

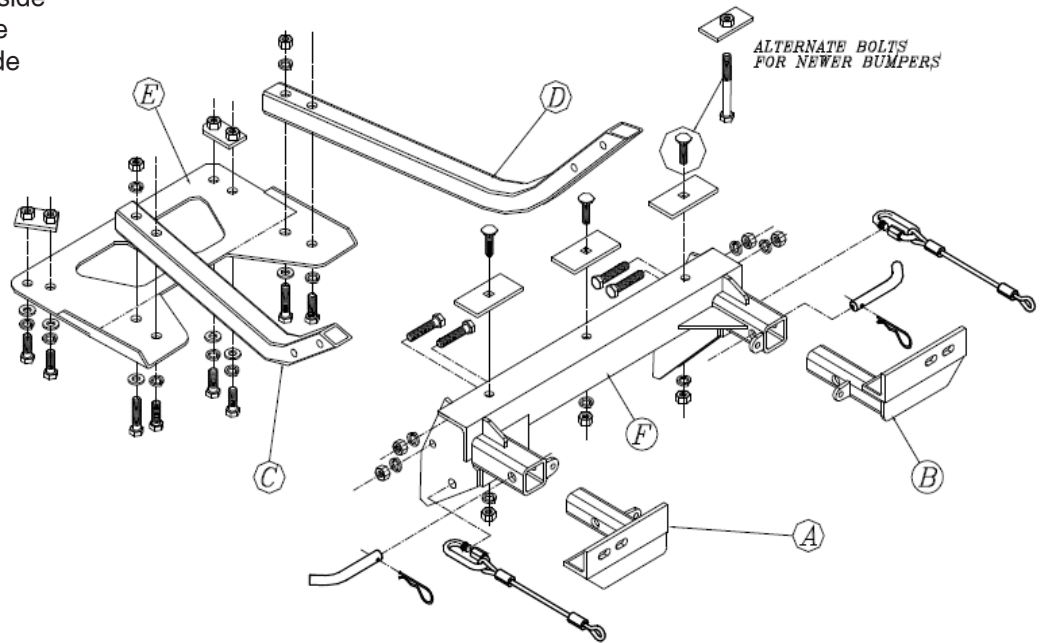
# BASEPLATE KIT INSTALLATION INSTRUCTIONS

ROADMASTER, Inc. 6110 NE 127th Ave. Vancouver, WA 98682 360-896-0407 fax 360-735-9300 www.roadmasterinc.com

## PARTS LIST:

- 1- FRONT BRACE (A) - Passenger side
- 1- FRONT BRACE (B) - Driver's side
- 1- REAR BRACE (C) - Passenger side
- 1- REAR BRACE (D) - Driver's side
- 1- REAR PLATE (E) - Mounting
- 1- RECEIVER BRACE (F) -

KIT NO. 466-1



11/02/22

**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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**KIT NO. 466-1**

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, a rear mounting plate and a hardware pack. The main receiver brace bolts to the bottom of the steel bumper core 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 a mounting plate bolted to the suspension subframe. 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 the installation with the rear mounting plate. Match the holes in the plate with the existing holes in the bottom of the suspension subframe and bolt in place using 1/2" x 1 1/4" bolts, lock washers, flat washers and 1/4" threaded backing plates. Don't tighten at this time. *Note:* some models have additional frame stiffeners bolted in this area. If this is the case, remove the stock bolts and threaded retainers. Sandwich the rear plate between the bottom of the frame and the stiffener, then bolt through the stiffener, rear mounting plate and subframe with the provided hardware.
3. Cover the front receiver tubes with shop rags or gloves to prevent marring the plastic grille fascia, then insert the receiver brace through the lower grille opening from behind and below the bumper. Clamp to the bottom of the bumper temporarily.
4. Locate the rear braces and bolt them one at a time to the top of the rear mounting plate with one 1/2" x 2 1/2" bolt, lock washer and nut per side through the rear hole. The front tube holes are threaded, use 1/2" x 1 1/4" bolts and lock washers for these holes. *Note:* put the nuts and lock washers on top to increase ground clearance. Bolt through the front of the rear braces and the main receiver brace with two 1/2" x 2 3/4" bolts, lock washers and nuts per side. Finger tighten these bolts for now.
5. Go to the front of the vehicle and make sure the receiver tubes are centered in the grille, then tighten all the mounting bolts to the torque specifications below.
6. Using the main receiver brace as a template, drill three 17/32" holes through the bottom of the bumper.
7. Insert 1/2" x 1 1/2" carriage bolts and 1/4" x 2" x 3" square-holed backing plates through the back of the bumper into the 17/32" holes. Finish with 1/2" nuts and lock washers. Torque these bolts to the specifications below. *Note: Later models have a modified C-section for a bumper core.* This will require drilling through the lower section of the bumper core and the use of the included 1/2" x 3 1/2" bolts and backing plate.
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

- |  |                       |   |
|--|-----------------------|---|
| 2- 1/2" x 2-1/2" bolts                     | 15- 1/2" lock washers | 3- 1/4" x 1-1/2" x 2 3/4" threaded backing plates |
| 4- 1/2" x 2-3/4" bolts                     | 6- 1/2" flat washers  | 3- 1/4" x 2" x 3" square-holed backing plates     |
| 3- 1/2" x 1-1/2" carriage bolts            | 2- 12" safety cables  | 2- 1/4" x 1 1/2" x 2 3/4" threaded backing plates |
| 3- 1/2" x 3 1/2" bolts (alternative bolts) | 2- 5/8" draw pins     |   |
| 6- 1/2" x 1-1/4" bolts                     | 2- 1/8" spring pins   |   |
| 9- 1/2" nuts                               | 2- cable connectors   |   |

### 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

Thread Size	Grade	Torque
5/16.....	5.....	13 ft./lb.
3/8.....	5.....	23 ft./lb.
7/16.....	5.....	37 ft./lb.
1/2.....	5.....	56 ft./lb.
5/8.....	5.....	150 ft./lb.

#### METRIC BOLTS

Thread Size	Grade	Plated / Unplated
8mm-1.0.....	8.8.....	20 ft./lb. 18 ft./lb.
8mm-1.25.....	8.8.....	19 ft./lb. 18 ft./lb.
10mm-1.25.....	8.8.....	38 ft./lb. 36 ft./lb.
10mm-1.5.....	8.8.....	37 ft./lb. 35 ft./lb.

#### METRIC BOLTS

Thread Size	Grade	Plated / Unplated
12mm-1.25.....	8.8.....	70 ft./lb. 65 ft./lb.
12mm-1.5.....	8.8.....	66 ft./lb. 61 ft./lb.
12mm-1.75.....	8.8.....	65 ft./lb. 60 ft./lb.
14mm-2.0.....	8.8.....	104 ft./lb. 97 ft./lb.