



MOUNTING BRACKET KIT INSTALLATION INSTRUCTIONS

ROADMASTER, INC.

5602 N.E. SKYPORT WAY

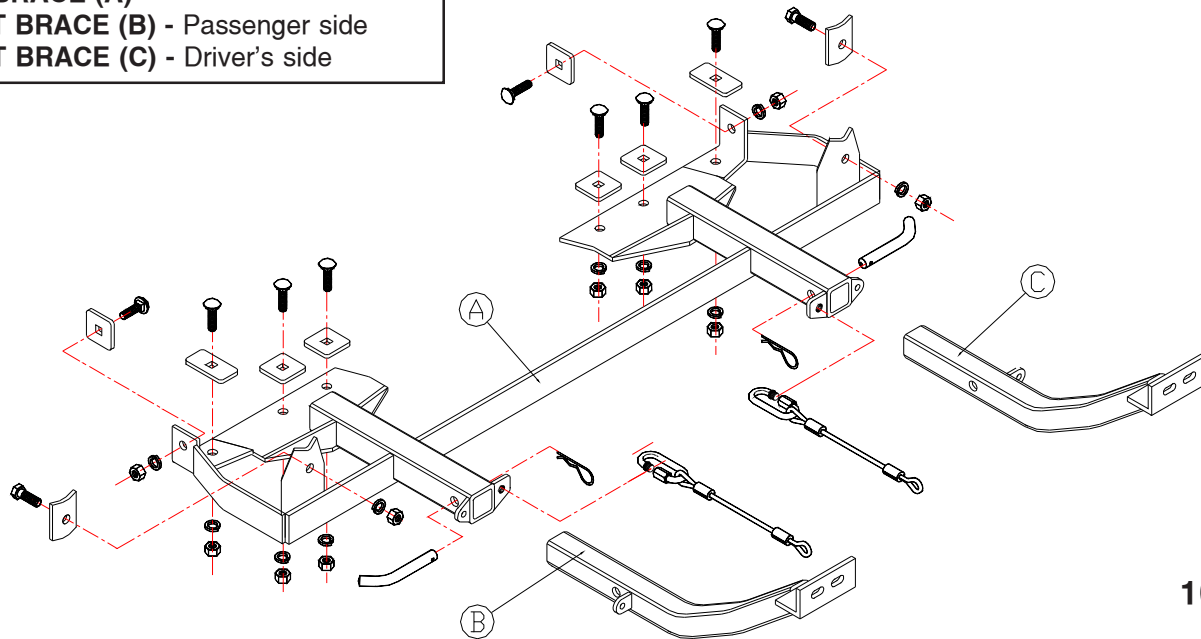
PORTLAND, OR 97218

1-800-669-9690

FAX (503) 288-8900

PARTS LIST:

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

KIT NO. 170-1**10-08-98**

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.



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KIT NO. 170-1

1. This bracket kit is one of our XL Series, which is partly removable. It utilizes the lower front subframe as a mounting base for the lower receiver brace. Remove the rubber splash guard fasteners on the drivers side and pull down for access to the side of the subframe.
2. Hold the lower receiver brace in position against the bottom of the sub frame with the front mounting tabs tight against the front of the subframe. The rear outer mounting tabs should be over existing holes in the side of the sub frame cross member. Block or clamp in this position and fish wire a 1/2" x 1 1/2" carriage bolts and 1/4" x 2" x 2" sq. hole backing plates through the front of the sub frame into the side holes and through the brace on each side. Bolt to the sub frame on each using a supplied 1/2" nut and lock washer.
3. Once the receiver brace is secured by the back bolts, check the alignment on the sub frame. The front receivers should just touch the bumper plastic and clearance should exist between the bottom of the radiator cross frame and the top of the receiver brace. Once this is correct, use the front tabs of the receiver brace as templates to drill 17/32" holes through the front of the sub frame in front of the isolation mounts on each side. *Note:* later models may have a small inspection plate under the radiator cross frame on the passenger side. Remove this plate for additional clearance.
4. Now insert the special formed 1/4" backing plates and 1/2"x 2" bolts into the holes from the inside of the sub frame and bolt in place using 1/2" nuts and lock washers.
5. Now, using the brace as a template, drill the remaining three holes in each side of the subframe.
6. Fish wire a 1/2" x 1 1/2" carriage bolt and 1/4" x 1 1/2" x 3" backing plate through the front of the subframe and into the outside bottom hole on each side. Fish wire four 1/2" x 1 1/2" carriage bolts and 1/4" x 2" x 2" backing plates into the remaining bottom holes through a large center access hole located in the subframe cross member. Finish bolting with 1/2" lock washers and nuts.
7. Tighten all bolts to the torque specifications below then replace the splash guard fasteners. Trim as necessary to fit.
8. Insert the front tubular braces into the lower receiver tubes making sure that they are mated to the correct side. If correct, the lock holes located on the receiver lip will match the front brace lock holes. Install the supplied 5/8" receiver pins in the receivers as illustrated and safety pin with the supplied spring pins.
9. Mount the tow bar according to the manufacturers instructions and torque all bolts to the specifications below.
10. Attach the included safety cables to the front of the receiver brace and the other end to the tow bar and the tow vehicle's safety cables.

10-08-98

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.



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HARDWARE LIST:

- 8-1/2" X 1 1/2" CARRIAGE BOLTS
- 10-1/2" LOCK WASHERS
- 10-1/2" NUTS
- 2-5/8" DRAW PINS
- 2-1/8" SPRING PINS
- 2-CABLE CONNECTORS
- 2-14" SAFETY CABLES
- 6-1/4" X 2" X 2" SQ. HOLE BACKING PLATES
- 2-1/4" X 1 1/2" X 3" BACKING PLATES
- 2-1/4" X 2" X 2 1/2" FRONT BACKING PLATES
- 2-1/2" X 2" BOLTS

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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

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