

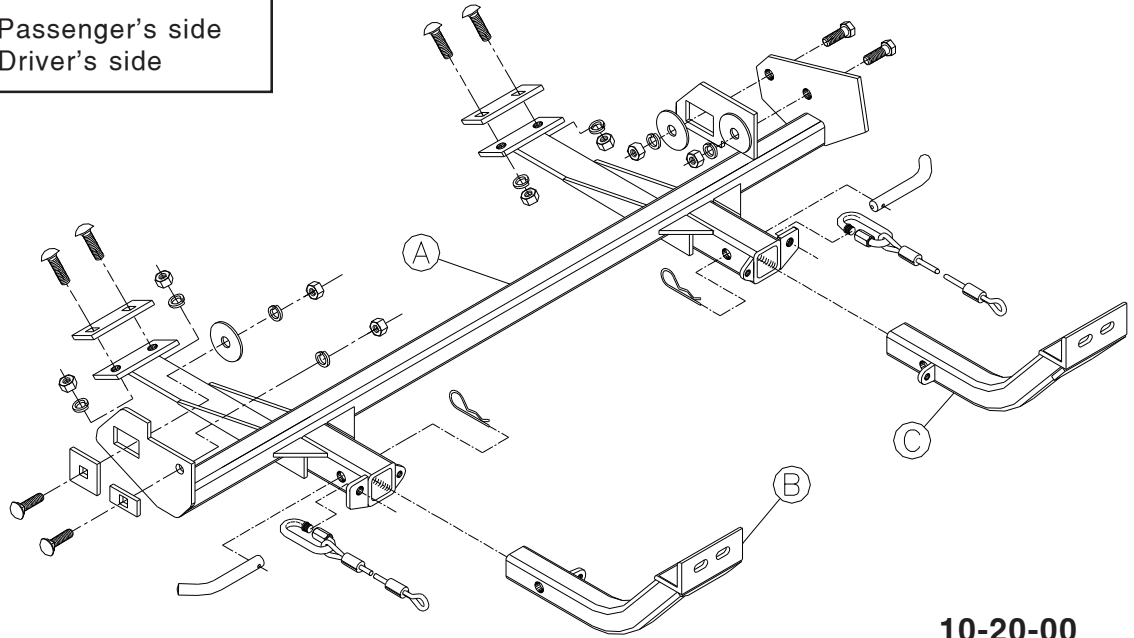
MOUNTING BRACKET KIT

INSTALLATION INSTRUCTIONS

PARTS LIST:

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

KIT NO. 191-1



10-20-00

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. 191-1

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 is one of our XL Bracket kits which are partly removable. The kit consists of the main receiver brace, two front braces and a hardware pack. The main receiver brace will fit in front of the under the radiator. Start by temporarily removing the small air deflector under the radiator. This will be trimmed to fit later.
2. The main receiver brace will fit under the radiator and mounts to the two front tie down plates. *Note:* the brace mounts differently on each side. The mounting plate on the driver side fits to the outside of the tie down plate while the mounting plate on the passenger side fits to the inside of the tie down plate.
3. Once the main receiver brace is in position, bolt through each tie down plate with a 1/2" x 1 3/4" carriage bolt on the passenger side and two 1/2" x 1 3/4" bolts on the driver's side as illustrated. Use a special large backing plate on the driver's side, and one 1/4" x 1" x 2" backing plate on the rear passenger side bolt. Finish with 1/2" plate washers, lock washers and nuts. Align the brace and tighten these bolts.
4. A 17/32" hole will now have to be drilled through the passenger side tie down plate using the brace as a template. Do this, then bolt through using a 1/2" x 1 1/2" carriage bolt, 1/4" x 2" x 2" backing plate, lock washer and nut.
5. The rear mounting plates on the main brace should be flat against the bottom of the subframe at this time. Use the rear of the brace as a template and drill four 17/32" holes into the bottom subframe. The two inner holes should already exist and need only to be enlarged.
6. Now, use the large access holes in the bottom of the sub frame to fish wire and position two 1/4" x 1 1/4" x 4 1/4" backing plates and four 1/2" x 1 1/2" carriage bolts through the holes. Finish with 1/2" lock washers and nuts.
7. Tighten all bolts to the torque specifications below.
8. Reinstall the air deflector at this time.
9. Insert the front braces into the receivers and pin with 5/8" draw pins and 1/8" spring pins.
10. Mount the tow bar according to the manufacturers specifications.
11. Attach the supplied safety cables to the receiver brace with the supplied cable connectors and then to the tow bar and the tow vehicle's safety cables.

HARDWARE LIST:

1-1/2" X 1 3/4" CARRIAGE BOLT	1-1/2" X 1" X 2" SQUARE HOLE BACKING PLATE
5-1/2" X 1 1/2" CARRIAGE BOLTS	1-1/4" X 2" X 2" SQUARE HOLE BACKING PLATE
2-1/2" X 1 3/4" BOLTS	2-1/4" X 1 1/4" X 4 1/4" TWO SQUARE HOLE BACKING PLATES
8-1/2" LOCK WASHERS	2-5/8" DRAW PINS
2-1/2" PLATE WASHERS	2-1/8" SPRING PINS
8-1/2" NUTS	2-10" SAFETY CABLES
1-1/4" TWO HOLE BACKING PLATE	2-CABLE CONNECTORS

10-20-00

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.						

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