

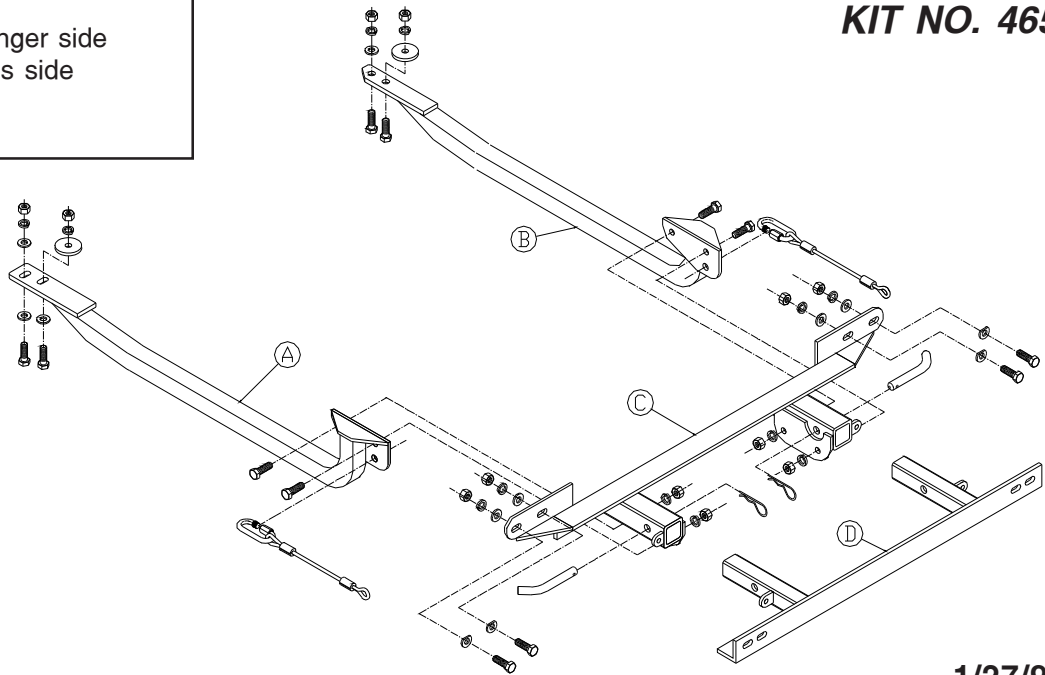
# BASEPLATE KIT INSTALLATION INSTRUCTIONS

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

**PARTS LIST:**

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

**KIT NO. 465-3**



1/27/99

**IMPORTANT:** All baseplates *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 and lock washers on all fasteners.

## WARNING

Failure to heed these warnings or follow the installation instructions may result in a voided warranty, loss of towed vehicle, personal injury or death.

- Do not weld or modify this baseplate or its components. Welding or modification will void the warranty.
- Do not use this document as a basis to design/fabricate a baseplate, as it may not show all parts or structural components.
- We strongly recommend professional installation.
- If the towed vehicle has been in an accident, it must be properly repaired before attaching the baseplate. Do not install the baseplate if any structural frame damage is found.
- The installer must use all bolts and parts supplied. If running changes were made by the vehicle manufacturer after this kit was designed, some bolts or other fasteners may no longer be the correct size. It is the installer's responsibility to verify this kit is securely fastened to the vehicle.
- Use Loctite® Red on all bolts used to secure this baseplate. Torque all bolts to the specifications found at the end of these instructions. Do not over-torque the bolts or failure may occur.
- The installer must inspect the baseplate to ensure adequate clearance, particularly around hoses, air conditioner lines, radiators, etc. or non-warranty failure may result.
- Roadmaster manufactures many styles of baseplates. If your baseplate has removable arms, they must be removed before driving the vehicle, unless the arms can be pinned or padlocked in place. If not secured, the arms could vibrate out.
- Some motorhome chassis have such a tight turning radius that you can damage your motorhome, towed vehicle, tow bar or baseplate 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 your 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 or vehicles.
- 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. See cable instructions for proper routing. Failure to do so will result in non-warranty damage and/or the loss of the towed vehicle.
- This kit is designed for use with ROADMASTER tow bars and ROADMASTER adapters only. Using this kit with other brands, without an approved ROADMASTER adapter, may result in non-warranty damage or injury.
- Receiver extensions and out-of-level towing situations of 3 inches or more. This can cause the system to swing much higher and lower, causing excessive strain on the tow bar, baseplate and frame. That can cause the towing system to fail, causing property damage, personal injury or even death. If you must use a receiver extension or drop hitch to tow, it will reduce your receiver's weight capacity by 1/3 to avoid damaging your system. Never use more than one extension and/or drop hitch, as this will void your warranty.
- Every 3,000 miles, the owner must inspect all mounting points for cracks or fatigue, and check the fasteners for proper torque, according to the bolt torque requirements chart on the last page of these instructions.
- The owner must follow the vehicle manufacturer's instructions to prepare the vehicle for towing. Failure to do so may cause severe damage to the vehicle.
- This baseplate is only warranted for the original installation. Installing a used baseplate on another vehicle is not recommended and will void the warranty.

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- 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, front brace, two rear braces and a hardware pack. The main receiver brace bolts to the bottom bumper mount bolts on each side behind the front bumper fascia and lower grille. The two front braces insert through the lower grille under the bumper into the receiver brace on each side. Two rear braces attach to the receiver brace and then to the suspension sub frame. Lay out the kit 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 front bumper fascia assembly. Remove four 6mm lower fascia fasteners, seven 10mm fasteners in each fender well and two bolts from the front frame above the radiator. Pull the assembly forward, disconnect the headlights, turn signals and fog lights, then pull off.
- The large fiberglass bumper core is mounted on the EA units on each side with four bolts, remove the bumper core and discard the lower stock bolts. The nuts may be joined together, if so cut through the retainer web so you can use the stock retainer nuts for the top bolts when reinstalling.
- The lower lip on the rear of the bumper core must be trimmed flush to allow the main receiver brace room to mount on the back of the EA mounting plates. Lay the receiver brace on the back of the bumper and mark how much will have to be trimmed to clear. A saber saw will work well for this.
- Replace the original bottom mounting bolts in the bumper core with supplied 7/16" x 2" bolts and clipped flat washers. Mount the bumper core on the EA units then mount the receiver brace behind the EA mounting plate on the bottom 7/16" bolts. Use 7/16" flat washers, lock washers and nuts to finish installing the bumper core and receiver brace. Torque bolts to the specifications below.
- Cover the front receiver tubes on the receiver brace with shop rags or gloves to prevent marring the plastic grille fascia, then mount the bumper fascia over the receiver tubes and mark the back of the lower grille opening which will have to be trimmed to fit. *Note:* it will seem that a lot must be trimmed but it is on the back side of the fascia and if properly done will not be noticeable when reinstalled. Once trimmed reverse the removal procedure in step 2 to reinstall.
- Locate the rear braces and bolt them one at a time to the receiver brace with two 1/2" x 1 1/2" bolts, lock washers and nuts per side. Bolt the rear of the braces to the subframe as illustrated with 1/2" x 1 1/2" bolts, plate washers, flat washers, lock washers and nuts. Tighten these bolts to torque specifications below. *Note:* be sure to use the large plate washers on the top forward holes in the subframe. Some vehicles may have a hole missing, in this case, bolt the braces in position and use the brace as a template to drill a 17/32" hole through the sub frame plate, the finish bolting in position. Some vehicles may have additional frame stiffeners bolted in this area, in this case, remove the stock bolts sandwich the rear of the braces between the subframe and the stiffener. Torque all mounting bolts to the specifications below.

## 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.						



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8. Insert the front brace into the receiver tubes and secure with 5/8" draw pins and 1/8" spring pins.
9. Install the tow bar according to the manufacturer's instructions.
10. Attach one end of the included 12" safety cables to the lower front hole in the side mounting plate on each side of the receiver brace with the included cable connectors. Connect the other end to the tow vehicle's safety cables and the tow bar.

**HARDWARE LIST:**

- 8-1/2" X 1 1/2" BOLTS
- 8-1/2" LOCK WASHERS
- 8-1/2" NUTS
- 4-1/2" FLAT WASHERS
- 2-12" SAFETY CABLES
- 2-CABLE CONNECTORS
- 2-5/8" DRAW PINS
- 2-1/8" SPRING PINS
- 4-7/16" X 2" BOLTS
- 4-7/16" LOCK WASHERS
- 4-7/16" FLAT WASHERS
- 4- 7/16" CLIPPED FLAT WASHERS
- 2-2" PLATE WASHERS

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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.