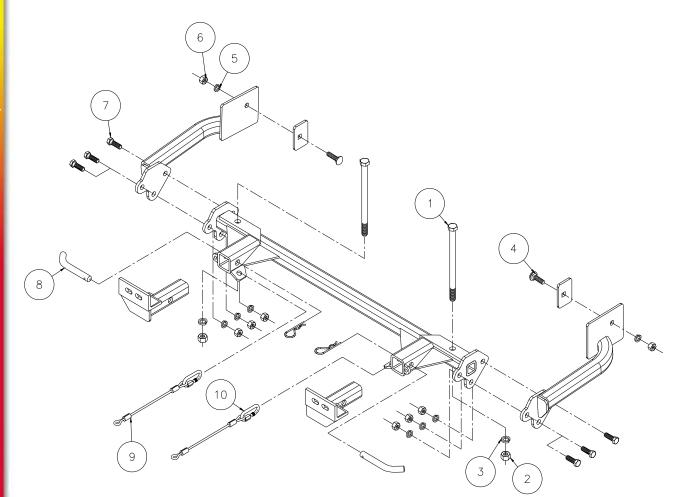


**MOUNTING BRACKET KIT** INSTALLATION INSTRUCTIONS





| Item | Qty | Length | Width  | Hardware                           | Part No.  |
|------|-----|--------|--------|------------------------------------|-----------|
| 1    | 2   | 9"     | . 5/8" | 5/8" x 9" BOLT                     | 350379-00 |
| 2    | 2   |        | . 5/8" | 5/8" NUT                           | 350262-00 |
| 3    | 2   |        | . 5/8" | 5/8" LOCK WASHER                   | 350313-00 |
| 4    | 2   | 1 1/2" | . 1/2" | 1/2" x 1 1/2" CARRIAGE BOLT        | 350362-00 |
| 5    | 8   |        | . 1/2" | 1/2" LOCK WASHER                   | 350309-00 |
| 6    | 8   |        | . 1/2" | 1/2" NUT                           | 350258-00 |
| 7    | 6   | 1 1/2" | . 1/2" | 1/2" x 1 1/2" BOLT                 | 350095-00 |
| 8    | 2   |        |        | DRAW PIN/SPRING PIN                | 357035-00 |
| 9    | 2   | 10"    |        | 10" SAFETY CABLES, 8,000 lb. rated | 650648-10 |
| 10   | 2   |        |        | CABLE CONNECTORS                   | 200008-00 |



## MOUNTING BRACKET KIT INSTALLATION INSTRUCTIONS

#### IMPORTANT: All brackets must be assembled with all the bolts left loose for final adjustment & positioning (before tightening) unless otherwise instructed. All bolts *must* be torqued for proper strength. If more than one bolt is used per fastening B point, the diagram may only show one. 8 Qty Item Name Assembly 2 ...... 1 ...... C-000146 ..... DRIVER SIDE ARM WELDMENT 3 ..... 1 ..... C-000147 ..... PASSENGER SIDE ARM WELDMENT 5 ..... 1 ...... C-000148 ..... DRIVER SIDE REAR BRACE WELDMENT

**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.



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

- Installation of most mounting brackets requires moderate mechanical aptitude and skills. We strongly recommend professional installation by an experienced installer.
- The installer must read the instructions and use all bolts and parts supplied. Failure to do so could result in loss of the towed vehicle.
- Use Loctite® Red on all bolts used for mounting this bracket.
- 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.
- Every 3,000 miles, the owner must inspect the fasteners for proper torque, according to the bolt torque requirements chart on the last page of these instructions. The owner must also inspect all mounts and brackets for cracks or other signs of fatigue every 3,000 miles. Failure to do so could result in loss of the towed vehicle.
- The owner must check the vehicle 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.
- If running changes were made by the vehicle manufacturer after this bracket was designed, some bolts or other fasteners in the 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 could result in the loss of the towed vehicle.

**KIT# 3108-1** 

- 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 nonwarranty 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 warranteed for the original installation. Installing a used bracket on another vehicle is not recommended and will void the warranty.



## MOUNTING BRACKET KIT INSTALLATION INSTRUCTIONS

# KIT# 3108-1

1. *Important:* please use all supplied bolts and parts and read all instructions carefully before beginning this installation. The majority of questions you may have can be answered within the text, and proper installation will ensure safe and secure travel. Now, begin the installation. This bracket kit is one of our XL series, which is designed to be partly removable. The kit consists of the main receiver brace, two front braces, two rear braces and a hardware pack. The main receiver brace mounts below the front bumper core and utilizes the stock bumper core mounts for the front mounts and the side of the frame rails for the back mounting points. The rear braces bolt to the sides of the main receiver brace and then to the frame. The front braces then insert into the receiver brace under the front bumper. The front grille and bumper will have to be removed to access the mounting area. 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.

2. The next step is to remove the grill, this will provide access to the main bumper mounting bolts. Pull forward on the top of the grill, this should pop the top retainer clips loose so that you can pull up and release the bottom plastic retainer clips. Once the grille is free, just lay it on top of the engine compartment, leaving the headlight washer lines attached.

3. To remove the bumper fascia and bumper core, remove two plastic fasteners per side in the bottom of the fascia, two 10mm (head) screws and one plastic fastener in the top of the fascia then one large bumper bolt per side. Pull forward and lift the entire fascia and bumper core off.

4. Remove the lower black plastic shroud located between the bumper core and the radiator. This will be left off to make room for the receiver braces. *Note*: retain the shroud and attachment hardware for replacement in case the bracket is ever removed.

5. Prepare the bumper core for remounting by separating the bumper fascia from the bumper core (four plastic fasteners in the bottom of the bumper core). Now remove the large spring retainer nuts located on the bottom on each side.

6. Install the bare bumper core back on the vehicle with the 5/8" x 9" bolts in the hardware pack. These bolts will replace the factory bolts. Wait until the next step to put on nuts and lock washers.

7. Hold the main receiver brace to the bottom of the bumper core and bolt in place with 5/8" nuts and lock washers.

8. Working on one side at a time, hold a side brace into position on the side of the frame and the main receiver brace and bolt to the receiver brace with three  $\frac{1}{2}$ " x 1<sup>1</sup>/<sub>2</sub>" bolts, lock washers and nuts.

9. Now, fishwire a ½" x 1½" carriage bolt and ¼" x 2" x 3" backing plate through the back of the frame into the remaining mounting hole in the side plate. Bolt in plate with a ½" lock washer and nut.

10. Repeat steps 8 through 9 for the remaining side.

- 11. Torque the 5/8" bolts to 150-ft./lb. and the rest of the bolts to the specifications below.
- 12. Reinstall the front fascia and grill reversing steps 2 and 3 then replace the plastic pins removed in step 4.
- 13. Insert the front braces into the receiver brace and secure with 5/8" draw pins and 1/8" spring pins.
- 14. Install the tow bar according to the manufacturer's instructions.

15. Attach 10" safety cables to the holes provided in the receiver brace with the included cable links. Connect the other end to the tow vehicle's safety cables and tow bar.

#### 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 Thread Size Grade Plated/Unplated Thread Size Grade Plated/Unplated Toraue 8mm-1.0...... 8.8 ..... 20 ft./lb. 18 ft./lb. 5/16 ...... 5 ...... 13 ft./lb. 12mm-1.25..... 8.8 ..... 70 ft./lb. 65 ft./lb. 8mm-1.25...... 8.8 ..... 19 ft./lb. 18 ft./lb. 12mm-1.5 ...... 8.8 ..... 66 ft./lb. 61 ft./lb. 10mm-1.25..... 8.8 ..... 38 ft./lb. 36 ft./lb. 12mm-1.75..... 8.8 ..... 65 ft./lb. 60 ft./lb. 14mm-2.0 ...... 8.8 ... 104 ft./lb. 97 ft./lb. 10mm-1.5 ...... 8.8 ..... 37 ft./lb. 35 ft./lb. 1/2......56 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.