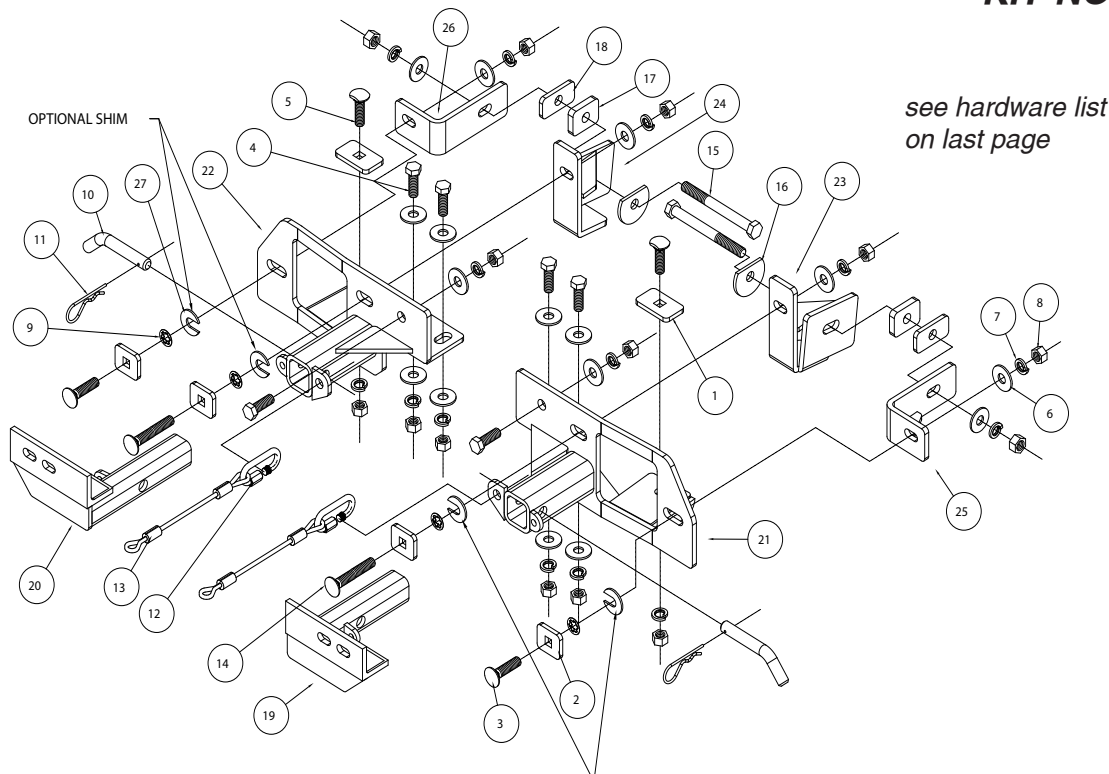


# BASEPLATE KIT INSTALLATION INSTRUCTIONS

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

KIT NO. 477-1



03-30-22

**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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- 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 braces, front braces and a hardware pack. The main receiver braces mount behind and through the front bumper fascia to the front frame and tow loop mounts. 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.
- Remove the front bumper and fascia (four 19mm shoulder nuts).
- Remove the existing front tow hooks and mounting bolts (15mm head). These components will not be replaced. Retain all hardware in case the bracket is ever removed. *Note:* some models may not be equipped with tow hooks.
- The front of the frame and the bumper mounts should be exposed and in full view at this time. Notice the front slots in the front of the frame on each side, then find the large slotted holes about 2½" back in the bottom of each frame tube. Locate two ½" x 1¾" ground head carriage bolts. These should fit through the front slot if held at an angle. Fishwire these bolts and ¼" x 1½" x 2½" backing plates through the front of the frame on each side into the bottom slots in each rectangular frame rail.
- Working on one side at a time, hold a receiver brace over the front of the frame and bolt it in place using a ½" nut and lock washer on the previously installed bolt. Make sure the bumper mounting slots line up with the receiver brace slots. *Note:* due to frame variances, the holes may need to be enlarged.
- To the inside of the frame rail, place one of the supplied 3/8" x 1½" x 2" backing plates over the pre-existing hole and then the inside rear brace over the backing plate. Bolt through both with a ½" x 5" bolt and ½" clipped plate washer. On the outside of the frame rail, place one of the supplied ¼" x 1¼" x 2½" backing plates and then the outside rear brace. Finish with a ½" flat washer, lock washer and nut.
- Now, bolt through the three tow hook mounting holes located on the inner mounting of the brace with three ½" x 1½" bolts, flat washers, lock washers and nuts.
- Repeat steps 5 through 7 for the remaining side.
- Torque all mounting bolts to the specifications below.
- Prepare the bumper for remounting by removing the existing four mounting bolts and substituting two ½" x 2½" carriage bolts and ¼" x 1½" x 2" backing plates on the outside mounts and two ½" x 4" carriage bolts and ¼" x 1½" x 1¾" backing plates on the inside mounts. Secure the bolts in the bumper with the provided push nut bolt retainers.
- Replace the bumper and bolt it in place using ½" flat washers, lock washers and nuts. Slotted shim washers are provided to aid in bumper alignment. Normally, one or two washers may be needed between the bumper and the lower bumper mounting point.
- Align and torque all mounting bolts to the specifications below.
- Insert the front braces into the receiver tubes and secure with 5/8" draw pins and 1/8" spring pins.
- Install the tow bar according to the manufacturer's instructions.
- Attach one end of the included 10" safety cables to the safety cable tab 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.

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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.

# BASEPLATE KIT

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### HARDWARE LIST

ITEM	QTY	MATERIAL	PART #
1.....2.....	1/4" x 1 1/2" x 2 1/2" BACKING PLATE.....	A000084	
2.....4.....	1/4" x 1 1/2" x 2" BACKING PLATE.....	A000039	
3.....2.....	1/2" x 2 1/2" CARRIAGE BOLT .....	350369-00	
4.....6.....	1/2" x 1 1/2" BOLT .....	350095-00	
5.....2.....	1/2" x 1 3/4" GROUND HEAD CARRIAGE BOLT .....	A003142	
6.....16.....	1/2" FLAT WASHER .....	350308-00	
7.....14.....	1/2" LOCK WASHER.....	350309-00	
8.....14.....	1/2" HEX NUT.....	350258-00	
9.....4.....	PUSH NUT BOLT RETAINER .....	350200-00	
10.....2.....	DRAW PIN.....	357035-00	
11.....2.....	SPRING PIN.....	357036-00	
12.....2.....	CONNECTORS .....	200008-00	
13.....2.....	10" CABLES .....	650646-10	
14.....2.....	1/2" x 4" CARRIAGE BOLT .....	350124-00	
15.....2.....	1/2" x 5" BOLT .....	350107-00	
16.....2.....	1/2" CLIPPED PLATE WASHER .....	A002687	
17.....2.....	3/8"x 1 1/2" x 2" BACKING PLATE.....	A000713	
18.....2.....	1/4" x 1 1/4" x 2 1/2" BACKING PLATE.....	A000228	
19.....1.....	DRIVER SIDE ARM .....	C000106	
20.....1.....	PASSENGER SIDE ARM .....	C000107	
21.....1.....	DRIVER SIDE RECEIVER .....	C000108	
22.....1.....	PASSENGER SIDE RECEIVER .....	C000109	
23.....1.....	DRIVER INSIDE BRACE .....	C002619	
24.....1.....	PASSENGER INSIDE BRACE.....	C-002620	
25.....1.....	DRIVE OUTSIDE BRACE.....	C002621	
26.....1.....	PASSENGER OUTSIDE BRACE.....	C002622	
27.....4.....	SHIM.....	A004510	

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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.