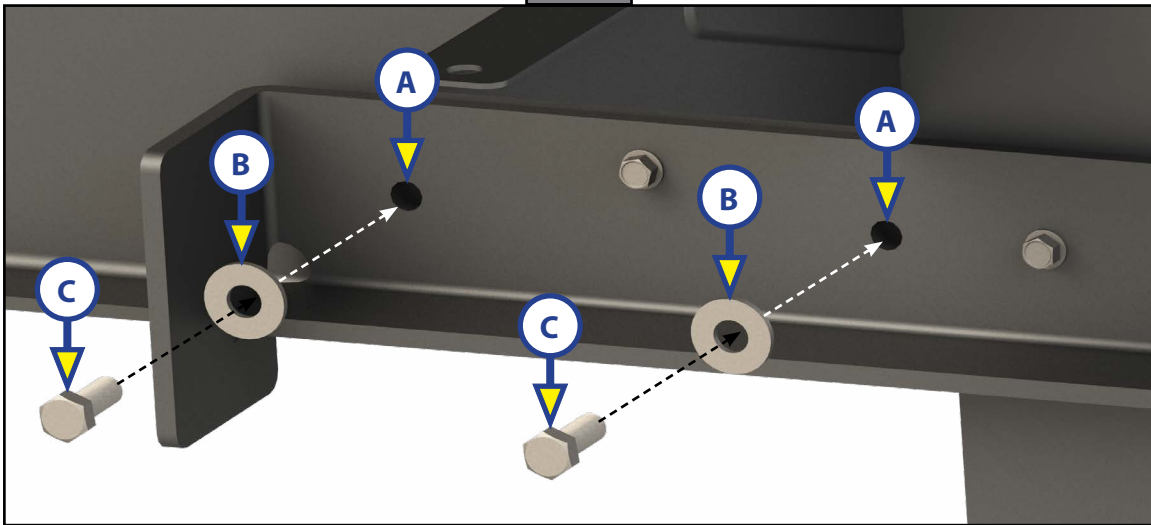
2. To hold the bracket in-place, install two 1/4"-14 x 1 1/4" self-tapping hex head screws (Fig. 3A) into pre-drilled holes on the storage rack bracket and into the web of the I-beam.

Fig. 3



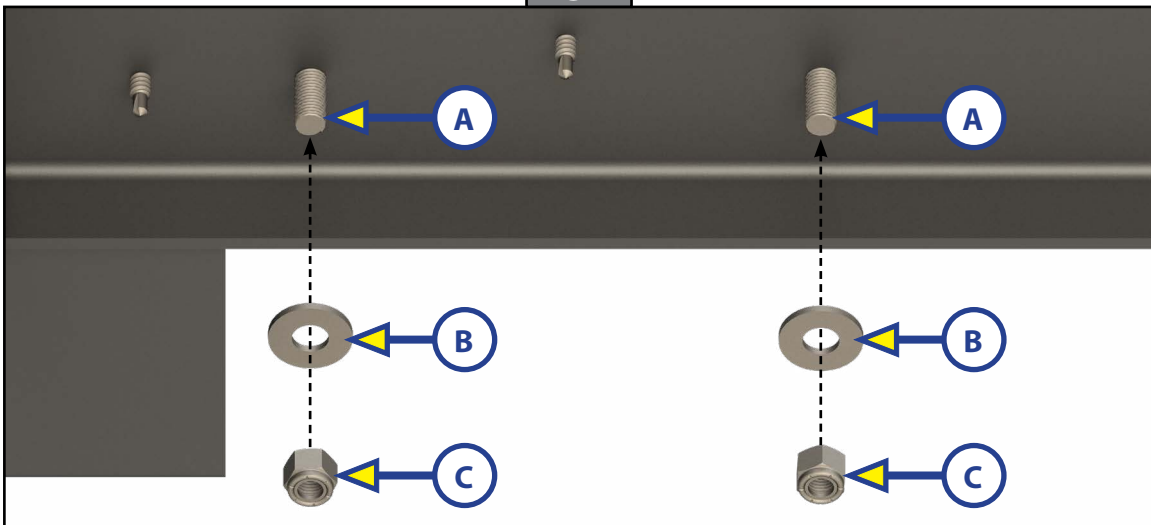
3. With a  $\frac{3}{8}$ " drill bit, drill through the storage rack bracket and the I-beam (Fig. 4A) at the two locations.
4. Install a  $\frac{3}{8}$ "-16 x 1" bolt (Fig. 4C) through a  $\frac{3}{8}$ " flat washer (Fig. 4B) through the storage rack bracket and web of the I-beam. Do this to both of the drilled holes.

Fig. 4



5. Install an additional  $\frac{3}{8}$ " flat washer (Fig. 5B) over the bolt (Fig. 5A) and secure with a  $\frac{3}{8}$ "-16 nylon locking nut (Fig. 5C) to both bolts.

Fig. 5

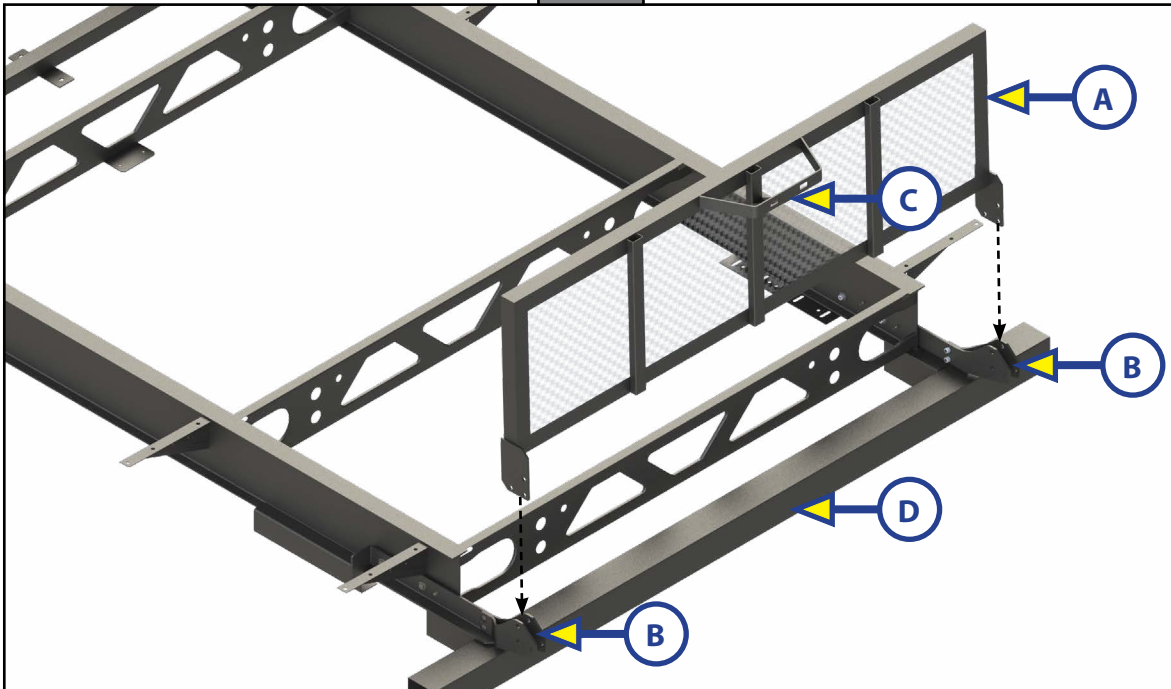


6. Repeat steps 1-5 with the remaining curbside storage rack bracket.

**NOTE:** Make sure the storage rack is in the correct position with the tire rack (Fig. 6C) facing towards the bumper (Fig. 6D).

7. Using one or two people, lift the storage rack (Fig. 6A) up so that it is perpendicular to the storage rack bracket assemblies (Fig. 6B).

Fig. 6



8. While supporting the storage rack, insert the  $\frac{1}{2}$ "-13 x 3  $\frac{1}{2}$ " bolt (Fig. 7E) through the  $\frac{1}{2}$ " washer (Fig. 7F).

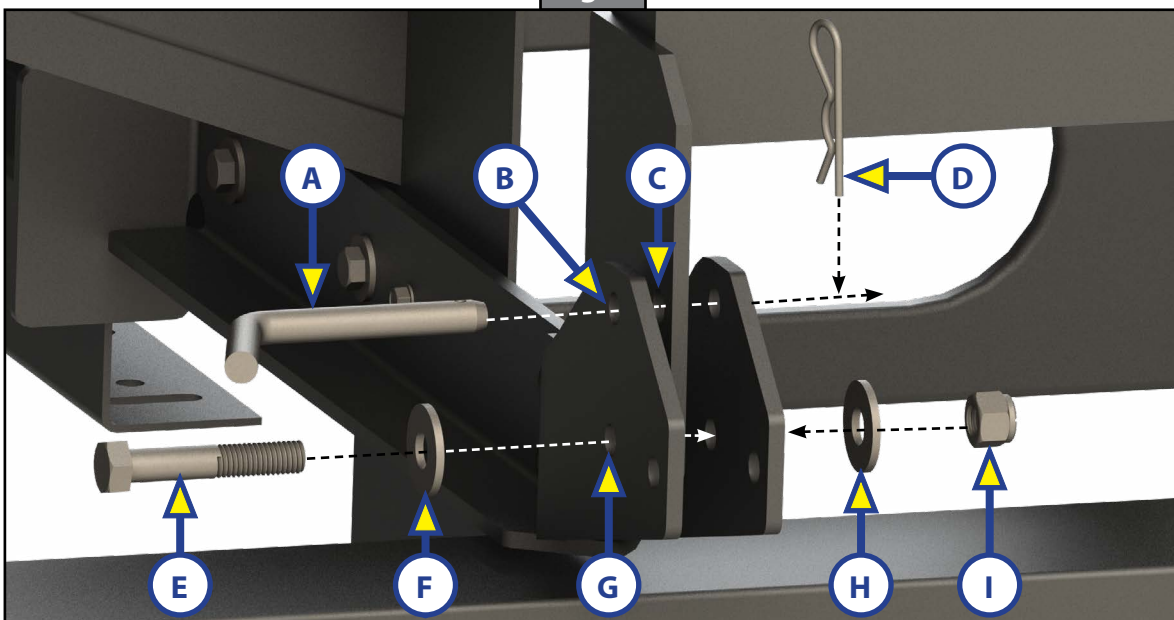
9. Insert the bolt and washer through the storage rack bracket (Fig. 7G), through the storage rack hole and out the opposite side of the storage rack bracket.

10. Secure the bolt with a  $\frac{1}{2}$ " washer (Fig. 7H) and  $\frac{1}{2}$ " - 13 nylon locking nut (Fig. 7I).

11. Install  $\frac{1}{2}$ " cane bolt (Fig. 7A) through the remaining vertical hole on both the storage rack bracket (Fig. 7B) and the storage rack (Fig. 7C).

12. Secure the cane bolt with a hairpin cotter pin (Fig. 7D).

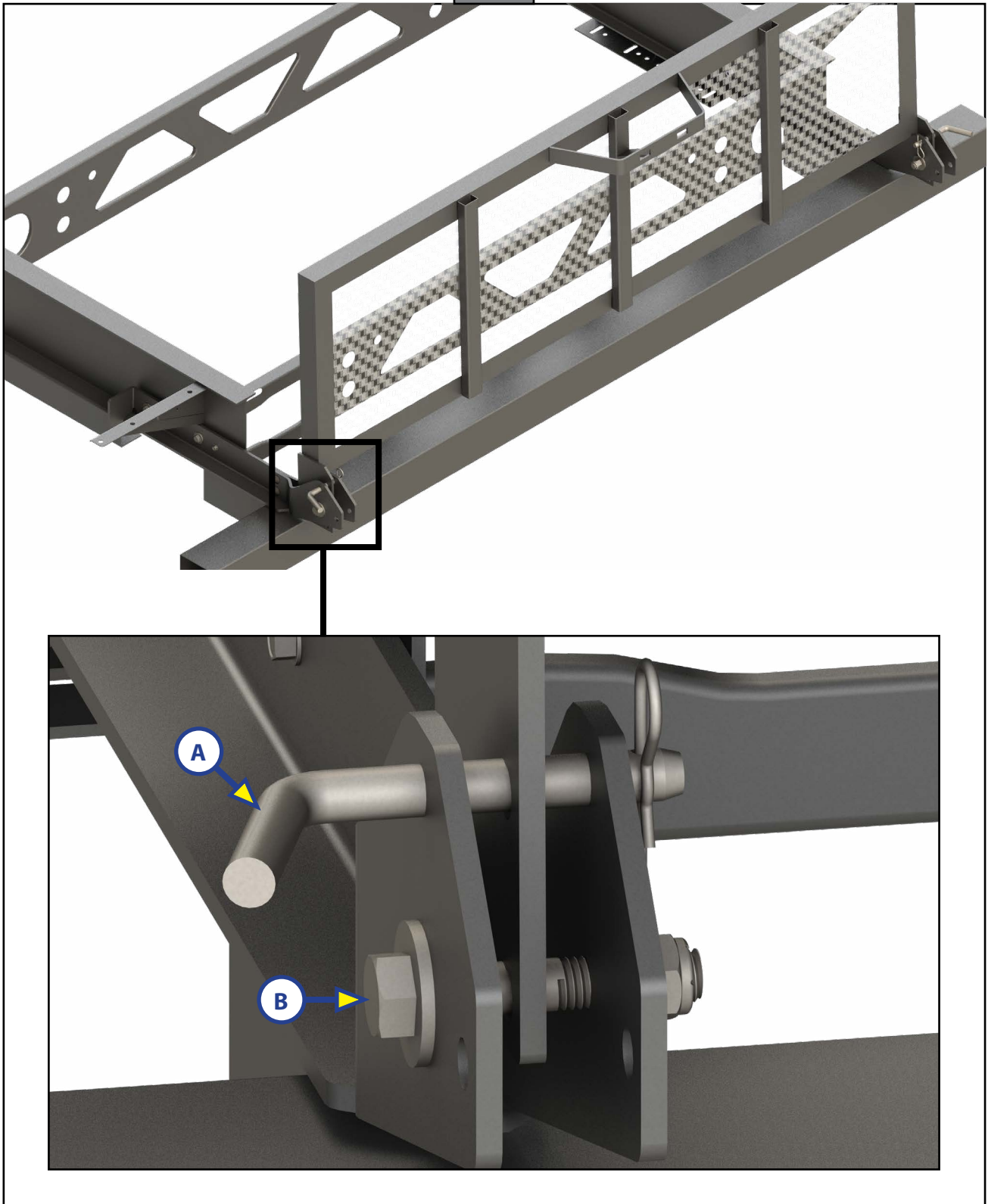
Fig. 7





13. Repeat steps 8 -12 for the opposite side of the storage rack.
14. Figure 8 shows the completed assembly for the under - mount storage rack.
15. Figure 8A shows the installed removable cane bolt and hairpin cotter pin and the stationary bracket bolt (Fig. 8B).

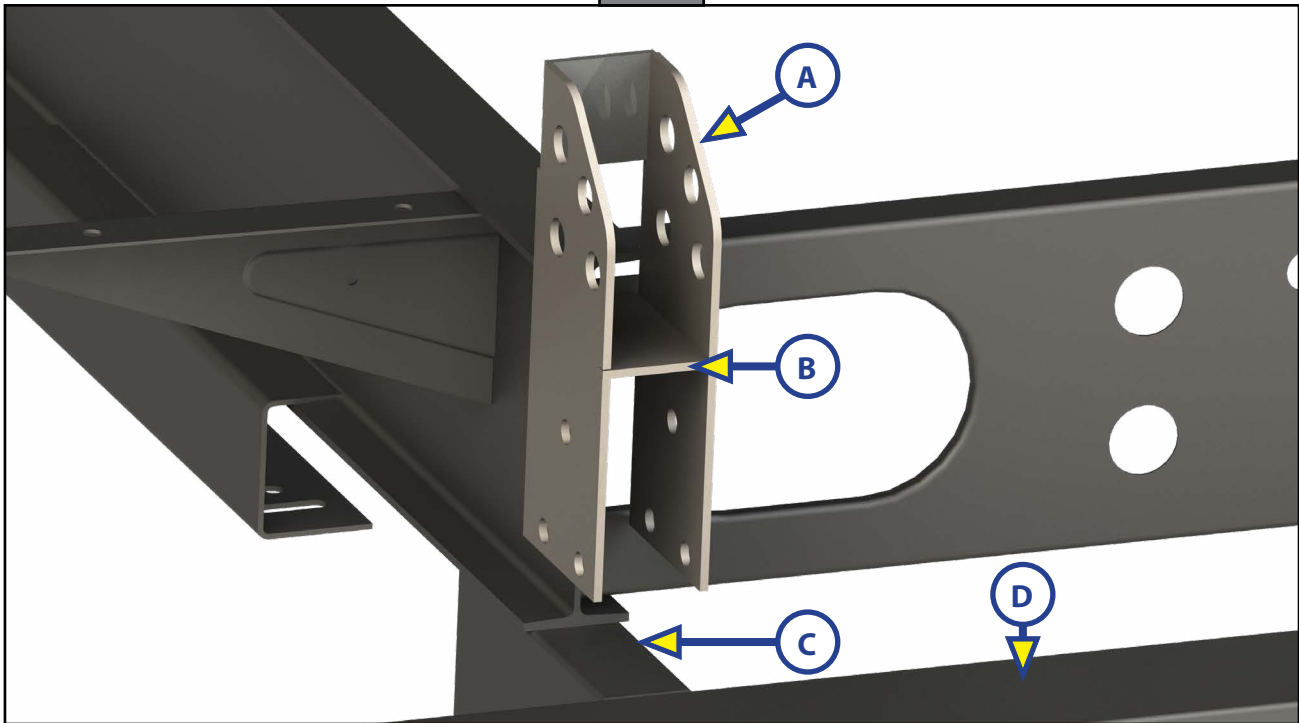
Fig. 8



## Over-Mount Storage Rack Bracket

1. Place one of the storage rack brackets (Fig. 9A) onto the bumper tube (Fig. 9C), behind the bumper (Fig. 9D). Make sure the top angle side of the bracket (Fig. 9A) is facing towards the bumper.
2. Slide the storage bracket down over the bumper tube (Fig. 9C) so that the horizontal plate support (Fig. 9B) of the storage bracket is resting on the bumper tube (Fig. 9C).

Fig. 9



3. Install two  $\frac{1}{2}$ "-13 x 3  $\frac{1}{2}$ " bolts (Fig. 10B) through the two bottom holes of the storage bracket (Fig. 10A).
4. Secure the two bolts with two  $\frac{1}{2}$ "-13 nylon locking nuts (Fig. 11A) to hold the storage bracket in place.
5. Repeat steps 1-4 for the opposite side. Figure 12 shows the underside of the completed bracket.

Fig. 10

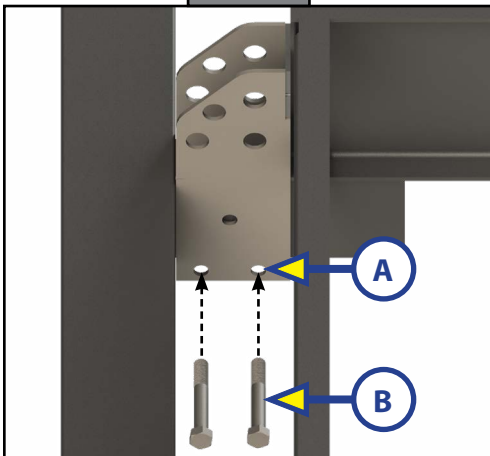


Fig. 11

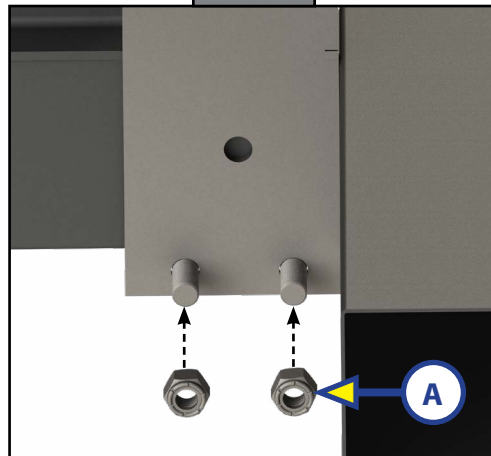
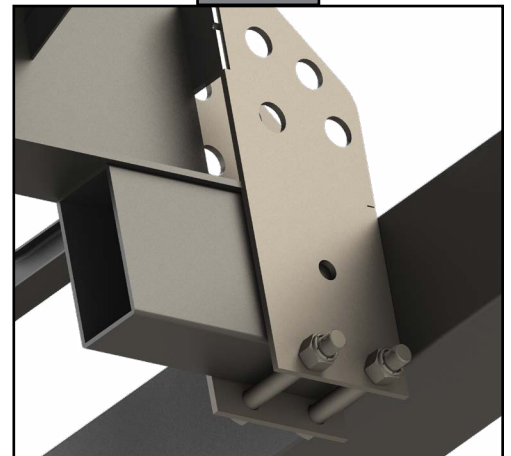


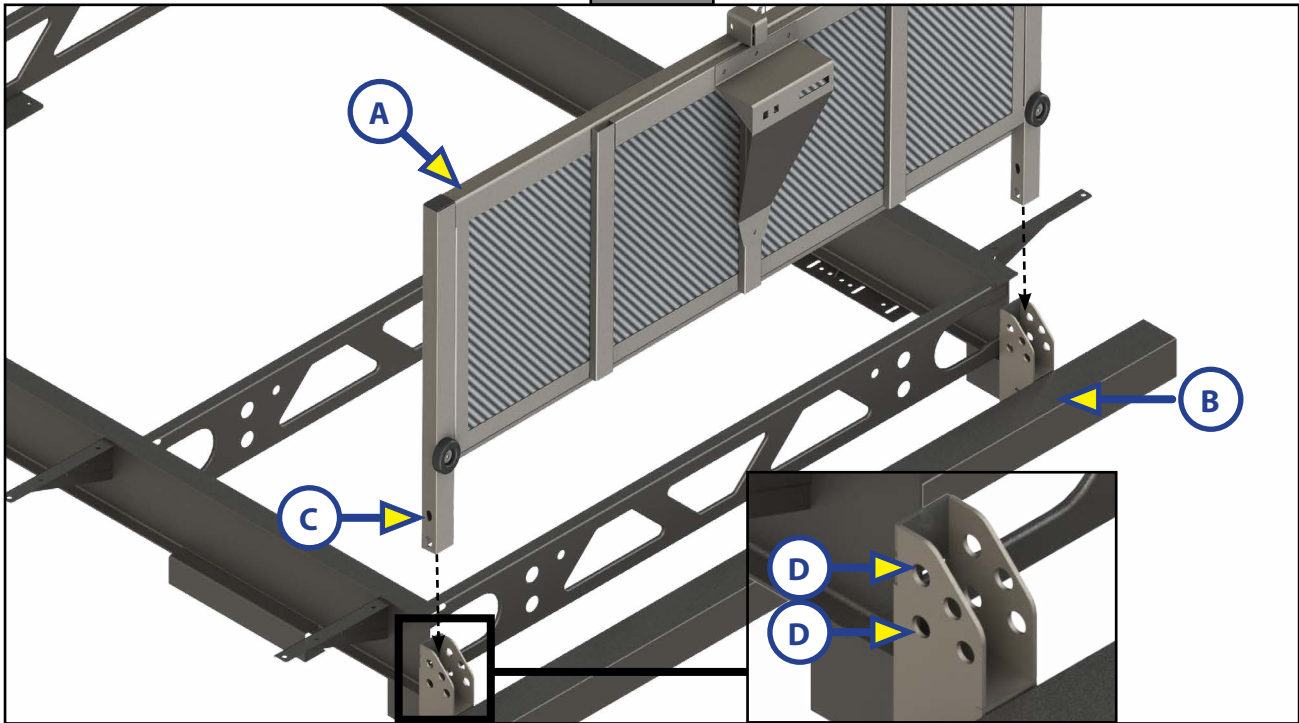
Fig. 12





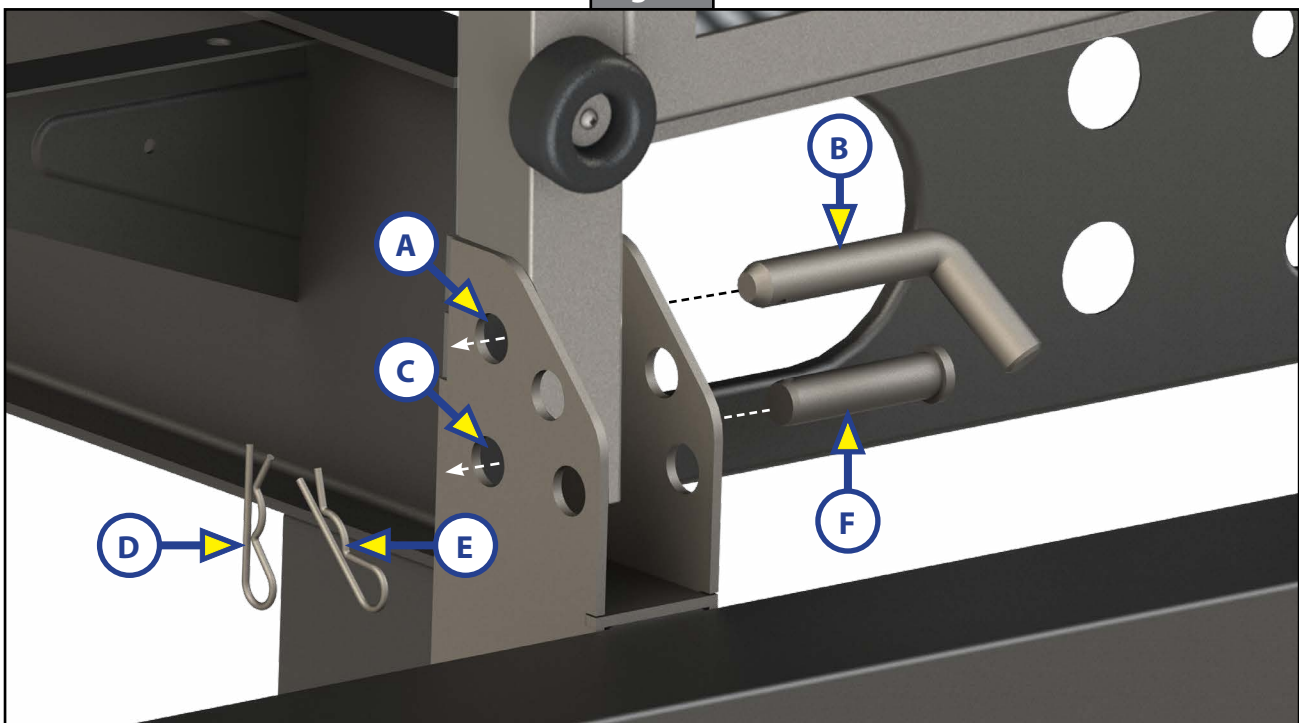
6. Using one or two people, lift the storage rack (Fig. 13A) up so that it is vertical with the ground or at 90 degrees to the bumper (Fig. 13B).
7. Align the holes in the storage rack (Fig. 13C) with the storage rack bracket holes farthest away from the bumper (Fig. 13D).

Fig. 13



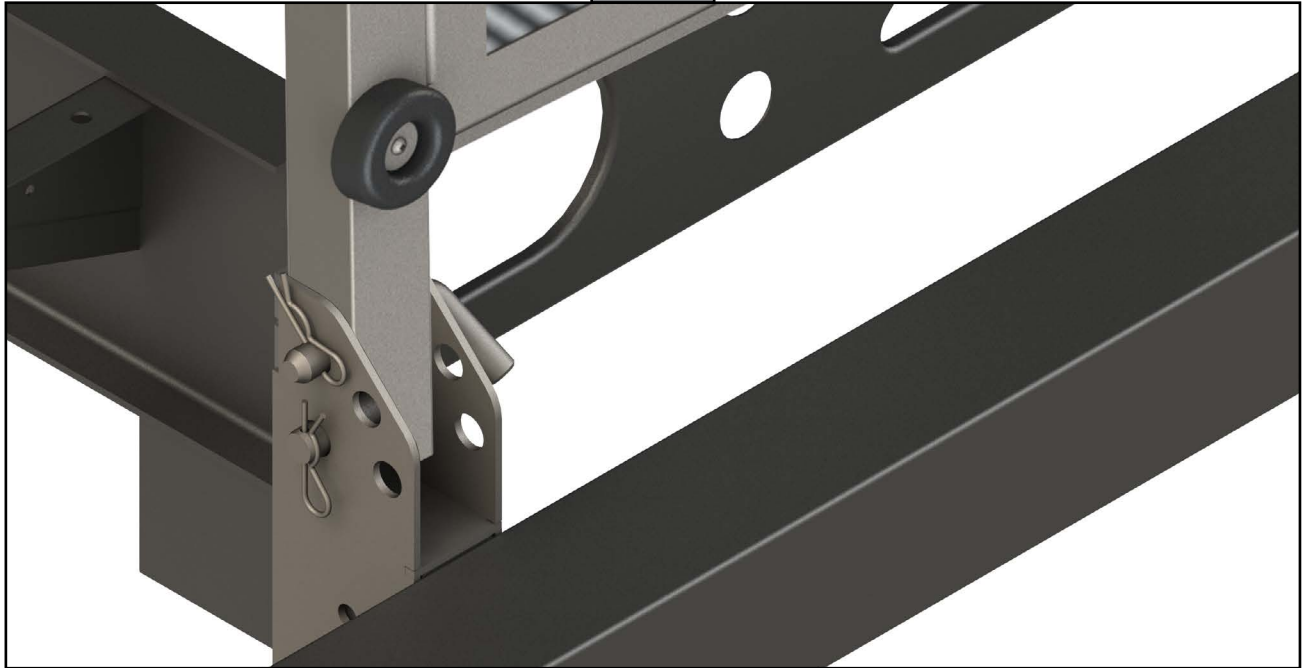
8. While supporting the storage rack in place, with the holes of the storage rack and storage rack bracket aligned, insert a clevis pin (Fig. 14F) into the bottom hole of the storage bracket (Fig. 14C) farthest from the bumper, through the storage rack holes and out the opposite side of the storage rack bracket. Secure the clevis pin with a hairpin cotter pin (Fig. 14D).
9. Insert the cane bolt (Fig. 14B) through the top hole in the storage bracket (Fig. 14A) farthest from the bumper, through the storage rack holes and out the opposite side of the storage rack bracket. Secure the cane bolt with a hairpin cotter pin (Fig. 14E).

Fig. 14



10. Repeat steps 8 - 9 for the opposite side of the storage rack.
11. Figure 15 shows the completed storage rack bracket assembly.

Fig. 15



## Operation

### Under-Mount Storage Rack

#### **Stowed to Extend Position**

Figure 16 shows the storage rack in the stowed position.

1. With one side of the storage rack, remove hairpin cotter pin (Fig. 17A) from the cane bolt (Fig. 17B).

Fig. 16

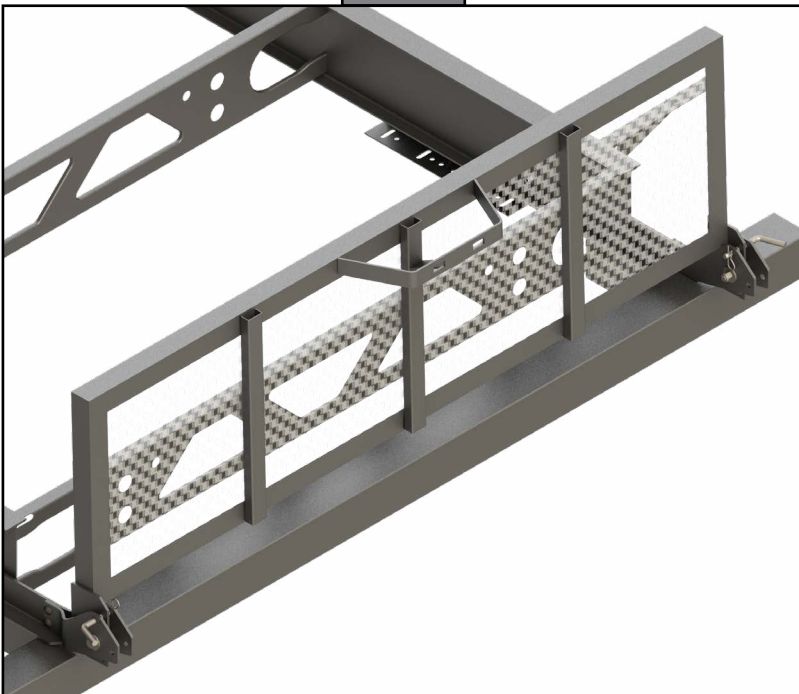
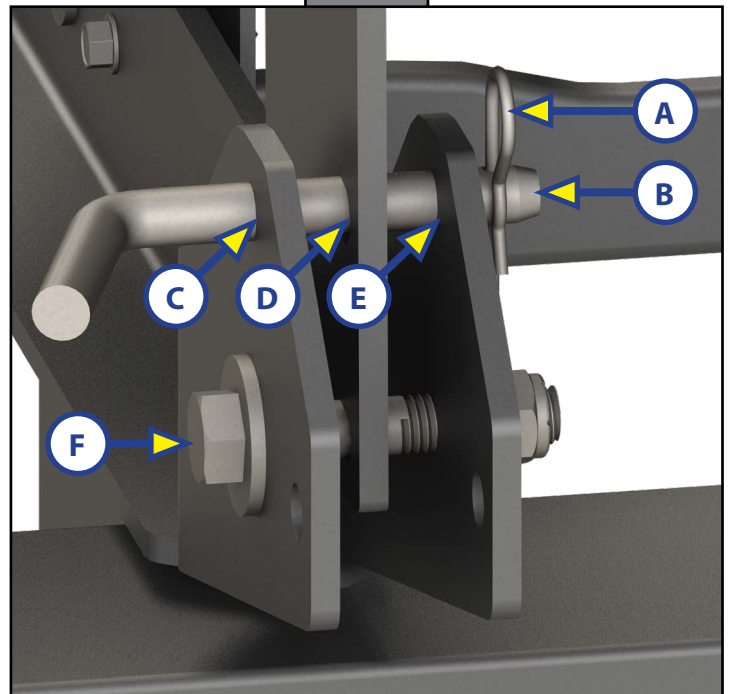
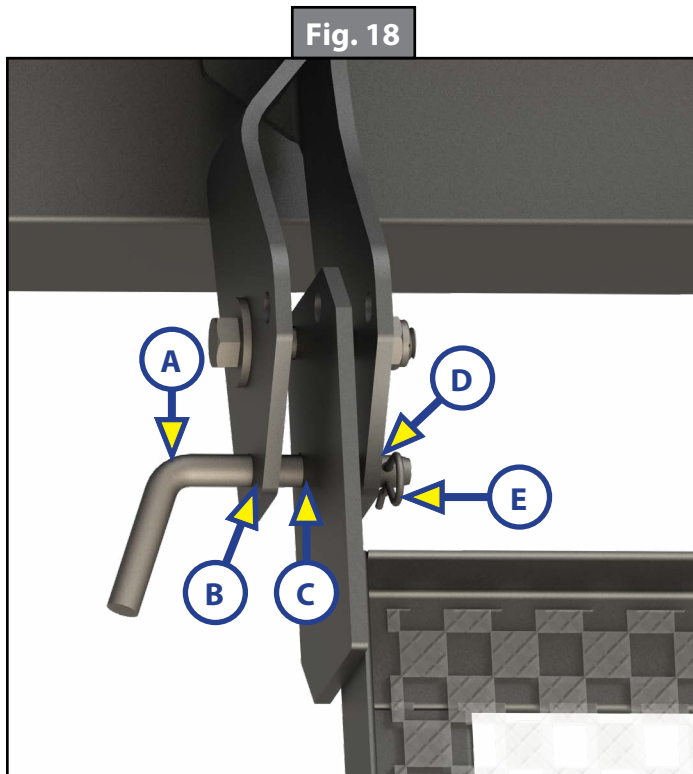


Fig. 17



2. Remove the cane bolt from the storage rack bracket.
3. Proceed to the opposite side of the storage rack. While supporting the storage rack, remove the hairpin cotter pin from the cane bolt, then remove the cane bolt from the storage rack bracket.
4. Lower the rack so that the storage rack is parallel to the bumper.
5. Reinsert the cane bolt (Fig. 18A) into the storage bracket hole closest to the bumper of the unit (Fig. 18B) through the storage rack hole (Fig. 18C) and out the opposite side of the storage rack bracket (Fig. 18D).
6. Secure the cane bolt with a hairpin cotter pin (Fig. 18E).
7. Repeat steps 5 and 6 for the opposite side of the storage rack.

Figure 19 shows the storage rack in the extended position.



### Extended to Stowed Position

Figure 19 shows the storage rack in the extended position.

1. With one side of the storage rack, remove the hairpin cotter pin (Fig. 18E) from the cane bolt (Fig. 18A).
2. Remove the cane bolt from the storage rack bracket.
3. Proceed to the opposite side of the storage rack. While supporting the storage rack, remove the hairpin cotter pin from the cane bolt, then remove the cane bolt from the storage rack bracket.
4. Raise the storage rack so that it is perpendicular to the bumper.
5. Reinsert cane bolt (Fig. 17B) into storage bracket hole (Fig. 17C) located above the stationary bolt (Fig. 17F), through the storage rack hole (Fig. 17D) and out the opposite side of the storage rack bracket (Fig. 17E).
6. Secure the cane bolt with a hairpin cotter pin (Fig. 17A).
7. Repeat steps 5 and 6 for the opposite side of the storage rack.

Figure 16 shows the storage rack in the stowed position.



## Over-Mount Storage Rack

### Stowed to Extend Position

Figure 20 shows the storage rack in the stowed position.

1. With one side of the storage rack, remove the hairpin cotter pin (Fig. 21A) from the cane bolt (Fig. 21B).

Fig. 20

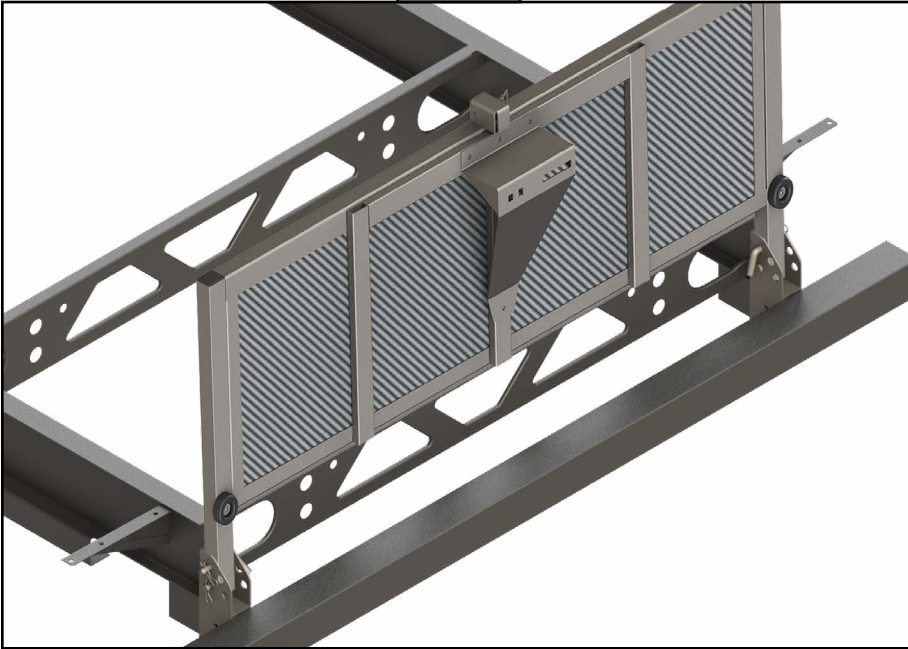
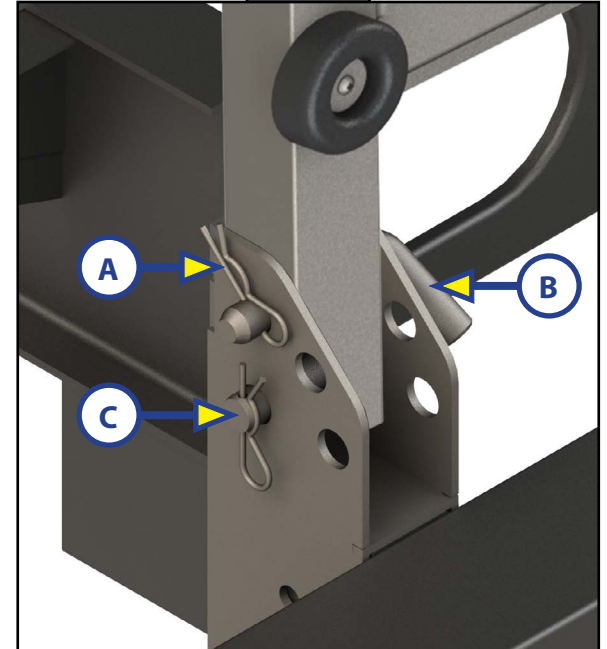
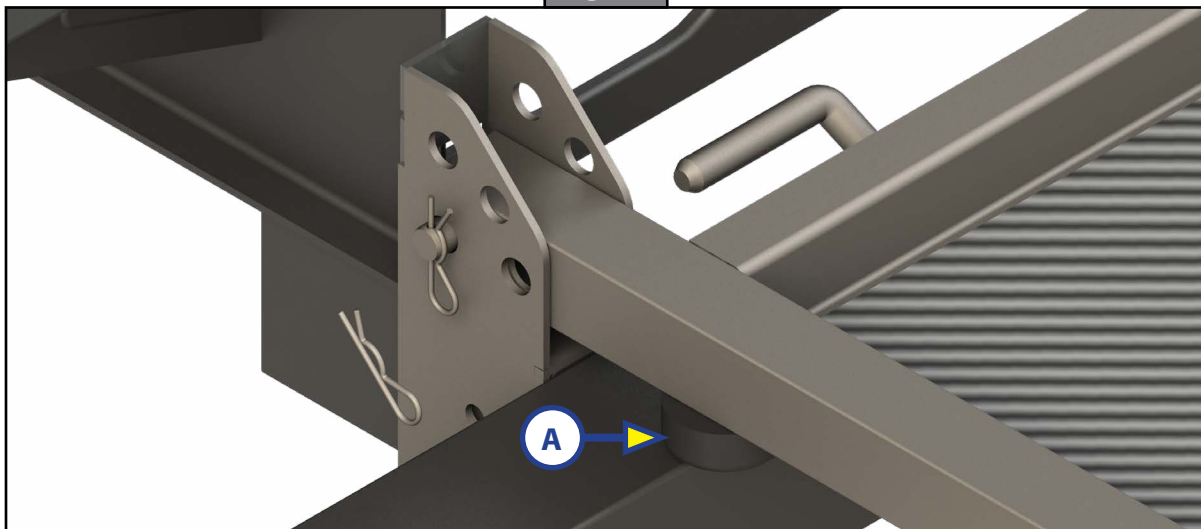


Fig. 21



2. Remove the cane bolt from the storage rack bracket.
3. Proceed to the opposite side of the storage rack. While supporting the storage rack, remove the hairpin cotter pin from the cane bolt, then remove the cane bolt from the storage rack bracket.
4. Lower the rack so that the storage rack is parallel to the bumper. The storage rack bumpers (Fig. 22A) should be resting on the bumper of the unit.

Fig. 22



5. Reinsert the cane bolt (Fig. 23A) into the storage bracket hole, closest to the bumper of the unit (Fig. 23C).
  6. Secure the cane bolt with a hairpin cotter pin (Fig. 23B).
  7. Repeat steps 5 and 6 for the opposite side of the storage rack.
- Figure 24 shows the storage rack in the extended position.

Fig. 23

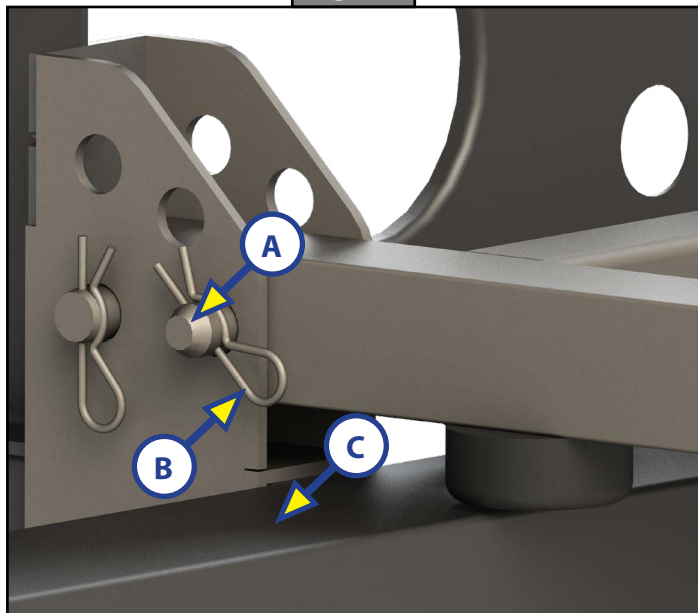


Fig. 24



### Extend to Stowed Position

Figure 24 shows the storage rack in the extended position.

1. With one side of the storage rack, remove the hairpin cotter pin (Fig. 23B) from the cane bolt (Fig. 23A).
2. Remove the cane bolt from the storage rack bracket.
3. Proceed to the opposite side of the storage rack. While supporting the storage rack, remove the hairpin cotter pin from the cane bolt, then remove the cane bolt from the storage rack bracket.
4. Raise the storage rack so that it is perpendicular to the bumper.
5. Reinsert the cane bolt (Fig. 21B) into the storage bracket hole, above the stationary clevis pin (Fig. 21C) through the storage rack hole and out the opposite side of the storage rack bracket.
6. Secure the cane bolt with a hairpin cotter pin (Fig. 21A).
7. Repeat steps 5 and 6 for the opposite side of the storage rack.

Figure 20 shows the storage rack in the stowed position.

## Optional Storage Rack Accessories

### ⚠ CAUTION

Failure to acknowledge tire carrier weight ratings may result in damage to the trailer. Lippert spare tire carriers are not intended to be used for more than one spare tire. The combined weight of the spare tire carrier tire must not exceed a total weight of 100 lbs.

### ⚠ CAUTION

Prior to transporting the trailer, note the new departure angle with the spare tire carrier and spare tire attached. The new angle will be less than the original departure angle.

### Spare Tire Carrier

1. Place the tire, hub side up, directly underneath the spare tire bracket (Fig. 25A) or (Fig. 26A).
2. Insert one bolt from inside of the spare tire carrier down through the tire carrier and exiting through one of the wheel stud holes.
3. Thread and secure a nylon locking nut onto the bolt.
4. Insert an additional bolt through the horizontal channeled slot in the spare tire carrier and through an additional opposing wheel stud hole from the first one.
5. Secure a nylon locking nut onto the additional bolt.

Fig. 25

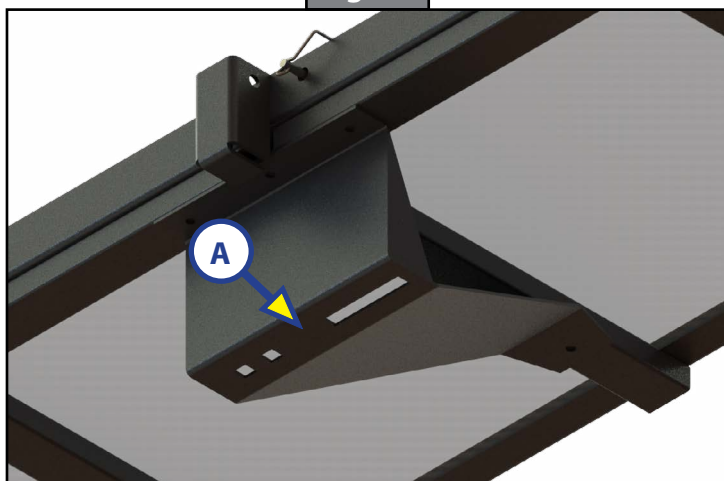
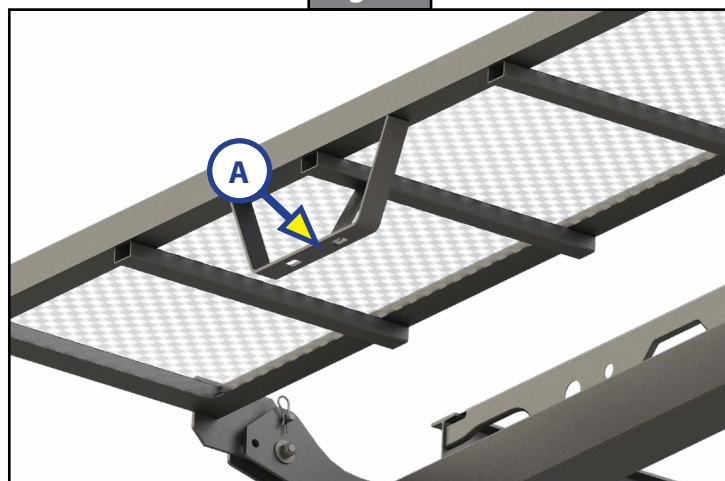


Fig. 26









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