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# ROADMASTER

## BASEPLATE KIT INSTALLATION INSTRUCTIONS

KIT# 521624-1

**09/18/08** 

6110 NE 127th Ave. Vancouver, WA 98682 1-800-669-9690 fax 360-735-9300 www.roadmasterinc.com Special tools required: 1 - Hole saw - 2" **686 ITEM** QTY **NAME MATERIAL** 350103-00 



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his is one of our EZ2 series brackets, which allows the visible front portion of the bracket to be easily removed from the front of the vehicle (Fig.A and Fig.B). The bracket kit consists of a pas-senger and driver side main receiver brace, two lower braces, two removable front braces and a hardware pack. The main receiver braces mount to the bumper core and frame rails and the lower braces mount to the main receiver braces. The removable front braces install in the main receiver braces.

Before starting the installation, lay out the kit components in order, as they will be used. This will give you a visual idea of how the components work, and will also confirm that everything is present and accounted for.





**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.

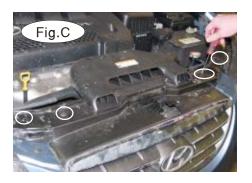
- Do not weld or modify this baseplate or its components. Welding or modification will void the warranty.
- Do not use this document as a basis to design/fabricate a baseplate, as it may not show all parts or structural components.
- We strongly recommend professional installation.
- If the towed vehicle 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

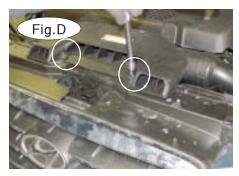
- result in non-warranty damage to your towing system, motorhome and/or towed vehicle.
- Do not back up with the towed vehicle attached or non-warranty damage will occur to your towing system or vehicles.
- The safety cables must connect the towing vehicle to the towed vehicle frame to frame, with the 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 nonwarranty 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 warranteed for the original installation.
   Installing a used baseplate on another vehicle is not recommended and will void the warranty.



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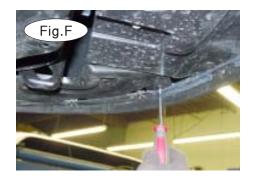
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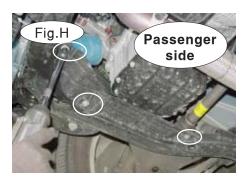




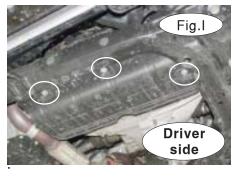
- 1. Important: please use all supplied bolts and parts and read all instructions carefully before beginning this installation. The majority of questions you may have can be answered within the text, and proper installation will ensure safe and secure travel. Now, begin the installation by removing four plastic fasteners attaching the top of the fascia to the core support (Fig.C).
  - 2. Next, remove two 10mm bolts attaching the air intake to the core support (Fig.D).
  - 3. On each side, remove one 8mm screw attaching the corner of the fascia to the fender (Fig.E).







- 4. On each corner, remove three plastic fasteners attaching the splash panel to the fascia (Fig.F).
- 5. Now, remove five 10mm bolts attaching the center splash panel to the radiator support (Fig.G).
- 6. On both sides, remove three 10mm (head) screws attaching the two rear splash panels to the sub frame (Fig.H, I).







- 7. Unplug the fog lights (if your vehicle is so equipped).
- 8. Now, remove the fascia by pulling out and forward on both corners (Fig.J).
- 9. Using the yellow marker line in Figure K as a guide, trim the air deflectors on both sides to allow clearance for the main receiver braces (Fig.K).



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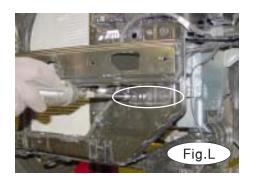
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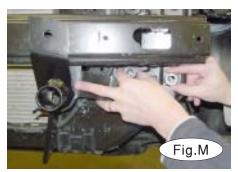
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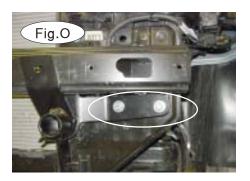
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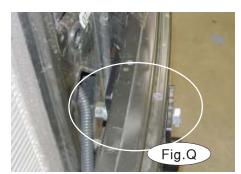




- 10. On both sides, remove the two lower 12mm (head) bolts attaching the bumper core to the ends of the frame rails (Fig.L).
- 11. Next, place the driver side main receiver brace over the bumper core and rotate the main receiver brace slightly toward the center of the vehicle (Fig.M). Place the pipe spacers over the holes you removed the 12mm (head) bolts from in step 10. Now, rotate the main receiver brace into place so that the spacers are between the end of the frame rail and the main receiver brace (Fig.N).

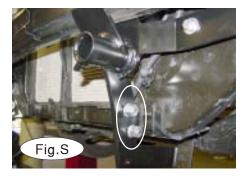


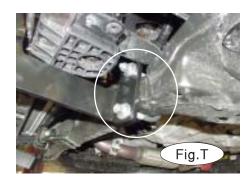




- 12. Bolt through the main receiver brace, pipe spacers and into the existing weld nuts using the supplied 8mm x 1.5 x 45mm bolts, lock washers and fender washers (Fig.O).
- 13. Now, place a 1" x 2" pipe spacer inside the bumper core (Fig.P). Bolt through the main receiver brace, bumper core and pipe spacer with the  $\frac{1}{2}$ " x  $3\frac{1}{2}$ " bolt, lock washer and nut (Fig.Q,R).







- 14. Bolt the lower brace to the main receiver brace using the supplied  $2\frac{1}{2}$ " x  $1\frac{1}{2}$ " bolts, lock washers, flat washers and nuts (Fig.S).
- 15. Using the supplied 3/8" x  $3\frac{1}{2}$ " x  $2\frac{1}{2}$ " U-bolt, bolt around the sub frame and into the lower brace. Finish with the 3/8" flat washers, lock washers and nuts (Fig.T).



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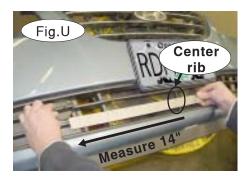
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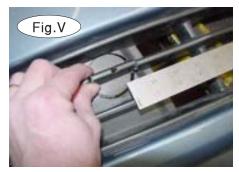
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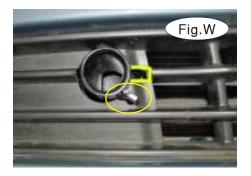
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- 16. Repeat steps 11 through 15 for the passenger side of the vehicle.
- 17. Now, tighten all bolts to the torque specifications listed at the end of these instructions.
- 18. The fascia needs to be trimmed to allow clearance for the main receiver braces. First, measure out 14" from the center vertical rib (Fig.U). Now, using a 2" hole saw, drill directly through the center of the horizontal rib (Fig.V). Finally, use the yellow marker line in Figure W as a guide to complete the trimming. *Note*: the yellow marker line is the guide for trimming to allow clearance for the lock tab on the removable front braces. The yellow circle indicates the trimming for the receiver side of the lock tab







- 19. The splash shields you removed earlier will need to be trimmed before replacing them. Use the yellow marker line in Figure X as a guide for trimming to allow clearance for the main receiver brace and lower brace. Repeat for the other side.
- 20. Use the yellow marker line in Figure Y as a guide for trimming to allow clearance of the U-bolts. Repeat for the other side.
- 21. Reinstall the splash shields and fascia, reversing steps 1 through 8.
- 22. Insert the removable front braces into the main receiver brace, and twist them 90 degrees to lock. Attach the safety cables with the cable connectors (Q-Links) to the front of the receiver brace (Fig.Z). Attach the ends of the safety cables to the tow vehicle's safety cables and tow bar.
- 23. Install the tow bar to the mounting bracket according to the manufacturer's instructions.

#### **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						