

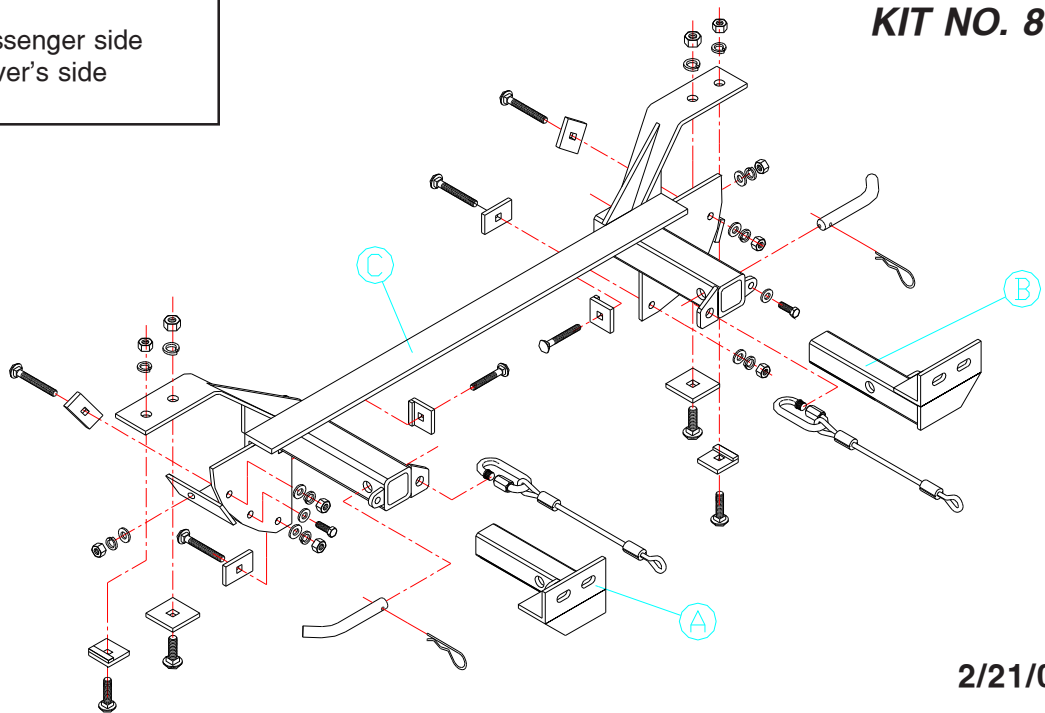
# BASEPLATE KIT INSTALLATION INSTRUCTIONS

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)

**KIT NO. 812-1**



2/21/01

**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. 812-1

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 partly removable. It is designed to fit behind the front bumper and uses the front radiator cowl and frame work for mounting points. The first thing to do is remove the bumper. This is accomplished by removing two bolts underneath the frame on each side, then removing a 10mm bolt and a plastic fastener on the edge of the bumper in each fender well. Remove two more plastic fasteners holding the lower bumper fascia. Once the bumper is loose, grasp the front of the bumper and pull up and straight forward. Be sure and lift up otherwise the bumper will catch on a retainer formed into the bumper supports in the frame.
2. Next, remove the turn signal and head lights. To do this, remove a 10mm screw from the top inside corner of the turn signal light housing, then pull forward and disconnect. This will expose two 10mm nuts on the side of the head light housing which must be removed. Remove another 10mm bolt in front, pull out and disconnect. Do this for both sides.
3. Hold the receiver brace to the front of the frame and bolt in place using two 8mm x 1.25 x 30mm bolts in the bottom front of the brace on each side. The front frame should have existing nuts in the frame on each side which will match the second hole from the bottom on each side of the receiver braces. Align the brace so that the top mounting plates are flat on the top of the frame on each side then tighten the 8mm bolts.
4. Now, use the receiver brace as a drill template to drill a 1/2" in the top of the frame on each side.
5. Bolt through each of these holes from inside the frame with a 1/4" x 2" x 2" sq. hole backing plate, 1/2" x 1 1/2" carriage bolt, lock washer and nut. The backing plates should be inside the frame.
6. Locate four remaining holes in the front of the bracket and drill completely through the radiator cowl frame work using the receiver brace as a drill template again. *Note:* be sure the wiring in the back if the cowl is pulled away to avoid damaging it with the drill bit. Be sure you drill straight through the cowl and into the middle of the channel on the back side.
7. Bolt from the back to the front, starting with a 1/4" x 1" x 2" sq. hole backing plate, 3/8" x 3 1/2" carriage bolt, lock washer and nut for each front hole. The backing plate should nest into the back channel. The wiring harness will have to be displaced temporarily to insert the bolts and backing plates.
8. Each side now needs two side clamps installed behind the cowl flange and on the top of the frame. Use 3/8" x 1 1/2" bolts, lock washers and nuts to secure small clamping plates.
9. Torque all bolts to the specifications below.
10. The back lower corners of the grill opening under the bumper will have to be trimmed on the edge approximately 1/4" for bracket clearance. Drape a rag over the front of the receiver tubes and slip the bumper back into the frame tubes until it contacts the lower portion of the receiver brace. Mark the plastic where it contacts the brace, then remove the bumper and trim.
11. Replace the bumper reversing step one.
12. Replace the head lights and turn signals reversing step two.
13. Insert the front brace into the receivers and pin with a 5/8" draw pin and a 1/8" spring pin.
14. Mount the tow bar according to the manufacturers instructions and torque all bolts to the specifications below.
15. Attach the included 10" safety cables to the receiver brace using the included cable connectors, then attach to the tow bar and the tow vehicle's safety cables.

### 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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**HARDWARE LIST:**

- 2-8MM X 1.25 X 30MM
- 2-8MM FLAT WASHERS
- 2-8MM LOCK WASHERS
- 6-3/8" X 3 1/2" CARRIAGE BOLTS
- 2-3/8" X 1 1/2" CARRIAGE BOLTS
- 6-3/8" FLAT WASHERS
- 8-3/8" LOCK WASHERS
- 8-3/8" NUTS
- 4-1/4" x 1 1/2" x 2" SPECIAL CLAMP PLATES (3/8" SQ. HOLE)
- 4-1/4" x 1 1/4" x 2" BACKING PLATE 3/8" SQ. HOLE
- 2-1/4" x 2" x 2" BACKING PLATE 1/2" SQ. HOLE
- 2-10" SAFETY CABLES
- 2-CABLE CONNECTORS
- 2-5/8" DRAW PINS
- 2-1/8" SPRING PINS
- 2-1/2" x 1 1/2" CARRIAGE BOLTS
- 2-1/2" LOCK WASHERS
- 2-1/2" NUTS

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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.