

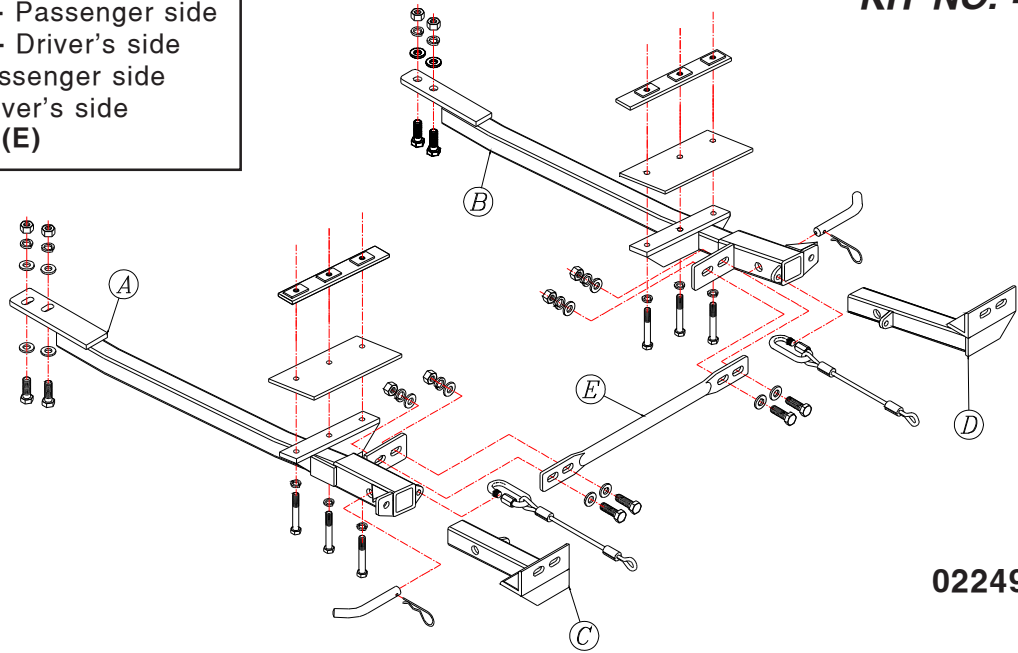
# MOUNTING BRACKET KIT

## INSTALLATION INSTRUCTIONS

**PARTS LIST:**

- 1- LOWER RECEIVER (A) - Passenger side
- 1- LOWER RECEIVER (B) - Driver's side
- 1- FRONT BRACE (C) - Passenger side
- 1- FRONT BRACE (D) - Driver's side
- 1- FRONT CROSS BRACE (E)

KIT NO. 443-3



022498

**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. 443-3**

- 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 bracket kit is one of our XL Bracket Series which is partly removable. It utilizes the front suspension subframe and front radiator cross member for mounting points. The kit consists of two main receiver braces, a cross brace, two front braces and a hardware pack. Included in the hardware pack are two large mounting plates and two threaded backing plates. The threaded backing plates must be installed between the bottom of the radiator and the top of the radiator cross member. To achieve this on most of the vehicles, the top plastic fairing and radiator supports will have to be removed and the radiator raised enough to provide working room between the radiator and the cross member. Remove the fastener screws, fairing and brackets then raise the radiator in preparation for the next steps.
- The rear of the receiver braces bolt through two existing holes per side in the suspension subframe. Find these holes and bolt the braces to the sub frame using the supplied 1/2" x 1 1/2" bolts, flat washers and lock washers. These holes may vary slightly between vehicles. On some vehicles, a hole may be missing or one hole may be slightly off from the hole pattern in the rear braces. In these cases, pick the holes which will align the braces evenly in the front of the car and under the radiator cross member. You will always have at least three holes available. Be sure the braces are mounted as illustrated with the center tube mounting clips pointing to each other. *Note:* a stiffener strut assembly is bolted to the bottom of the frame on GT convertibles with bolts and clips. Remove these bolts and sandwich the rear of the braces between the frame and stiffener plate. Bolt using the provided bolts. Support the front of the braces in preparation for the next steps.
- Assemble the front braces into the receiver braces and pin with 5/8" draw pins and 1/8" spring pins, then bolt the center tube brace between the receiver braces with four 1/2" x 1 1/2" bolts, flat washers, lock washers and nuts. Don't tighten yet – we will use this center brace to help align the braces to each other and the vehicle. Move the center braces in or out until the front mounting holes measure 30" and 27" between centers. Now tighten the center brace bolts to hold the setting.
- Find the center of the vehicle and align the braces to the center of the vehicle by measuring from the front of the braces to vehicle center. Adjust as necessary then tighten the rear bolts. Double check the alignment across the front and to the center of the vehicle.
- Make sure the receiver braces are against the radiator cross member, then drill six 3/8" holes through the radiator cross member using the braces as a template. *Note:* make certain all engine components are protected before doing so. You will notice that as you pushed the braces to the bottom of the cross member, that you also raised the plastic under the nose about an inch. This necessary to maintain the ground clearance on this vehicle.
- Bolt through the front cross member using the provided 3/8" x 3" bolts, lock washers and 1/4" x 1 1/2" x 10" threaded backing plates. Don't forget the 1/4" x 4" x 8" backer plates between the braces and the cross members. *Note:* do not over-tighten these bolts. Hand tighten to the torque specifications below.
- Mount the tow bar according to the manufacturer's instructions, align and torque all bolts to the specifications below. Connect the 12" safety cables to the main receiver braces with the provided cable connectors. Connect the other end to the tow vehicle's safety cables and the 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	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.						

# MOUNTING BRACKET KIT INSTALLATION INSTRUCTIONS

**KIT NO. 443-3**

**Hardware List**

- 8- 1/2" X 1-1/2" BOLTS
- 8- 1/2" LOCK WASHERS
- 14- 1/2" FLAT WASHERS
- 8- 1/2" NUTS
- 2- 1/4" X 1-1/2" X 9 1/4" THREADED BACKING PLATES
- 2- 1/4" X 4" X 8" BACKER PLATES
- 6- 3/8" X 3" BOLTS
- 6- 3/8" LOCK WASHERS
- 2- 12" SAFETY CABLES
- 2- CABLE CONNECTORS
- 2- 5/8" DRAW PINS
- 2- 1/8" SPRING PINS

**022498**

**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.