



MOUNTING BRACKET KIT INSTALLATION INSTRUCTIONS

ROADMASTER, INC.

5602 N.E. SKYPORT WAY

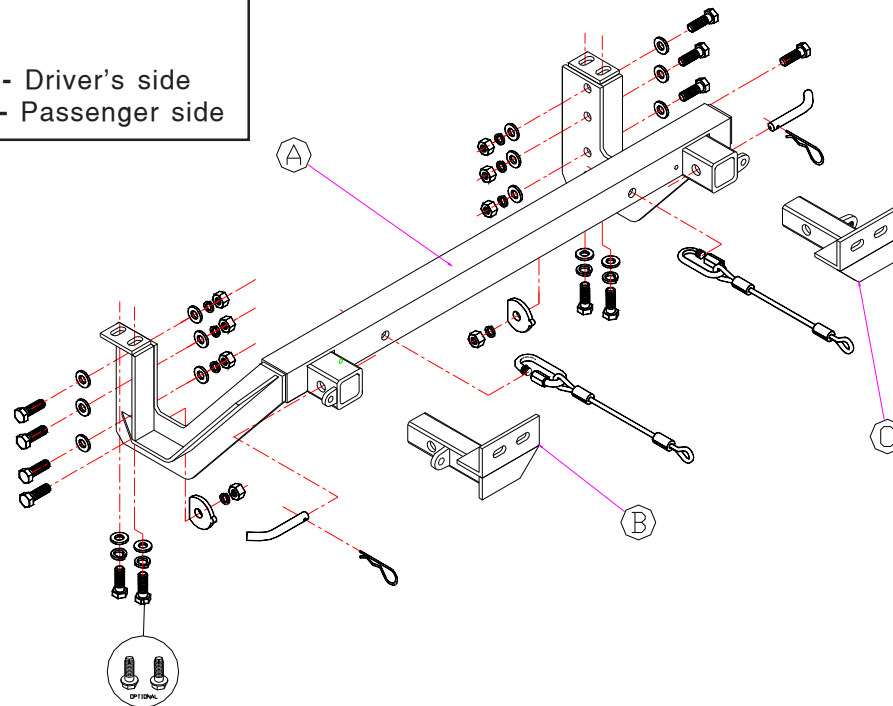
PORTLAND, OR 97218

1-800-669-9690

FAX (503) 288-8900

PARTS LIST:

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

KIT NO. 461-1**022098**

IMPORTANT: All brackets *must* be assembled with all the bolts left loose for final adjustment & 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

- Do not use this document for custom fabrication as it may not show all parts or structural components.
- ROADMASTER will not be responsible for any damage or injury resulting from any modification or alteration.
- The owner must inspect all mounts and brackets before each use for cracks or other signs of fatigue. Also, inspect the fasteners for proper torque, according to the torque chart.
- The owner must check the 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.
- The installer must read the instructions and use all bolts and parts supplied.
- If the towed vehicle has been in an accident, it must be properly repaired before attaching the brackets. Do not install the brackets if any structural frame damage is found. Failure to repair the damage may result in loss of your towed vehicle.
- Some motorhome chassis have such a tight turning radius that you can damage your motorhome, towed vehicle or tow bar while turning sharply. Before getting on the road, test your turning radius in an empty parking lot. Damage that results from turning too sharply is not covered by warranty.
- The driver must not back up the motorhome with the towed vehicle attached or non-warranty damage will occur to your towing system or towed vehicle.
- The safety cables must connect the towing vehicle to the towed vehicle frame to frame, with the cables crossed. Refer to the cable instructions for proper routing.
- Make sure there is enough slack in the safety cables at the motorhome to allow for sharp turns.
- Use caution when handling the tow bar – if your hands, fingers or any part of your body are caught between moving components, they can be pinched, cut or otherwise injured.
- This bracket is designed for use with ROADMASTER tow bars and ROADMASTER adaptors. Using this bracket with other brands, without an approved ROADMASTER adaptor, may result in non-warranty damage or injury.
- Important! This bracket is only warranted for the original installation. Installing a used bracket on another vehicle is not recommended and will void the warranty.
- Upon final installation, the installer must inspect the bracket to ensure adequate clearance, particularly around hoses, AC lines, radiators, etc., or non-warranty damage will result.

**WARNING**

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



MOUNTING BRACKET KIT INSTALLATION INSTRUCTIONS

ROADMASTER, INC.

5602 N.E. SKYPORT WAY

PORTLAND, OR 97218

1-800-669-9690

FAX (503) 288-8900

KIT NO. 461-1

1. This XL bracket kit consists of a main brace, which utilizes the existing tow bracket mounting points and hardware. Remove the plastic splash panel fasteners surrounding the front tie down brackets. Pull the splash panels down and back to provide access to these points.
2. Work on one side at a time and take two 10mm x 1.25 x 30mm bolts, flat washers, lock washers and a socket with an extension and bolt upward through the top holes of each main brace into the existing threaded holes in the frame. *Note:* 1998 and later vehicles may not have these threaded holes. In this case, push the receiver brace up into position and install with the 7/16" bolts. Using a long drill bit, drill two 1/4" holes through the bottom of the frame using the slotted top holes as a drill template. Use a 3/8" drive air wrench or ratchet to install two 3/8" x 1 1/2" self tapping bolts. Now, take three of the 7/16" x 1-1/2" bolts provided and bolt through the upper three holes in the side of the brace and the side of the tow bracket using flat washers, lock washers and nuts. *Note:* on some cars the holes may have to be enlarged slightly.
3. Bolt through the lower hole in the brace and tow bracket using a 1/2" x 1 1/2" bolt, clipped plate washer, lock washer and nut.
4. Tighten the two original top bolts first, then tighten the lower bolts. Use the torque values in the torque chart below.
5. Mount and align the tow bar according to the manufacturer's instructions, then tighten bolts to the torque specifications below.
6. Reinstall the plastic splash panels removed in step 1, then attach the included safety cables to the receiver brace with the included cable connectors. Attach the ends to the tow vehicle's safety cables and the tow bar.

Hardware –

- | | | |
|-----------------------------|-------------------------------|-------------------------------------|
| 4- 10mm x 1.25 x 30mm bolts | 6- 7/16" nuts | 2- 12" safety cables |
| 4- 10mm fender washers | 2- 1/2" x 1 1/2" bolts | 2- 5/8" draw pins |
| 4- 10mm lock washers | 2- 1/2" lock washers | 2- 1/8" spring pins |
| 6- 7/16 x 1-1/2" bolts | 2- 1/2" nuts | 4- 3/8" x 1 1/2" self tapping bolts |
| 6- 7/16" lock washers | 2- 1/2" clipped plate washers | |
| 12- 7/16" flat washers | 2- cable connectors | |

022098

CAUTION: Installer must read instructions and use all bolts and parts supplied.

FAILURE TO FOLLOW THESE INSTRUCTIONS CAN RESULT IN DEATH, PERSONAL INJURY OR PROPERTY DAMAGE

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.