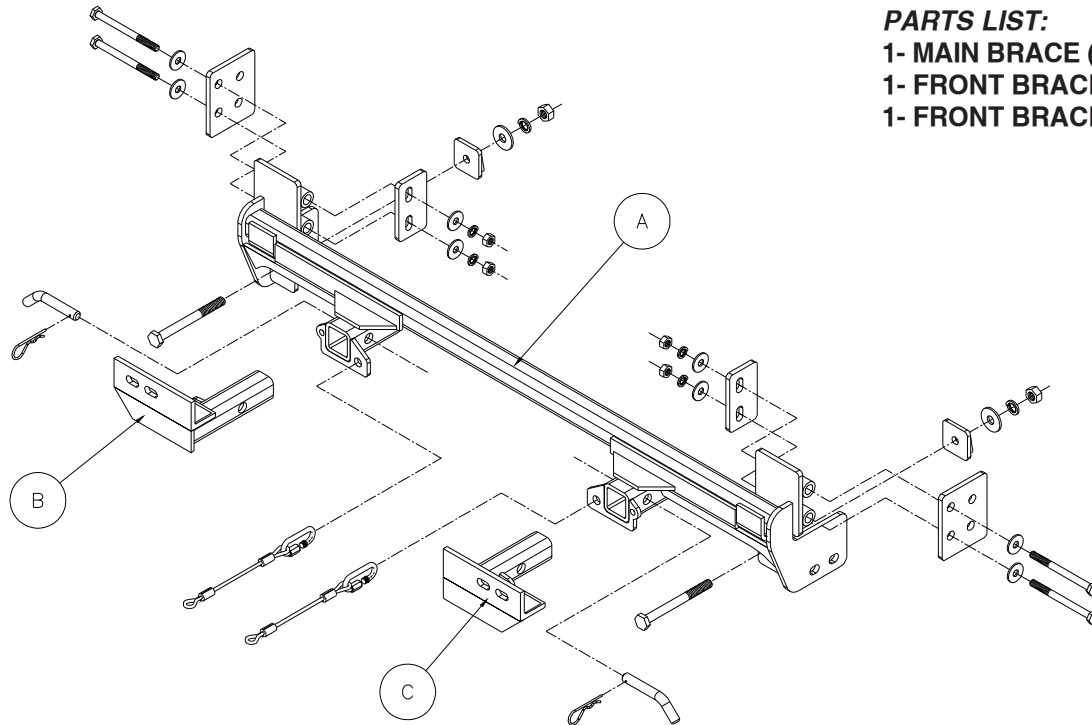


BASEPLATE KIT INSTALLATION INSTRUCTIONS

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



PARTS LIST:

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

KIT NO. 481-3

11/12/04

IMPORTANT: All baseplates *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 and lock washers on all fasteners.

WARNING

Failure to heed these warnings or follow the installation instructions may result in a voided warranty, loss of towed vehicle, personal injury or death.

- Do not weld or modify this baseplate or its components. Welding or modification will void the warranty.
- Do not use this document as a basis to design/fabricate a baseplate, as it may not show all parts or structural components.
- We strongly recommend professional installation.
- If the towed vehicle has been in an accident, it must be properly repaired before attaching the baseplate. Do not install the baseplate if any structural frame damage is found.
- The installer must use all bolts and parts supplied. If running changes were made by the vehicle manufacturer after this kit was designed, some bolts or other fasteners may no longer be the correct size. It is the installer's responsibility to verify this kit is securely fastened to the vehicle.
- Use Loctite® Red on all bolts used to secure this baseplate. Torque all bolts to the specifications found at the end of these instructions. Do not over-torque the bolts or failure may occur.
- The installer must inspect the baseplate to ensure adequate clearance, particularly around hoses, air conditioner lines, radiators, etc. or non-warranty failure may result.
- Roadmaster manufactures many styles of baseplates. If your baseplate has removable arms, they must be removed before driving the vehicle, unless the arms can be pinned or padlocked in place. If not secured, the arms could vibrate out.
- Some motorhome chassis have such a tight turning radius that you can damage your motorhome, towed vehicle, tow bar or baseplate 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 your 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 or vehicles.
- 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. See cable instructions for proper routing. Failure to do so will result in non-warranty damage and/or the loss of the towed vehicle.
- This kit is designed for use with ROADMASTER tow bars and ROADMASTER adapters only. Using this kit with other brands, without an approved ROADMASTER adapter, may result in non-warranty damage or injury.
- Receiver extensions and out-of-level towing situations of 3 inches or more. This can cause the system to swing much higher and lower, causing excessive strain on the tow bar, baseplate and frame. That can cause the towing system to fail, causing property damage, personal injury or even death. If you must use a receiver extension or drop hitch to tow, it will reduce your receiver's weight capacity by 1/3 to avoid damaging your system. Never use more than one extension and/or drop hitch, as this will void your warranty.
- Every 3,000 miles, the owner must inspect all mounting points for cracks or fatigue, and check the fasteners for proper torque, according to the bolt torque requirements chart on the last page of these instructions.
- The owner must follow the vehicle manufacturer's instructions to prepare the vehicle for towing. Failure to do so may cause severe damage to the vehicle.
- This baseplate is only warranted for the original installation. Installing a used baseplate on another vehicle is not recommended and will void the warranty.

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KIT NO. 481-3

- 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 series, which allows the visible front portion of the brackets to be easily removed from the front of the car by removing the front braces. The bracket kit consists of a receiver brace, two front braces, and a hardware pack. The rear receiver brace mounts to the front of the frame and protrudes through the lower grill below the headlights. The bumper core is removed and replaced with the receiver brace. The front braces insert into the rear brace and pin in place. Before starting the installation, lay out the kit components as it is illustrated. This will give you a visual idea of how the components work and also confirm that everything is present and accounted for.
- Begin by removing the front fascia, starting with two (T-25 torx screws) located on the top near the inside corners of the headlights, three plastic fasteners in each fender well. Now, remove one Philip head plastic fastener at each fascia, fender junction, two plastic fasteners under the bumper core and eight bolts (10mm head) under the fascia. Pull forward to remove then set aside. *Note:* retain the bumper core and attachment hardware so that it can be replaced in case the bracket is ever removed.
- Working on both sides, remove the front tie down plates and keep the bolts (five 13mm head bolts each).
- Remove the bumper core and the inner backing plates on the inside of the frame rails on each side (two 14mm nuts, four 13mm head bolts on each side).
- Hold the main receiver brace to the front of the frame rails with the tubular mounts inside the front of the frame tubes on each side with the lower slotted mounting holes over the tie down mounts on each side. Bolt through the lower slotted mounting holes of the receiver brace with two of the bolts removed in step 3. Leave loose for now.
- Working on one side at a time, take a 5/16" four hole backing plate and hold to the side of the frame mounting area as illustrated. Bolt through the rear holes with two more bolts removed in step 3. Find two 10mm x 1.5 x 140mm bolts and bolt through the two front holes, frame and a 5/16" two hole backing plate. Finish with 10mm nuts, lock washers and fender washers.
- Repeat step 6 for the remaining side.
- Align the brace up and down and parallel to the ground then tighten bolts to hold position.
- Locate the remaining mounting holes in the front of the brace under the mounting area. Using the brace as a drill guide, drill a 1/2" hole through the frame on each side. *Note:* this hole goes through the back of the frame in a limited area. Try to keep the hole centered in the middle of the frame junction.
- Bolt through the brace and frame on each side with a 1/2" x 5 1/2" bolt. Use a supplied 1/4" x 2" x 2" backing plate, beveled washer backing plate, flat washer, lock washer and nut to finish each bolt. Torque these bolts to 50-ft. lbs.
- Torque all remaining mounting bolts to the specifications below.
- The front of the air opening under the bumper core may have to be trimmed slightly for clearance around the top of the bracket. Trial fit the fascia, mark and trim.
- Once the trimming is done, reinstall the fascia, reversing step 2 with the exception of replacing the bumper core and inner frame backing plates.
- Install the front braces by inserting into the front of the receivers and securing with 5/8" draw pins and 1/8" spring pins.
- Mount the tow bar according to the tow bar manufacturer's instructions. Install the 8" safety cables to the side of the main receivers with the quick links provided. Attach the other end to the tow vehicle's safety cables and the tow bar.

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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KIT NO. 481-3

Hardware list

- 4- 10mm x 1.5 x 140 mm bolts
- 4- 10mm lock washers
- 8- 10mm fender washers
- 4- 10mm nuts
- 2- 1/2" x 5 1/2" bolts
- 2- 3/4" beveled washers backing plates
- 2- 1/2" flat washers
- 2- 1/2" lock washers
- 2- 1/2" nuts
- 2- 5/16" x 4 1/2" x 3 5/8" backing plates
- 2- 5/16" x 2 1/4" x 4" slotted backing plates
- 2- 8" safety cables
- 2- cable connectors
- 2- 5/8" draw pins
- 2- 1/8" spring pins

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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.

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.