

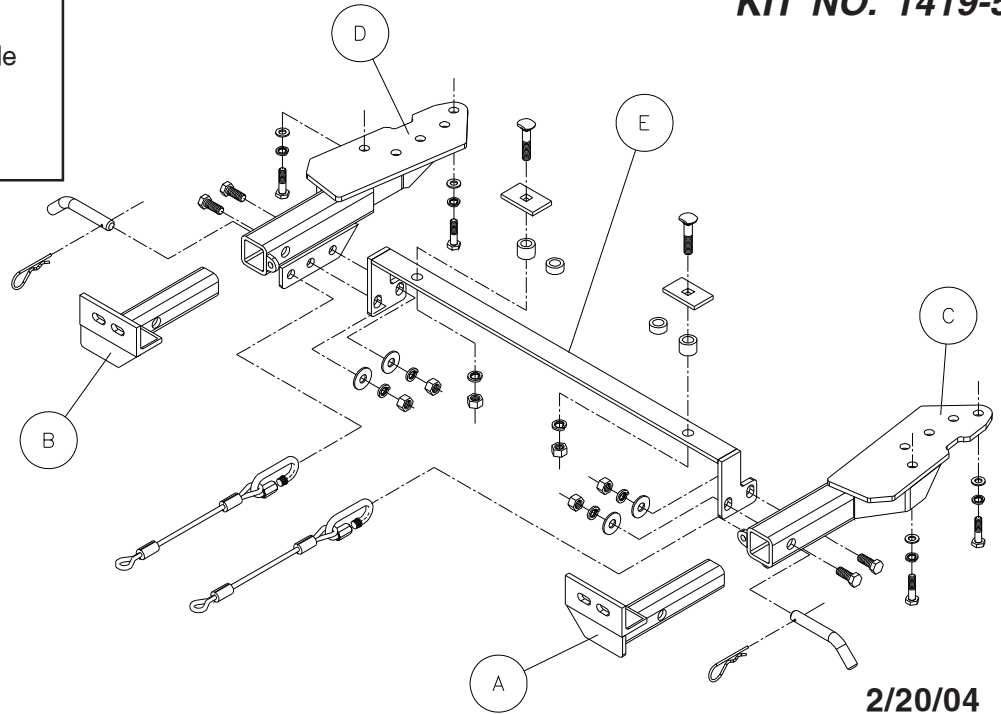
MOUNTING BRACKET KIT INSTALLATION INSTRUCTIONS

ROADMASTER, Inc. 6110 NE 127th Ave. Vancouver, WA 98682 1-800-669-9690 fax 360-735-9300 www.roadmasterinc.com

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. 1419-5



2/20/04

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.

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KIT NO. 1419-5

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 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.
2. Start by removing the lower plastic splash shield over the stabilizer bar behind the front bumper. Remove four plastic fasteners on each side then set the splash shield aside. *Note:* loosen the plastic fasteners and twist counter clockwise to remove. Now, remove three plastic fasteners under the bumper fascia in preparation for a later step.
3. Remove four bolts holding the stabilizer bar to the bottom of the frame (two per side).
4. 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.
5. Hold the passenger side main 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.
6. Repeat step 5 for the driver's side.
7. Bolt the stabilizer bar in place over the receiver braces and leave loose for the time being.
8. 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.
9. Check the holes in the middle of the center brace and see if they line up with two existing holes in the bottom of the cross member, if not drill through using the center brace as a guide. Now, fishwire 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.
10. Insert the front braces in the receiver braces and secure using 5/8" draw pins and 1/8" spring pins.
11. Tighten all bolts to the torque specifications below.
12. Replace all plastic keepers in the bumper fascia then replace the center splash shield reversing step 2, with the exception of inserting the front plastic keepers into the frame on each side.
13. Install the tow bar according to the manufacturer's instructions.
14. Attach the tow vehicle's safety cables to front hole in the side of each receiver brace with the included cable connectors.

Hardware

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

2/20/04

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.						