

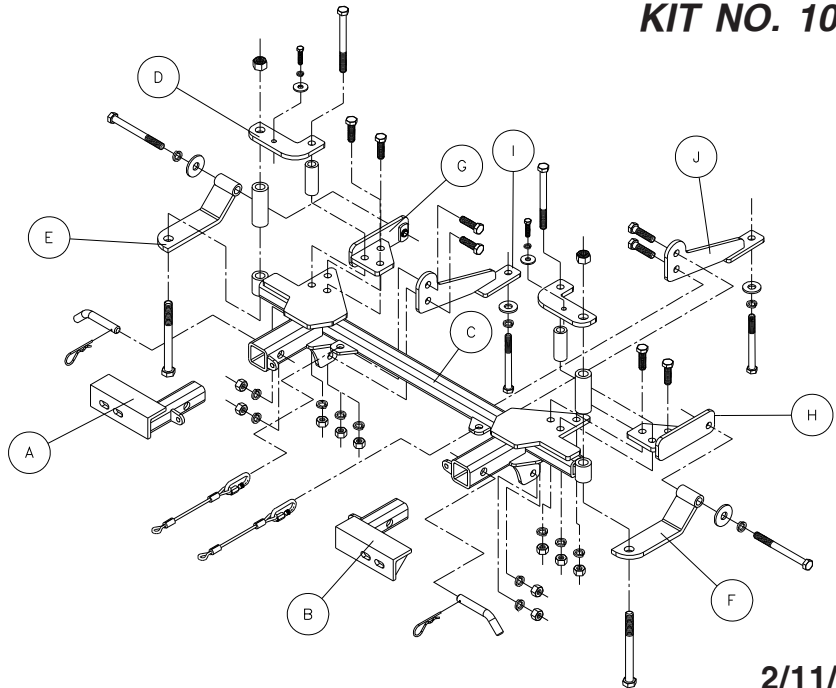
BASEPLATE KIT INSTALLATION INSTRUCTIONS

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

PARTS LIST:

- 1- FRONT BRACE (A) - Passenger side
- 1- FRONT BRACE (B) - Driver's side
- 1- MAIN BRACE (C)
- 2- TOP PLATES (D)
- 1- OUTER REAR BRACE (E) - Passenger side
- 1- OUTER REAR BRACE (F) - Driver's side
- 1- INNER REAR BRACE (G) - Passenger side
- 1- INNER REAR BRACE (H) - Driver's side
- 1- LOWER BRACE (I) - Passenger side
- 1- LOWER BRACE (J) - Driver's side

KIT NO. 1011-3



2/11/03

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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- 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 by removing four plastic fasteners on the top of the front grill, carefully pull the grill straight forward to remove then set aside. This will expose the top plastic fasteners in the bumper fascia. *Note:* the side sockets that hold the grille in can be quite tight, a wire or hook may help in pulling loose.
- Locate and remove two 12mm (head) bolts holding a small vacuum pump to the back of the bumper core. Leave the pump attached to the vehicle, and tuck it out of the way for now.
- Remove the front fascia, starting with seven plastic fasteners on top. Now, remove the plastic and screw fasteners in the front of each fender especially the hidden 10mm (head) screw located in the top junction of the fender and fascia on each side. Remove three remaining 10mm (head) bolts from the bottom sides and center.
- Remove the marker light connectors on each side, then pull the fascia forward and set aside.
- Remove the center fascia brace by removing two 10mm (head) bolts.
- Remove the bumper core (two 12mm head) bolts per side.
- Locate existing holes in the outside of each frame rail about 10" back from the front. These holes will be used to mount and align the inner and outer rear braces. The outer holes are large enough for the 1/2" bolt, the corresponding holes on the inside of the frame must be enlarged to 1/2" with a drill bit.
- Working on one side at a time, assemble a 1/2" x 5" bolt, flat washer and lock washer through an outside rear brace as illustrated then insert through the frame holes. Position the inner brace over the bolt in the frame and thread the 1/2" bolt into the inner rear brace. Tighten enough to hold braces in alignment. Repeat for the remaining side.
- Remove two front lower suspension bolts (19mm head) then install the lower braces with supplied 12mm x 1.25 x 120mm bolts. *Note:* later vehicles may have a additional lower metal air dam attached which will have to be trimmed to fit around the lower braces. If needed, trim now.
- Mount the main receiver brace in place with four 1/2" x 1 1/2" bolts through the lower braces and four through the two rear holes of the rear inside braces. Finish with 1/2" lock washers and nuts.
- Bolt through the ends of the main receiver brace, rear outer braces, 1 1/4" O.D. x 3 3/8" spacer tubes and top clamping plates with a 5/8" x 6 1/2" bolt and lock nut. Bolt through the inside holes on the top clamping plates, 1" x 2 5/8" pipe spacers, inner rear braces, and main brace with 1/2" x 5" bolts, lock washers and nuts. Tighten the bolts holding the flat plate enough to clamp the main brace in position. *Note:* additional shim washers are provided to accommodate minor differences between frame height, use if needed to prevent crushing the end of the frame. Align the top hole in the flat plate with the bumper-mounting hole in the top of the frame then tighten all bolts to the torque specifications below.

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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.



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13. Before installing the bumper core, slot the vacuum pumps inner-mounting hole. Install the matching mounting bolt in the back of the bumper core. This will help when remounting in limited access space.
14. Replace the bumper core using new 8mm x 1.25 x 35mm bolts, lock washers and flat washers on the top and the original bolts on the side of the frame.
15. Now install the vacuum pump behind the bumper core.
16. Reinstall the fascia, reversing steps 4 through 7.
17. Install the front braces by inserting and pinning with 5/8" draw pins and 3/16" spring pins.
18. Replace the grille-reversing step 2.
19. Mount the tow bar according to the tow bar manufacturer's instructions. Install the 12" safety cables to the side of the main receiver portion of the bracket with quick links provided. Attach the other end to the tow vehicle's safety cables and tow bar.

Hardware list

- | | |
|----------------------------------|------------------------------|
| 2- 5/8" x 6 1/2" bolts | 2- 8mm fender washers |
| 2- 5/8" lock nuts | 2- 8mm lock washers |
| 4- 1/2" x 5" bolts | 2- 12mm x 1.25 x 120mm bolts |
| 8- 1/2" x 1 1/2" bolts | 2- 12mm lock washers |
| 2- 1" O.D. x 2 5/8" pipe spacers | 2- 12mm flat washers |
| 2- 1 1/4" x 3 3/8" Pipe spacers | 2- 12" safety cables |
| 12- 1/2" lock washers | 2- cable connectors |
| 2- 1/2" flat washer | 2- 5/8" draw pins |
| 10- 1/2" nuts | 2- 3/16" spring pins |
| 2- 8mm x 1.25 x 35mm bolts | |

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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.						