1-800-669-9690

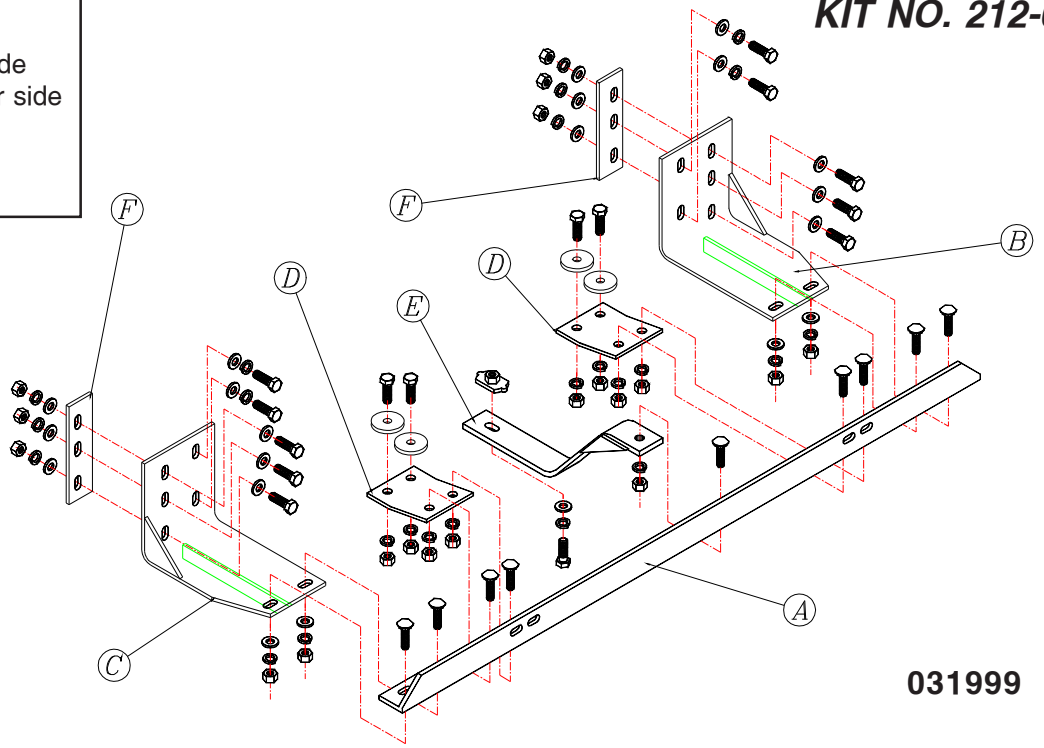
R O A D M A S T E R

MOUNTING BRACKET KIT INSTALLATION INSTRUCTIONS

ROADMASTER, Inc. 6110 NE 127th Ave. Vancouver, WA 98682 1-800-669-9690 fax 360-735-9300 www.roadmasterinc.com

PARTS LIST:
1- FACE PLATE (A)
1- MAIN BRACE (B) - Driver's side
1- MAIN BRACE (C) - Passenger side
2- BUMPER BRACES (D)
1- CENTER BRACE (E)
2- BACKING PLATE (F)

KIT NO. 212-0



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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 warranteed 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. 212-0

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 is designed to fit behind the front bumper and uses the bumper bracket mounts and motor mount as attachment points. Begin by removing the front bumper. Remove the two nuts on each side that hold the bumper plastic to the fender and remove backing plate. Set aside for reinstallation later.
2. Remove the two bolts on each side that hold the bumper brackets to the front of the car and discard bolts. Pull the bumper straight off the front of the car.
3. Locate a main brace(B or C) and install on the front of the car with two 10mm x 1.5 x 45 bolts, lock washers and flat washers. Install braces so that the two oval holes are over the holes left by the bumper bracket and the three holes in the brace are to the outside.
4. Temporarily install the face plate (A) onto the main braces and bolt the face plate to the main braces with four ½" x 1½" carriage bolts, flat washers and nuts. Align the main braces so that they are level with each other, then tighten the four bolts at the face plate. Again check main brace alignment and tighten the four 10mm bolts previously installed.
5. Using the main braces as templates, drill three 17/32" holes through the body metal on each side. Insert a ½" x 1½" bolt with a flat washer through the main brace and body metal, then install the three hole backing plate, flat washers, lock washers and nuts on the back side of the body metal. Torque all six ½" bolts to the torque chart below.
6. Remove the face plate and the four 10mm bolts from the main braces. Go to the bumper and remove four nuts on each side that secure the bumper brackets to the bumper and save. Bolt the bumper brackets to the main braces with the 10mm bolts previously removed. Align the brackets so that they are even with each other and torque the four 10mm bolts to the torque chart below. Install the bumper onto the bumper brackets(some models will require the plastic skin to be cut in order to mount the bumper) then install the face plate back onto the main braces with the ½" carriage bolts, flat washers, lock washers and nuts.
7. Locate the two bumper braces and loosely bolt to the bottom of the face plate with four ½" carriage bolts, lock washers and nuts. Drill one 17/32" hole through the brace and into the bottom of the bumper, then bolt through with a ½" x 1½" bolt, plate washer(on the inside of the bumper), lock washer and nut. Torque the three bolts to the torque chart below, then drill the forth hole into the bumper and bolt through in the same manner.
8. Insert a ½" x 1½" carriage bolt down through the hole located in the center of the face plate. Install the center brace(D) onto this bolt and finish with a lock washer and nut, hand tight at this time. Insert the nutted plate washer into the lower motor mount, then fasten the lower portion of the center brace to the motor mount with a ½" x 1½" bolt, lock washer and flat washer.
9. Torque all bolts according to the chart below. Mount the tow bar according to the manufacturer's instructions.

Hardware List

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11- ½" x 1-1/2" bolts
9- ½" x 1-1/2" carriage bolts
4- 10mm x 1.5 x 45 bolts
20- ½" nuts
17- ½" flat washers
19- ½" lock washers
4- 10mm flat washers
4- 10mm lock washers
4- ½" plate washers
1- nutted backing plate
2- ¼" x 4" x 5" bumper braces
2- three hole backing plates

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

Thread Size	Grade	Torque
5/16	5	13 ft./lb.
3/8	5	23 ft./lb.
7/16	5	37 ft./lb.
1/2	5	56 ft./lb.
5/8	5	150 ft./lb.

METRIC BOLTS

Thread Size	Grade	Plated / Unplated
8mm-1.0	8.8	20 ft./lb. 18 ft./lb.
8mm-1.25	8.8	19 ft./lb. 18 ft./lb.
10mm-1.25	8.8	38 ft./lb. 36 ft./lb.
10mm-1.5	8.8	37 ft./lb. 35 ft./lb.

METRIC BOLTS

Thread Size	Grade	Plated / Unplated
12mm-1.25	8.8	70 ft./lb. 65 ft./lb.
12mm-1.5	8.8	66 ft./lb. 61 ft./lb.
12mm-1.75	8.8	65 ft./lb. 60 ft./lb.
14mm-2.0	8.8	104 ft./lb. 97 ft./lb.