

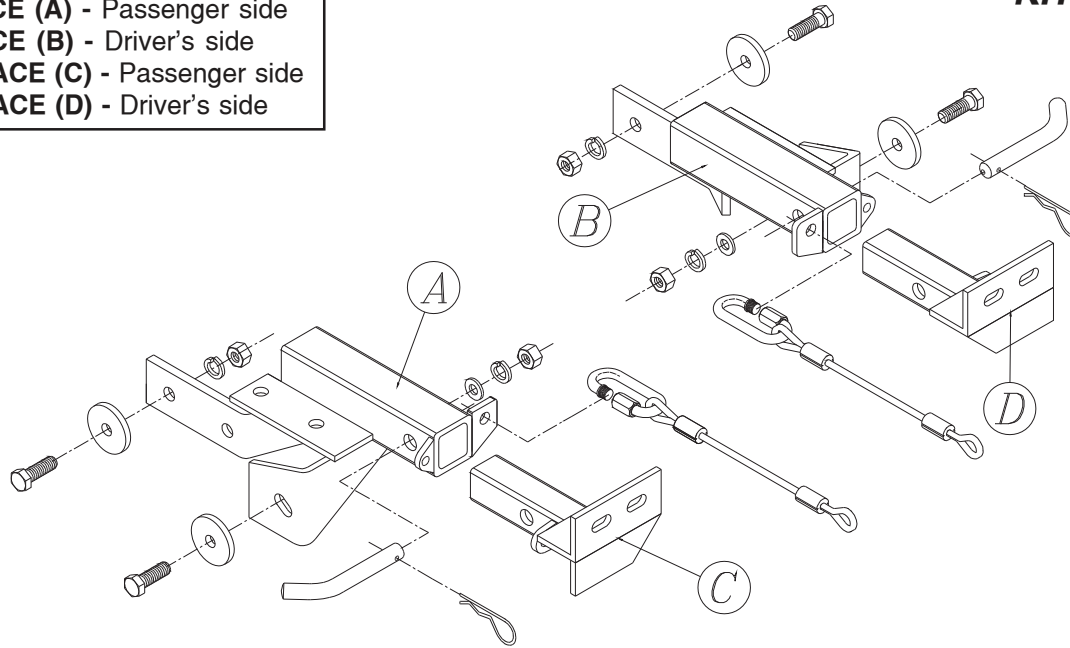
# MOUNTING BRACKET KIT INSTALLATION INSTRUCTIONS

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

**PARTS LIST:**

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

**KIT NO. 1147-1**



**022399**

**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
- Use lock washers on all fasteners

## **WARNING**

Failure to follow the below warnings and the installation instructions may result in voiding your warranty, property damage, the loss of your towed vehicle, personal injury or even death.

- Installation of most baseplates requires moderate mechanical aptitude and skills. We strongly recommend professional installation by an experienced installer.
- The installer must read the instructions and use all bolts and parts supplied.
- Use Loctite® Red on all bolts used for mounting this baseplate.
- Every 3,000 miles, the owner must inspect the fasteners for proper torque, according to the bolt torque requirements chart on the last page of these instructions. The owner must also inspect all mounting points for cracks or other signs of fatigue every 3,000 miles.
- The owner must check the vehicle manufacturer's instructions for the proper procedure(s) to prepare the vehicle for towing. Some vehicles must be equipped with a transmission lube pump, an axle disconnect, driveline disconnect or free-wheeling hubs before they can be towed. Failure to properly equip the vehicle will cause severe damage to the transmission.
- Do not weld. This baseplate is designed to be bolted to the vehicle. Welding will void the warranty.
- Do not use this document for custom fabrication, as it may not show all parts or structural components could result in loss of the towed vehicle.
- 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.
- If running changes were made by the vehicle manufacturer after this

kit was designed, some bolts or other fasteners in the hardware pack may no longer be the correct size. It is the installer's responsibility to verify this kit is securely fastened to the vehicle and fitted with the correct hardware to account for these changes.

- 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 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, motorhome and/or towed vehicle.
- 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. Refer to the cable instructions for proper routing. Failure to leave enough slack in the safety cables, or failure to connect the safety cables frame to frame, will result in 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.
- Upon final installation, the installer must inspect the baseplate to ensure adequate clearance, particularly around hoses, air conditioner lines, radiators, etc.
- This baseplate is only warranted for the original installation. Installing a used baseplate on another vehicle is not recommended and will void the warranty.



# MOUNTING BRACKET KIT INSTALLATION INSTRUCTIONS

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

**KIT NO. 1147-1**

- 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 XL bracket is designed to mount underneath the bumper and utilize existing frame bolts and tie down plates on each side. They will fit through the lower spoiler inboard of the existing bumper bracket mounts. Remove the center splash panel just behind the spoiler. This requires the removal of five (10mm head) bolts.
- Enlarge the bumper bracket mount openings approximately 2¼" toward the center line of the car on each side. Looking at the ends of the receiver braces will give you an idea of how much to trim. Trim so the receiver tube will fit through.
- Working on one side at a time, remove two 17mm nuts from existing bolts under the frame. Hold the receiver brace in place over the bolts and replace the 17mm shoulder nuts you just removed.
- Bolt through the tie down plate with two ½" x 1¾" bolts, ½" plate washers, lock washers and nuts. *Note:* two different rear mounting holes are provided. Use the holes that correspond to your tie down plates.
- Repeat steps 2 through 4 for the remaining side.
- Align the braces, then tighten all bolts to the torque specifications below. Reinstall the center splash panel and the five 10mm bolts removed in step 1.
- Insert the front braces into the receiver braces and pin using two 5/8" draw pins and 1/8" spring pins.
- Install the tow bar according to the manufacturers instructions, then torque all bolts to the specifications below.
- Connect the 10" safety cables to the main receiver on the passenger side and the existing tow loop on the driver's side with the supplied cable connectors. Connect the other end of the safety cables to the tow bar and the tow vehicle's safety cables.

**HARDWARE LIST:**

- 4-1/2" X 1 3/4" BOLTS
- 4-1/2" PLATE WASHERS
- 4-1/2" LOCK WASHERS
- 2-1/2" FLAT WASHERS
- 4-1/2" NUTS
- 2-5/8" DRAW PINS
- 2-1/8" SPRING PINS
- 2-CABLE CONNECTORS
- 2-10" SAFETY CABLES

**022399**

### 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. |              |       |                       |              |       |                        |

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.