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 (C) - Passenger side
1- FRONT BRACE (D) - Driver's side
1- FRONT BRACE (D) - Driver's side

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.



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.

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- 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 ROAD-MASTER 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 warranteed 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. 327-1

- 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 main receiver braces bolt to the side and bottom of the frame and tie down plates on each side. It utilizes existing frame nuts and holes in the frame. Work on one side at a time and start by removing two bumper bracket bolts in the side of the frame behind the bumper.
- 2. Hold a receiver brace to the bottom of the frame and check the rear most hole in the bottom of the frame. Note: Sometimes the frame nut in this hole is not exactly centered over the frame hole, in this case the hole in the frame must be relieved to allow it's use. On some later vehicles, the frame nuts maybe missing, in this case fish wire a ½" x 1¾" clipped carriage bolt and ¼" x 1" x 2" backing plate into the bottom hole though the side of the frame. Bolt through the hole into the existing frame nut with 12mm x 1.25 x 40mm bolt, lock washer and fender washer. *Note:* if tow hook is present remove.

These bolts will not be replaced. The bumper may drop slightly, just push up slightly when retightening.

- 3. Bolt through the side of the brace and bumper bracket into the frame with two supplied 10mm x 1.25 x 35mm bolts, lock washers and fender washers.
- 4. Bolt through the top of the frame with a 3/8" x 4¼" bolt, flat washer, lock washer, ¼" backing plate, and nut. *Note:* later models may need hole drilled though frame.
- 5. Finish with a ½" x 1½" bolt, plate washer, lock washer and nut through the side of the bracket and tie down plate.
- 6. Repeat steps one through five for the remaining receiver brace and torque all mounting bolts to the specifications
- 7. Align the braces and tighten all bolts to the torque specifications below.
- 8. Insert the front braces into the receiver braces and pin 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 10" safety cables to the front of the receiver braces with the included cable connectors. Connect the other end to the tow vehicle's safety cables and the tow bar.

Hardware

2-12mm lock washers

2- 12mm x 1.25 x 40mm bolts

4- 10mm x 1.25 x 35mm bolts

2-3/8" X 4 1/4" bolts

2-1/2" flatwashers

4-10mm fender washers

4-10mm lock washers

2- 1/2" x 1-1/2" bolts

2- 1/2" plate washers

4- ½" lock washers

4- 1/2" nuts

2- 1/2" x 1 3/4" clipped carriage bolts

2- 1/4" x 1" x 2" sq. hole backing plate

2- 1/4" x 1 1/2" x 2 1/2" backing plate

2- 1/2" clipped plate washers

2- 3/8" nuts

2-3/8" lock washers

2-3/8" flat washers

2- 1/8" spring pins

2-5/8" draw pins

2- cable connectors

2- 10" safety cables

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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 | | | 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 1 | 04 ft./lb. 97 ft./lb. |
| 5/8 | 5 | 150 ft./lb. | | | | | | |