



MOUNTING BRACKET KIT INSTALLATION INSTRUCTIONS

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PARTS LIST:

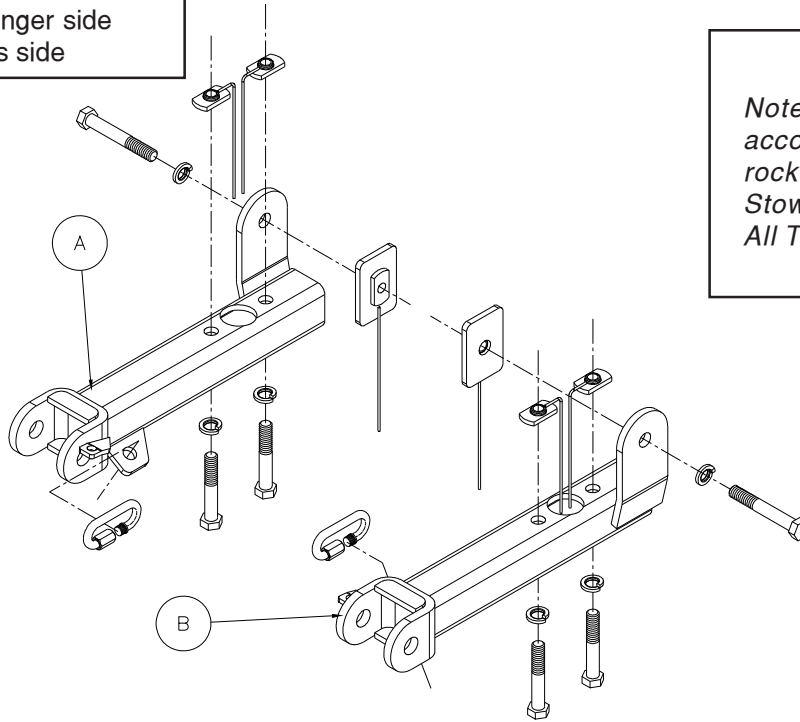
1- MAIN BRACE (A) - Passenger side

1- MAIN BRACE (B) - Driver's side

KIT NO. 480-3

Important

Note: this bracket will not accommodate the Guardian rock shield, Stowaway or the StowMaster and StowMaster All Terrain tow bars.



10/24/01

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 securely fasten the bracket could result in loss of the towed vehicle.
- 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.
- 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 bolt torque requirements chart on the last page. 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 included 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. 480-3

1. This bracket kit is one of our standard series, and is designed to attach directly to your factory tow loop mounting holes and the side of the frame. The kit consists of two main braces and a hardware pack. The main braces mount to the bottom of the frame rails on each side and extend forward through the factory tow loop area in the bumper fascia. 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. **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. Start by removing the small plastic covers in the lower bumper fascia on each side, (two plastic fasteners in each cover).
3. Working on one side at a time starting with the driver's side, put two 1/2" flat nuts with handles in the bottom of the frame rail over the factory bolt holes on each side of the large access hole in the bottom of the frame rail. Leave the wire handles on the nuts for the next step.
4. Hold the driver side main brace to the bottom of the frame with the front through the front bumper fascia and the nut handles hanging through the large access hole in the middle of the receiver brace. The side plate should be against the side of the frame over an existing frame hole.
5. Take a 1/2" x 3 1/2" bolt and lock washer and put it through the rear side mounting hole in the brace. The main brace should now hang in position below the frame. Find a 1/4" x 2" x 3" threaded backing plate with a wire handle and slide it between the radiator core support and the frame behind the 3 1/2" bolt. Thread the bolt into it and leave finger tight.
6. Now bolt through the bottom of the receiver brace and frame into the flat nuts with 1/2" x 3" bolts and lock washers.
7. Repeat steps 3 through 6 for the remaining side.
8. Torque all bolts to the specifications below.
9. Install the tow bar according to the manufacturer's instructions.
10. Attach one end of the vehicles safety cables to the lower front hole with the included cable connectors.

Hardware

- 2- 1/2" x 3 1/2" bolts
- 4- 1/2" x 3" bolts
- 6- 1/2" lock washers
- 2- 1/2" x 2" x 3" threaded backing plates with handles
- 4- 1/2" flat nuts with handles
- 2- cable connectors

10/24/01

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.