



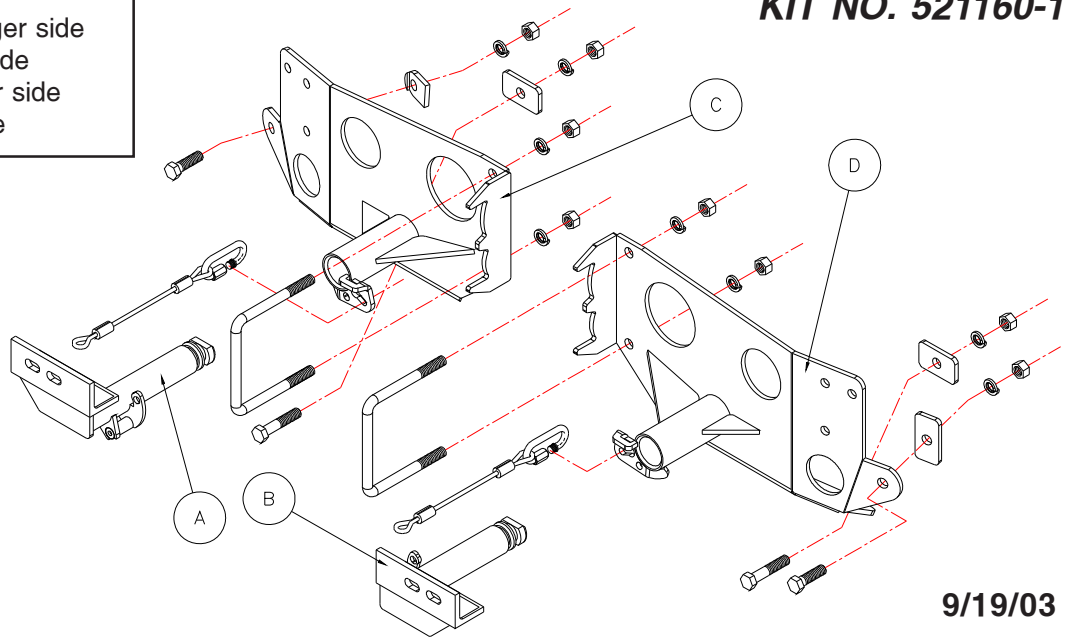
# BASEPLATE KIT INSTALLATION INSTRUCTIONS

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 side
- 1- MAIN BRACE (C) - Passenger side
- 1- MAIN BRACE (D) - Driver side

KIT NO. 521160-1



9/19/03

**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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**KIT NO. 521160-1**

1. This is one of our EZ lock bracket series, which allows the visible front portion of the brackets to be easily removed from the front of the car by rotating the front braces. The bracket kit consists of two main receiver braces, two tubular front braces and a hardware pack. The rear receiver braces mount to the bottom and side of the frame and protrude through the lower grill below the bumper. The front tubular braces insert into the rear braces and rotate 90 degrees to lock in place. The lower bumper fascia will have to be trimmed slightly to fit around the rear portion of the main receiver braces. 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.
2. **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. Remove the front fascia, starting with two Phillips screws on the top between the headlights. Remove four bolts (10mm head) and two more Phillips screws from the bottom then two screws in the fender wells.
3. Pull forward on the fascia and remove the fog light connectors on each side, then set aside. Now remove the Styrofoam bumper core facing and set aside.
4. Remove three nuts from the bumper core-mounting studs on each side then remove the bumper core.
5. Mount the driver and passenger side receiver braces on the front of the frame over the bumper core-mounting studs, then replace the bumper core and secure with the nuts removed in step 4.
6. Install the large U-bolts around the bumper core and through the receiver braces. Secure with 1/2" nuts and lock washers.
7. Bolt through the tie down loops and the bottom of the receiver braces with 1/2" x 2 1/2" bolts, 1/4" x 1 1/2" x 2 1/2" backing plates, lock washers and nuts.
8. Bolt through the DS tow loop with a 1/2" x 2" bolt, 1/4" x 1 1/2" x 2 1/2" backing plate, lock washer and nut.
9. The passenger side doesn't have a tow loop, instead we will clamp the frame flange with a special 1/4" plate, bolting with a 1/2" x 2" bolt, lock washer and nut.
10. Tighten all bolts to the torque specifications below, then check for proper clearance from all tubing, radiator components etc.
11. Temporarily install the Styrofoam facing on the bumper core and mark where the U-bolt passes underneath. Remove the Styrofoam and relieve the marked areas to clear the U-bolts. This is important to insure a final fit for the fascia so make sure it is relieved. A small air sander works well for this. When done, reinstall.

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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			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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12. Trial fit the fascia and trim as needed.
13. Reinstall the fascia, reversing steps 2 and 3. The bottom four fasteners will be replaced with four 6mm x 1.0 x 25mm bolts, fender washers and nylon ties. Simply screw through the nylon ties then thread the nylon ties through the original mounting holes and secure. This provides adjustment for the mounted bracket without further trimming on fascia.
14. Install the front braces by inserting with front braces vertical to the ground, push in and twist down 90 degrees to lock in place.
15. Replace the lower splash shields on each side.
16. Mount the tow bar according to the tow bar manufacturer's instructions. Install the 8" 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 the tow bar.

### Hardware list

- 2- 1/2" x 2" bolts
- 2- 1/2" x 2 1/2" bolts
- 2- 1/2" x 5 1/2" x 5" U-bolts
- 8- 1/2" lock washers
- 8- 1/2" nuts
- 3- 1/4" x 1 1/2" x 2 1/2" backing plates
- 1- 1/4" clamping plate
- 4- nylon tie straps
- 4- 6mm fender washers
- 4- 6mm x 1.0 x 25mm bolts
- 2- 8" safety cables
- 2- quick links

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5/16	5	13 ft./lb.
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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.