



# MOUNTING BRACKET KIT INSTALLATION INSTRUCTIONS

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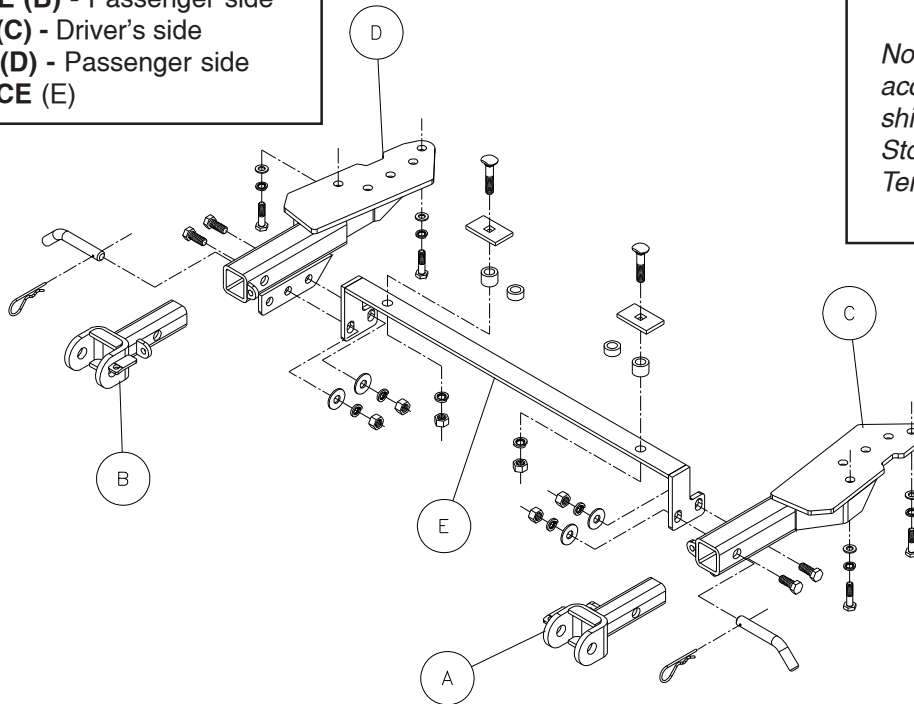
## PARTS LIST:

- 1- FRONT BRACE (A) - Driver's side
- 1- FRONT BRACE (B) - Passenger side
- 1- MAIN BRACE (C) - Driver's side
- 1- MAIN BRACE (D) - Passenger side
- 1- CENTER BRACE (E)

## KIT NO. 1419-8

### Important

Note: this bracket will not accommodate the Guardian rock shield, Stowaway or the StowMaster and StowMaster All Terrain tow bars.



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**IMPORTANT:** All brackets **must** be assembled with all the bolts left loose for final adjustment and positioning (before tightening) unless otherwise instructed. All bolts **must** be torqued for proper strength. If more than one bolt is used per fastening point, the diagram may only show one.

- Use flat washers over all slotted holes
- Use lock washers on all fasteners

ROADMASTER Limited Warranty, including One-Year Conditional Warranty Text and Product Registration Card, in Carton.



## WARNING

- Do not use this document for custom fabrication, as it may not show all parts or structural components. Custom fabrication or an attempt to copy this bracket design could result in loss of the towed vehicle.
- The owner must inspect all mounts and brackets before each use for cracks or other signs of fatigue. Also, inspect the fasteners for proper torque, according to the bolt torque requirements chart on the last page. Failure to do so could result in loss of the towed vehicle.
- The owner must check the manufacturer's instructions for the proper procedure(s) to prepare the vehicle for towing. Some vehicles must be equipped with a transmission lube pump, an axle disconnect, driveline disconnect or free-wheeling hubs before they can be towed. Failure to properly equip the vehicle will cause severe damage to the transmission.
- The installer must read the instructions and use all bolts and parts supplied. Failure to securely fasten the bracket could result in loss of the towed vehicle.
- If running changes were made by the vehicle manufacturer after this bracket was designed, some bolts or other fasteners in the included hardware pack may no longer be the correct size. It is the installer's responsibility to verify that the bracket is securely fastened to the vehicle, and fitted with the correct hardware, to account for these changes. Failure to securely fasten the bracket could result in loss of the towed vehicle.
- If the towed vehicle has been in an accident, it must be properly repaired before attaching the bracket. Do not install the bracket if any structural frame damage is found. Failure to repair the damage may result in the loss of the towed vehicle.
- Some motorhome chassis have such a tight turning radius that you can damage your motorhome, towed vehicle, tow bar or bracket while turning sharply. Before getting on the road, test your turning radius in an empty parking lot. Turning too sharply could result in non-warranty damage to towing system, motorhome and/or towed vehicle.
- Do not back up with the towed vehicle attached or non-warranty damage will occur to your towing system, motorhome and/or towed vehicle.
- The safety cables must connect the towing vehicle to the towed vehicle frame to frame, with the cables crossed, with enough slack for sharp turns. Refer to the cable instructions for proper routing. Failure to leave enough slack in the safety cables, or failure to connect the safety cables frame to frame, will result in the loss of the towed vehicle.
- This bracket is designed for use with ROADMASTER tow bars and ROADMASTER adaptors only. Using this bracket with other brands, without an approved ROADMASTER adaptor, may result in non-warranty damage or injury.
- Upon final installation, the installer must inspect the bracket to ensure adequate clearance, particularly around hoses, air conditioner lines, radiators, etc., or non-warranty damage to the towed vehicle will result.
- This bracket is only warranted for the original installation. Installing a used bracket on another vehicle is not recommended and will void the warranty.



## WARNING

Failure to follow these instructions can result in property damage, personal injury or even death.



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**KIT NO. 1419-8**

- This bracket kit is one of our XL series, which is designed to be partly removable. The kit consists of the two main receiver braces, two front braces, a center brace and a hardware pack. The main receiver brace mounts behind the front bumper fascia and through the lower grille. The center brace inserts between the lower bumper fascia and the radiator between the receiver braces. The front braces install in the receiver braces. Start by laying the kit out according to the illustration. This will give you a visual idea of how the kit installs and also confirm that the kit components are present and accounted for.
- Start by removing the lower plastic splash shield over the stabilizer bar behind the rear bumper (four plastic fasteners). Note: Some vehicles are equipped with a steel skid pan, if so remove four bolts holding the skid pan and set pan aside for reinstallation later. Now, remove three plastic fasteners under the bumper fascia in preparation for a later step.
- Remove four bolts holding the stabilizer bar to the bottom of the frame (two per side).
- Pull down the stabilizer bar and locate a threaded hole in the bottom of the frame just forward and to the outside of the front stabilizer bar bolt mounting hole.
- Hold the passenger side receiver brace to the bottom of the frame and bolt through into this hole using a supplied 10mm x 1.5 x 45mm bolt, lock washer and fender washer. Align the remaining two holes in the receiver plate to the stabilizer mounting holes and tighten bolt.
- Repeat step 5 for the driver's side.
- Bolt the stabilizer bar in place over the receiver braces and leave loose for now.
- Pull the bottom of the front bumper fascia down and insert the center brace behind the bumper fascia between the receiver braces. Bolt to the receiver braces with four 1/2" x 1 1/4" bolts, flat washers, lock washers and nuts.
- Check the existing holes in the bottom of the cross member, if they line up with the mounting holes in the center brace, proceed, if not, drill through the cross member using the center brace as a guide. Now fish wire two 1/2" x 2" carriage bolts with narrowed heads and 1/4" x 1 1/2" x 2 1/2" backing plates through the large access holes in back of the cross member into the bottom frame holes. Finish bolting through the center brace with pipe spacers, lock washers and nuts. Note: early models will require the use of the 1/2" spacers, while later models will require the 3/4" spacers.
- Insert the front braces in the receiver braces and pin using 5/8" draw pins and 1/8" spring pins.
- Tighten all bolts to the torque specifications below.
- Replace all plastic keepers in the bumper fascia then replace the center splash shield and skid pan reversing step 2 with the exception of inserting the front plastic keepers into the frame on each side and trimming the skid pan mounting tabs to fit inside the receiver braces. Two 10mm x 1.5 x 45mm bolts have been provided for rear most skid pan mounting holes if a pan is not present.
- Install the tow bar according to the manufacturer's instructions.
- Attach the safety cables to the main receiver brace.

**Hardware**

- |                            |                        |   |                      |
|----------------------------|------------------------|---|----------------------|
| 4- 10mm x 1.5 x 45mm bolts | 2- 1/8" spring pins    | 2- 1/2" x 2" carriage bolts with 3/4" heads       | 2- 1" x 3/4" spacers |
| 4- 10mm lock washers       | 4- 10mm fender washers | 6- 1/2" lock washers                              | 4- 1/2" flat washers |
| 2- 5/8" draw pins          | 6- 1/2" nuts           | 2- 1/4" x 1-1/2" x 2-1/2" sq. hole backing plates |                      |
| 4- 1/2" x 1-1/4" bolts     | 2- 1" x 1/2" spacers   |   |                      |

2/20/04

**CAUTION:** Installer must read instructions and use all bolts and parts supplied.

FAILURE TO FOLLOW THESE INSTRUCTIONS CAN RESULT IN DEATH, PERSONAL INJURY OR PROPERTY DAMAGE

### BOLT TORQUE REQUIREMENTS

Note: The torque values represented below are intended as general guidelines. Torque requirements for specific applications may vary. Roadmaster does not warrant this information to be accurate for all applications and disclaims all liability for any claims or damages which may result from its use.

| STANDARD BOLTS |       |             | METRIC BOLTS |       |                       | METRIC BOLTS |       |                        |
|----------------|-------|-------------|--------------|-------|-----------------------|--------------|-------|------------------------|
| Thread Size    | Grade | Torque      | Thread Size  | Grade | Plated/Unplated       | Thread Size  | Grade | Plated/Unplated        |
| 5/16           | 5     | 13 ft./lb.  | 8mm-1.0      | 8.8   | 20 ft./lb. 18 ft./lb. | 12mm-1.25    | 8.8   | 70 ft./lb. 65 ft./lb.  |
| 3/8            | 5     | 23 ft./lb.  | 8mm-1.25     | 8.8   | 19 ft./lb. 18 ft./lb. | 12mm-1.5     | 8.8   | 66 ft./lb. 61 ft./lb.  |
| 7/16           | 5     | 37 ft./lb.  | 10mm-1.25    | 8.8   | 38 ft./lb. 36 ft./lb. | 12mm-1.75    | 8.8   | 65 ft./lb. 60 ft./lb.  |
| 1/2            | 5     | 56 ft./lb.  | 10mm-1.5     | 8.8   | 37 ft./lb. 35 ft./lb. | 14mm-2.0     | 8.8   | 104 ft./lb. 97 ft./lb. |
| 5/8            | 5     | 150 ft./lb. |              |       |                       |              |       |                        |

All illustrations and specifications contained herein are based on the latest information available at the time of publication approval. ROADMASTER, INC. reserves the right to make changes at any time without notice in material, specification and models or to discontinue models.