

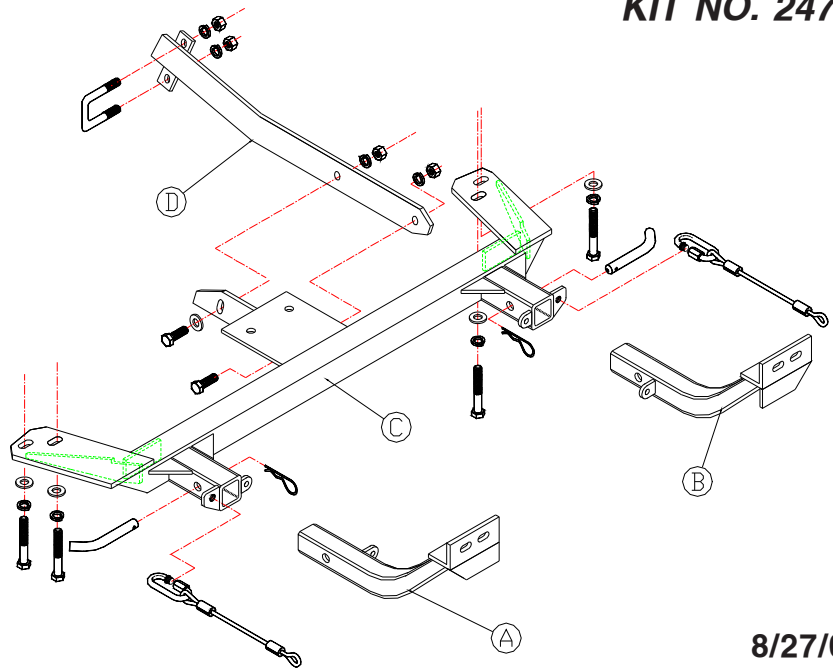
# BASEPLATE KIT INSTALLATION INSTRUCTIONS

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

## PARTS LIST:

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

KIT NO. 247-1



8/27/02

**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. 247-1**

- 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 is one of our XL Series which is partly removable. The main receiver brace attaches to the bottom of the front subframe utilizing the stock bolt locations. The front gravel guard will have to be removed before starting. The bracket kit consists of a main receiver brace, two upper braces, a rear brace and a hardware kit.
- Since this brace utilizes all six front subframe mounting bolts, the subframe will have to be supported while installing the brace. Failure to do this could cause serious injury as well as damage to the vehicle. Once the subframe is properly supported, remove the six mounting bolts holding the front of the subframe.
- Hold the main receiver brace to the bottom of the sub frame. Bolt through the middle of the brace with the two original bolts. Bolt through both ends of the brace with the supplied 10mm x 1.5mm x 90mm bolts, lock washers and fender washers.
- Bolt the center brace to the main brace with two 1/2" x 1 1/2" bolts, lock washers and nuts.
- Fasten the end of the center brace to the rectangular sub frame with the included 1/2" x 2" x 3" U bolt, lock washer and 1/2" nuts.
- Torque all bolts to the specifications below.
- Trim the lower gravel guard to fit and reinstall.
- Insert the upper braces into the lower receiver brace using the provided 5/8" draw pins and 1/8" spring pins.
- Mount the tow bar according to the manufacturers instructions.
- Attach the provided 12" safety cables to the receiver brace with the provided quick links. Connect the other end to the tow vehicle's safety cables and the tow bar.

### HARDWARE LIST:

- |                              |                             |
|------------------------------|-----------------------------|
| 4-10MM X 1.5 X 90MM BOLTS    | 1-1/2" DIA X 2" X 3" U BOLT |
| 4-10MM X 30MM FENDER WASHERS | 2-12" SAFETY CABLES         |
| 4-10MM LOCK WASHERS          | 2-CABLE CONNECTORS          |
| 2-1/2" X 1 1/2" BOLTS        | 2- 5/8" DRAW PINS           |
| 4-1/2" LOCK WASHERS          | 2-1/8" SPRING PINS          |
| 4-1/2" NUTS                  | 1-1/2" FLAT WASHERS         |

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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

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.

#### U-BOLT

3.8	5	30 ft./lb.	7/16	5	45 ft./lb.	1/2	5	50 ft./lb.
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