

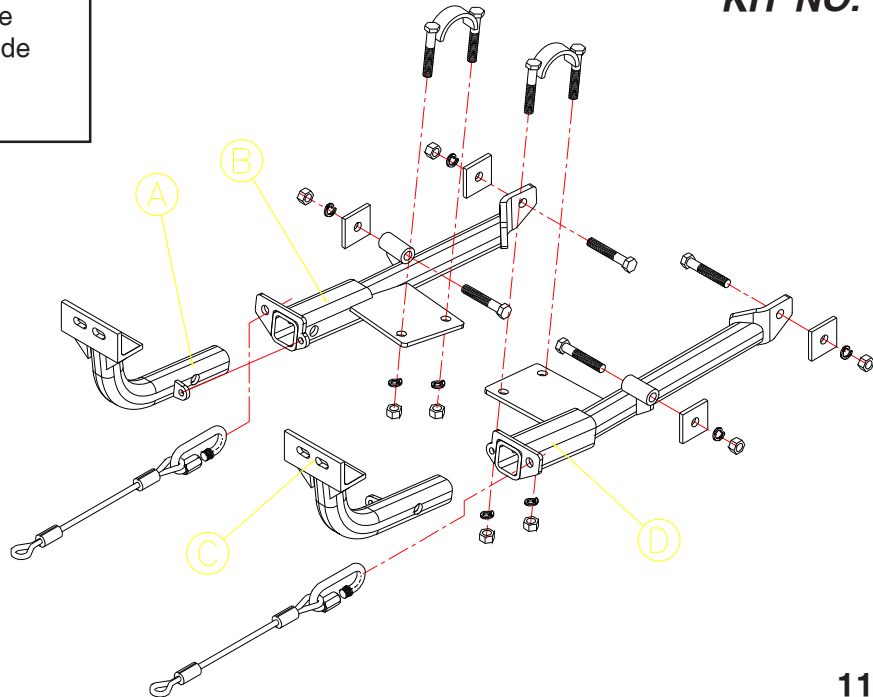
MOUNTING BRACKET KIT

INSTALLATION INSTRUCTIONS

PARTS LIST:

- 1- FRONT BRACE (A) - Passenger side
- 1- MAIN RECEIVER (B) - Passenger side
- 1- FRONT BRACE (C) - Driver side
- 1- MAIN RECEIVER (D) - Driver side

KIT NO. 1611-1



11-8-00

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.

MOUNTING BRACKET KIT INSTALLATION INSTRUCTIONS

KIT NO. 1611-1

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 consists of two main receiver braces, two front braces and a hardware pack. The main receiver braces mount behind and below the front bumper to the front engine and suspension subframe. The front braces install in the ends of the receiver braces and are pinned in place. 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. The lower splash panel will have to be removed then trimmed to fit later after the bracket kit is fully installed. Remove the splash panel at this time by removing five 6mm bolts with 10mm heads and two plastic fasteners. Now, remove two plastic fasteners from the front fender liners on each side to gain access to the outside of the sub frame rails.
2. Next, locate the front suspension and engine subframe. You should be able to locate two existing holes in the side of each sub frame rail. The holes on the inside of the sub frame rails are large enough for the 1/2" mounting bolts, however the matching holes on the outside of the frame rails are too small, these will have to be enlarged to accept the mounting bolts. Use a 1/2" drill bit to enlarge these holes.
3. Taking one side at a time starting with the passenger side, insert a 1/2" x 3 1/2" bolt through the rear frame hole with a 1/4" x 2" SQ. backing plate on the outside of the frame. Take a special strap U bolt and install over the top of the subframe's tubular cross member, approximately 5" in board of the outer subframe rail.
4. Hold the receiver brace to the inside and bottom of the subframe and bolt to the subframe with 1/2" nuts and lock washers. Now, bolt through the remaining sub frame hole and the brace with a 1/2" x 5 1/2" bolt, 1/4" x 2" SQ. backing plate, lock washer and nut.
5. Repeat steps 3 and 4 for the remaining side with the exception of using a 1/2" x 3" bolt for the rear mounting hole.
6. Check alignment then tighten the rear bolts, U bolts, then the middle bolts in that order to the torque specifications below.
8. Insert the front braces in the receivers and pin with 5/8" draw pins and 1/8" spring pins.
9. Trim the lower splash guard to fit and reinstall.
10. Install the tow bar according to the manufacturer's instructions.

Hardware

- | | |
|----------------------------------|----------------------|
| 2- 1/2" x 5 1/2" bolts | 8- 1/2" nuts |
| 1- 1/2" x 3" bolt | 2- 5/8" draw pins |
| 1- 1/2" x 3 1/2" bolt | 2- 1/8" spring pins |
| 2- 1/2" U bolts | 2- cable connectors |
| 4- 1/4" x 2" x 2" backing plates | 2- 10" safety cables |
| 8- 1/2" lock washers | |

11-8-00

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.