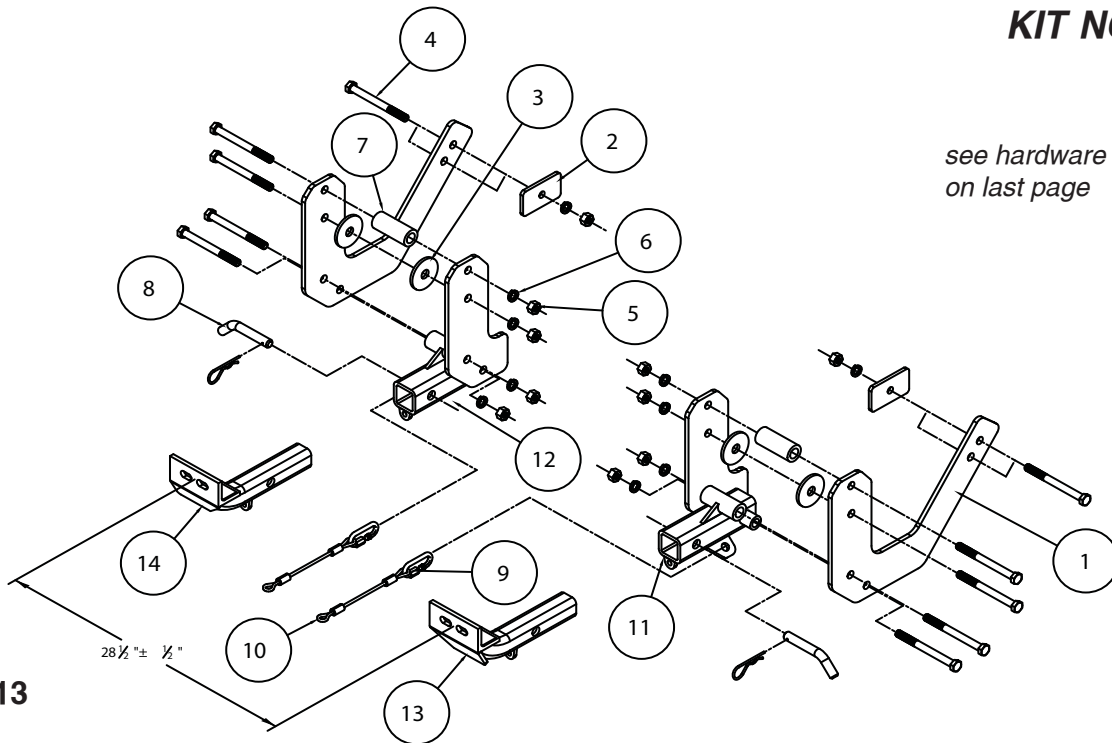


MOUNTING BRACKET KIT INSTALLATION INSTRUCTIONS

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

KIT NO. 483-1



see hardware list
on last page

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IMPORTANT: All brackets **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

ROADMASTER Limited Warranty, including One-Year Conditional Warranty Text and Product Registration Card, in Carton.

WARNING Failure to follow these instructions can result in property damage, personal injury or even death.

- Installation of most mounting brackets 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. Failure to do so could result in loss of the towed vehicle.
- Use Loctite® Red on all bolts used for mounting this bracket.
- Do not use this document for custom fabrication, as it may not show all parts or structural components. Custom fabrication or an attempt to copy this bracket design could result in loss of the towed vehicle.
- 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 mounts and brackets for cracks or other signs of fatigue every 3,000 miles. Failure to do so could result in loss of the towed vehicle.
- 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.
- If running changes were made by the vehicle manufacturer after this bracket 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 that the bracket is securely fastened to the vehicle and fitted with the correct hardware to account for these changes. Failure to securely

fasten the bracket 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 bracket. **Do not install the bracket if any structural frame damage is found.** Failure to repair the damage could result in the loss of the towed vehicle.
- Some motorhome chassis have such a tight turning radius that you can damage your motorhome, towed vehicle, tow bar or bracket 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 bracket is designed for use with ROADMASTER tow bars and ROADMASTER adaptors only. **Using this bracket with other brands, without an approved ROADMASTER adaptor, may result in non-warranty damage or injury.**
- Upon final installation, the installer must inspect the bracket to ensure adequate clearance, particularly around hoses, air conditioner lines, radiators, etc., or non-warranty damage to the towed vehicle will result.
- This bracket is only warranted for the original installation. Installing a used bracket on another vehicle is not recommended and will void the warranty.

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KIT NO. 483-1

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 kit consists of two main receiver braces, side braces, front braces and a hardware pack. The main receiver braces utilizes the rectangular frame tubes on each side as the primary mounting points. 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.
2. Remove the large radiator air duct located under the radiator between the frame tubes (four 10mm head bolts). This will give you easy access to the back of the bumper and frame mounting area.
3. Working on one side at a time, hold a receiver brace in position behind the bumper fascia against the inside of the frame rail and mark the bottom of the fascia where it needs to be trimmed to fit the receiver brace up to the frame. These will be 2" x 2" notches in the bottom lip of the fascia.
4. Cut the bottom of the fascia until the receiver brace sits level with the second mounting hole from the top of the brace aligned with the existing frame hole, located in the middle of the frame rail behind the bumper mount on the front of the frame.
5. Locate a large side plate. Take a 1/2" x 4 1/2" bolt and put through the second hole from the top in each plate. Put a 1/2" plate washer on the bolt behind the plate. Locate the existing hole in the outside of the frame tube behind the bumper mount and in front of the cab support bracket. Insert the bolt with the plate and 1/2" plate washer through the frame. Put another 1/2" plate washer on the inside of the frame and leave in place with the end of the bolt through the plate washer.
6. Hold the main receiver brace inside the frame rail behind the bumper mounting plates and insert the bolt through the second hole from the top in the brace. Finish with a 1/2" lock washer and nut. Leave the bolt loose to allow adjustment in the following steps.
7. Locate three more 1/2" x 4 1/2" bolts and bolt through the remaining front three mounting holes. Use 1/2" nuts and lockwashers on these bolts, then tighten to hold in position.
8. Repeat steps 3 through 7 for the remaining side.
9. Align the receiver braces so that the bottom of the receiver tubes are level and aligned to each other. The rear-mounting holes in the side plates should be situated over the middle of the frame. Using the drawing on the first page as a reference, measure between the two front braces, ensuring that the distance is still 28" +/- 1/2". Then, tighten all the mounting bolts installed to the torque specifications below. Recheck the measurements, to make certain this distance is still 28" +/- 1/2".
10. Using the side braces as templates, drill a 1/2" hole through each frame tube. *Note:* two holes are provided in the side brace. Pick the one nearest to the frame center.
11. Bolt through the rear of the side braces and the frame tubes with 1/2" x 4 1/2" bolts, lock washers, and 3/16" x 2" x 3" backing plates.
12. Trim the sides of the radiator air duct removed in step 2 to fit between the receiver braces and reinstall with two back bolts. Trimming will eliminate the front mounting holes.
13. Torque the remaining rear mounting bolts to the specifications below.
14. Insert the front braces into the receiver tubes and secure with 5/8" draw pins and 3/16" spring pins.
15. Install the tow bar according to the manufacturer's instructions.
16. Attach one end of the included safety cables to the receiver brace with the included cable connectors. Connect the other end to the tow vehicle's safety cables and the tow bar.

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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KIT NO. 483-1

HARDWARE LIST

ITEM	QTY	NAME	MATERIAL
1.....	2.....	OUTER PLATE.....	A-000482
2.....	2.....	3/16" x 2" x 3" BACKING PLATE.....	A-000147
3.....	4.....	1/2" PLATE WASHER.....	A-003086
4.....	10.....	1/2" x 4 1/2" BOLT.....	350106-00
5.....	10.....	1/2" HEX NUT.....	350258-00
6.....	10.....	1/2" LOCK WASHER.....	350309-00
7.....	2.....	11/4" x 0.25 WALL x 3" SPACER.....	A-001196
8.....	2.....	DRAW PIN W/ CLIP.....	357035-00
9.....	2.....	QUICK LINK.....	200008-00
10.....	2.....	10" SAFETY CABLE.....	650646-10
11.....	1.....	DRIVER SIDE RECEIVER.....	C-000264
12.....	1.....	PASSENGER SIDE RECEIVER.....	C-000265
13.....	1.....	DRIVER SIDE ARM.....	C-000266
14.....	1.....	PASSENGER SIDE ARM.....	C-000267

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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.