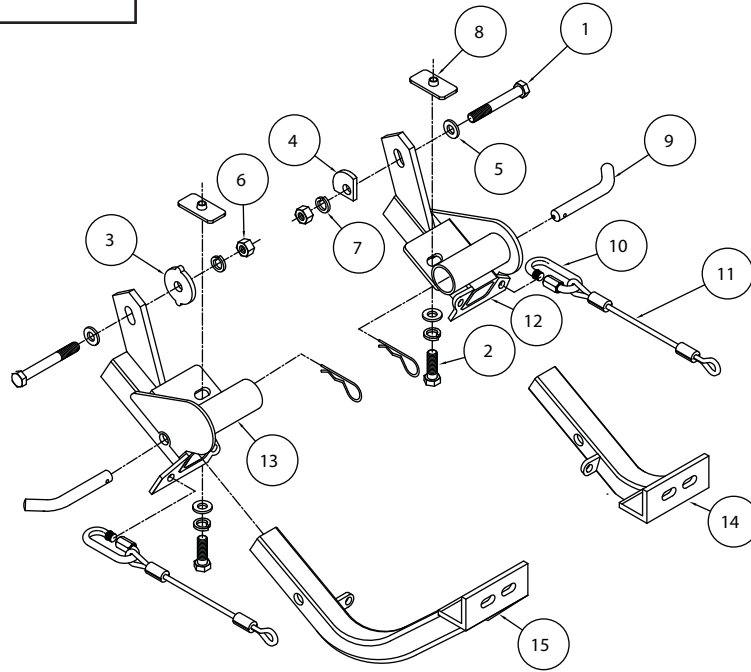


# MOUNTING BRACKET KIT INSTALLATION INSTRUCTIONS

KIT NO. 118-3

PARTS LIST ON OPPOSITE PAGE



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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 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.
- 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.

# MOUNTING BRACKET KIT INSTALLATION INSTRUCTIONS

**KIT NO. 118-3**

- 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 XL Series bracket kit utilizes the front frame crossover tube, the front tow loop and both side frame tubes as main mounting points. Remove the splash guard on the passenger side.
- Now, insert the two main receiver braces into the front frame crossover tube and position with the rear of the braces against the sides of the frame tubes and the bottom mounting plates tight against the bottom of the frame.
- The braces should be positioned so that the flat mounting tab is tight against the bottom of the frame and the hole is centered in the bottom of the frame rail. A 1/2" hole should be drilled in the center of the frame rail at this time. *Note:* be sure to drill the hole in the center of the frame rail otherwise you wont be able to line up the threaded backup plates which must be inserted through the front of the frame rail. Once the hole is drilled, locate the threaded 3/8" x 1 1/2" x 4" backing plate, a 1/2" x 1 1/2" bolt, flat washer and lock washer. Insert the backing plate in the front of the frame and bolt through the brace, and frame into the backing plate.
- Insert the front tube braces into the receiver braces and secure in place using the supplied 5/8" draw pins and 1/8" spring pins. Check the distance between the front bar mounting holes. It should be 30" center to center between the outer holes and 27" between the inner holes. If it is too wide, then the braces will have to be pushed farther into the frame tube until the correct distance is achieved. When it is correct, tighten the installed bolts.
- Mount your tow bar according to the manufacturer's instructions and finish aligning the braces.
- Once the braces are aligned, drill a 1/2" hole through the frame rail on each side using the rear most hole in each brace as a guide. Using a 1/2" x 3 1/2" bolt and flat washer, bolt through the brace and frame finishing with a plate washer, lock washer and nut. The driver's side takes the clipped plate washer. *Note:* do not over tighten these bolts. When applying torque to any bolt, care must be taken not to crush or deform frame or body parts. If crushing or deformation of the frame or body parts begins to occur, proper torque may be determined by the flattening of the lock washers and initial flexing of the frame.
- Attach the included safety cables to the receiver braces with the provided cable connectors, then attach to the tow vehicle's safety cables.

| ITEM    | QTY | NAME  | PART #    |
|---------|-----|---|-----------|
| 1.....  | 2   | 1/2" x 3 1/2" BOLTS.....                        | 350103-00 |
| 2.....  | 2   | 1/2" x 1 1/2" BOLT.....                         | 350095-00 |
| 3.....  | 1   | 1/2" PLATE WASHER.....                          | A-003086  |
| 4.....  | 1   | 1/2" CLIPPED PLATE WASHER.....                  | A-001850  |
| 5.....  | 4   | 1/2" FLAT WASHER.....                           | 350308-00 |
| 6.....  | 2   | 1/2" HEX NUT.....                               | 350258-00 |
| 7.....  | 4   | 1/2" LOCK WASHER.....                           | 350309-00 |
| 8.....  | 2   | 3/16" x 1 1/2" x 3" THREADED BACKING PLATE..... | A-003079  |
| 9.....  | 2   | 5/8" DRAW PINS W/ CLIP.....                     | 357035-00 |
| 10..... | 2   | QUICK LINK.....                                 | 200008-00 |
| 11..... | 2   | 15" SAFETY CABLES.....                          | 650646-15 |
| 12..... | 1   | DRIVER SIDE RECEIVER.....                       |           |
| 13..... | 1   | PASSENGER SIDE RECEIVER.....                    |           |
| 14..... | 1   | DRIVER SIDE ARM.....                            |           |
| 15..... | 1   | PASSENGER SIDE ARM.....                         |           |

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## 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. |                |          |                       |                |          |                        |