

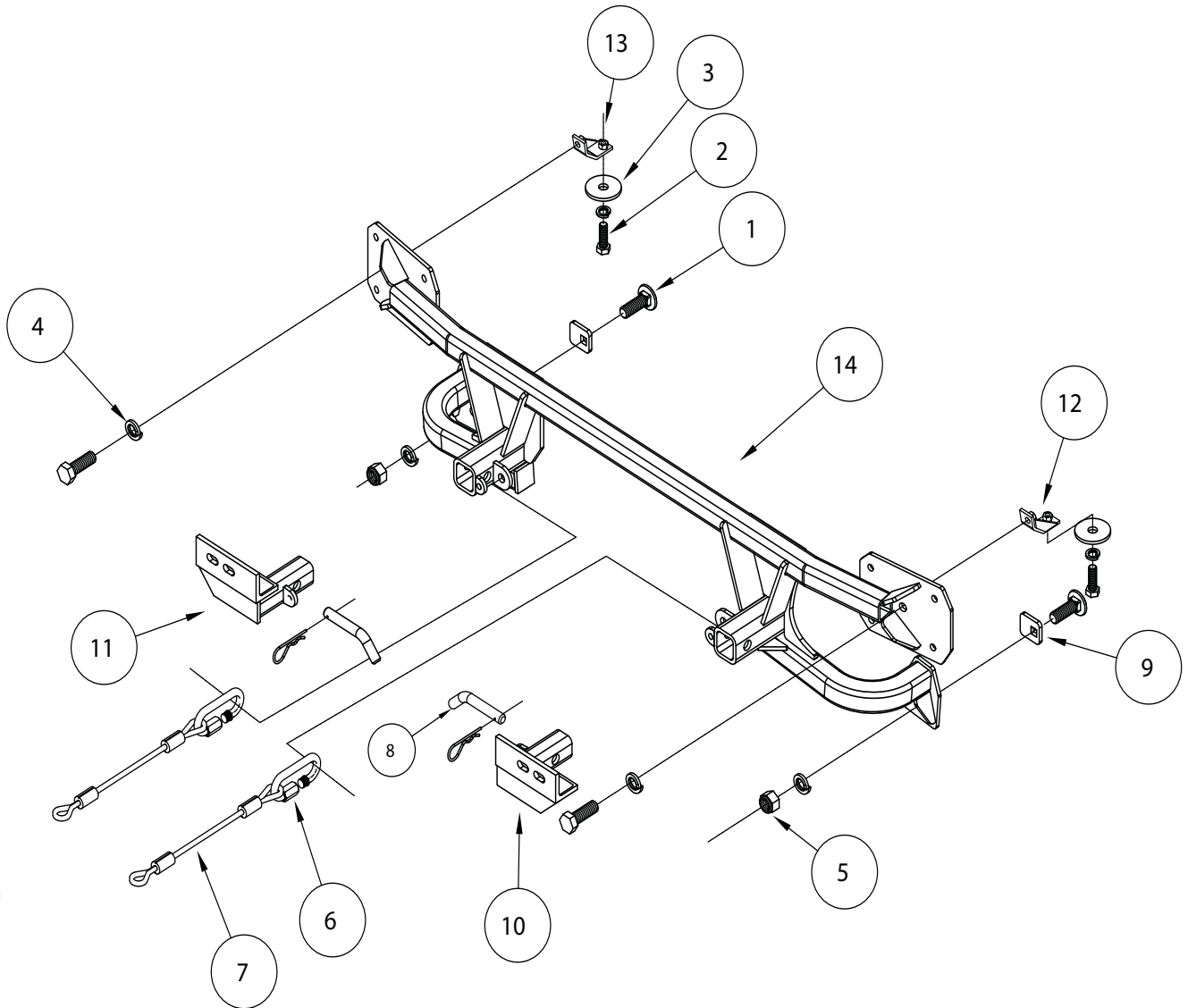


MOUNTING BRACKET KIT INSTALLATION INSTRUCTIONS

KIT# 4427-1

04/20/11
KS

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



ITEM	QTY	MATERIAL	MATERIAL
1.....	2	1/2" x 1 1/2" CARRIAGE BOLT	350362-00
2.....	4	1/2" x 1 1/2" BOLT	350095-00
3.....	2	1/2" PLATE WASHER	A-003086
4.....	6	1/2" LOCK WASHER.....	350309-00
5.....	2	1/2" NYLON LOCK NUT	350735-00
6.....	2	QUICK LINK.....	200008-00
7.....	2	10" SAFETY CABLES.....	650646-10
8.....	2	5/8" DRAW PIN W/ CLIP.....	357035-00
9.....	2	1/4" x 1 1/2" x 1 3/4" BACKING PLATE.....	A-002885
10.....	1	DRIVER SIDE ARM	C-002164
11.....	1	PASSENGER SIDE ARM.....	C-002165
12.....	1	DRIVER SIDE REAR BRACE.....	C-002166
13.....	1	PASSENGER SIDE REAR BRACE	C-002167
14.....	1	MAIN RECEIVER.....	C-002168
15.....	1	INSERT	25-4295-00



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This is one of our XL series brackets, which allows the visible front portion of the bracket to be easily removed from the front of the vehicle (Fig.A and Fig.B). The bracket consists of a main receiver brace, two removable front braces, and a hardware pack.

The main receiver brace mounts to the frame rails and the bumper core. The removable front braces install in the main receiver brace.

Before starting the installation, lay out the kit components in order, as they will be used. This will give you a visual idea of how the components work, and will also confirm that everything is present and accounted for.



Fig.A



Fig.B

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

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
- 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



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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. Remove seven 10mm (head) bolts and two plastic fasteners attaching the upper fascia to the fascia (Fig.C).

2. On each side, remove six Phillips screws attaching the fender liner to the fascia (Fig.D).



3. Remove nine 8mm (head) bolts attaching the fascia to the core support and fender liner. *Note:* Figure E shows the three driver's side bolts and two center bolts only.

4. Pull out and forward on the corners of the fascia to remove it (Fig.F). *Note:* unplug the fog lights and parking sensors, if the vehicle is so equipped.

5. Using a 3/8" drill bit, drill out the two spot welds on each outer edge of the bumper core (Fig.G). *Note:* due to manufacturing variances, there may be more than two spot welds. If that is the case, drill out all of the spots so that the bumper core can be removed.





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6. On each side, remove four 13mm (head) bolts attaching the bumper core to the frame rails (Fig.H). The bumper core will not be replaced. *Note:* retain the bumper core for replacement in case the bracket is ever removed.



7. On each side, place the supplied rear brace inside the frame rail, making certain that the long side of the bracket is on the bottom and the upper hole of the bracket is offset toward the outside of the vehicle (Fig.I – passenger side). Now, place one of the supplied 1/2" lock washers and plate washers over a 1/2" x 1 1/2" bolt, and bolt through the existing hole in the bottom of the frame rail and into the small bracket (Fig.J – passenger side). *Note:* use Loctite® Red on each bolt used in this installation.

8. Place the main receiver brace over the ends of the frame rails. On each side, using one of the supplied 1/2" x 1 1/2" bolts and 1/2" lock washer, bolt through the center hole in the plate on each end of the main receiver brace and into the small bracket you installed in step 7 (Fig.K).

9. On each side, replace the four factory bolts you removed in step 6 for the remaining mounting points (Fig.L – driver's side).



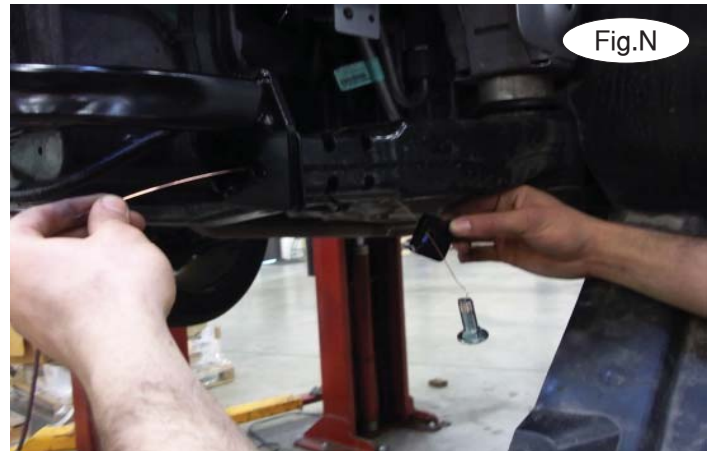


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10. Working on one side at a time, use the lower mount of the main receiver brace as a template, and a 9/16" drill bit to enlarge the existing hole in the end of the sub frame (Fig.M). Now, place one of the supplied 1/4" x 1 1/2" x 1 3/4" square hole backing plate over one of the supplied 1/2" x 1 1/2" carriage bolts and fishwire it through the existing hole in the bottom of the sub frame (Fig.N – passenger side) and out the lower mount of the main receiver brace (Fig.O). Finish with a 1/2" lock washer and nut (Fig.P) and then repeat for the other side of the vehicle.



11. Tighten all bolts to the bolt torque requirements found at the end of this document.

12. Trim the grille to allow clearance for the receivers of the main receiver brace, using Figure Q as a guide for trimming.





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- 13. Reinstall the fascia, reversing steps 1 through 4.
- 14. Insert the removable front bracket arms into the front receiver braces.
- 15. Attach the 10" safety cables with the cable connectors (Q-Links) to the front of the receiver braces (Fig.R).
- 16. Attach the ends of the safety cables to the tow vehicle's safety cables.
- 17. Install the tow bar to the mounting bracket according to the manufacturer's instructions.



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.

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