

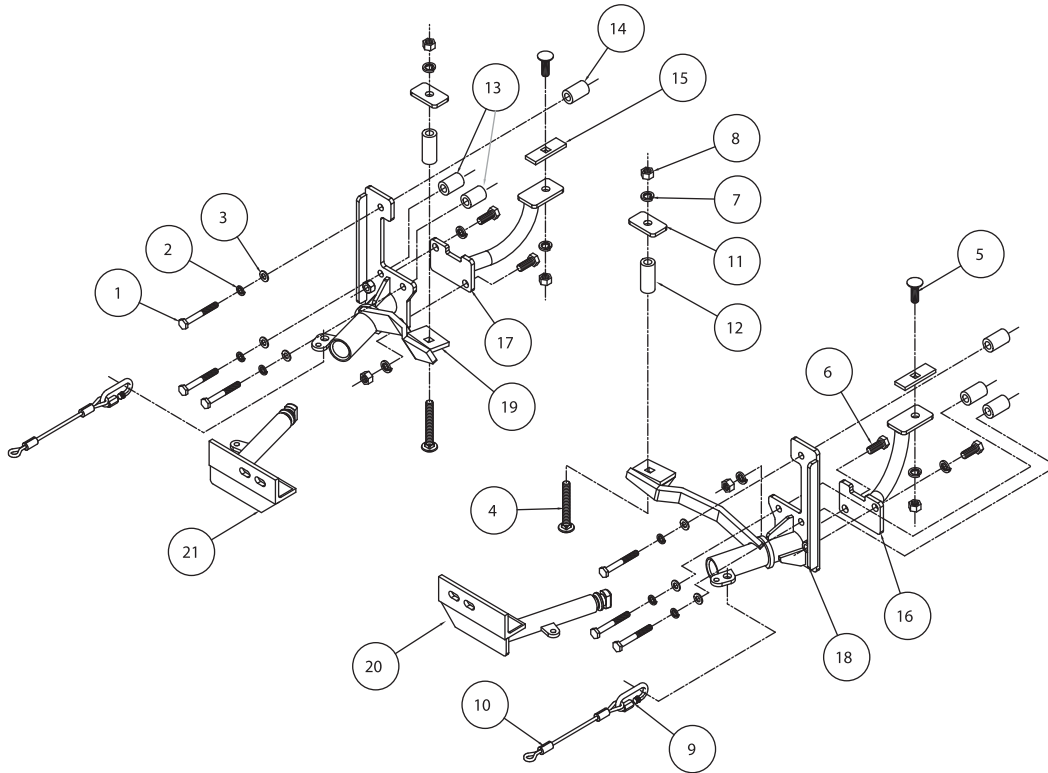


# BASEPLATE KIT INSTALLATION INSTRUCTIONS

**KIT# 521233-1**

02/18/08  
KS

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



ITEM	QTY	NAME	MATERIAL
1.....	6.....	10mm x 1.5 x 75 mm BOLT.....	356114-00
2.....	6.....	10mm LOCK WASHER.....	355715-00
3.....	6.....	10mm FLAT WASHER.....	355710-00
4.....	2.....	1/2" x 4" CARRIAGE BOLT.....	350124-00
5.....	2.....	1/2" x 1 1/2" CARRIAGE BOLT.....	350362-00
6.....	4.....	1/2" x 1 1/4" BOLT.....	350094-00
7.....	8.....	1/2" LOCK WASHER.....	350309-00
8.....	6.....	1/2" HEX NUT.....	350258-00
9.....	2.....	QUICK LINK.....	200008-00
10.....	2.....	SAFETY CABLE 8".....	500646-08
11.....	2.....	1/4" x 1 1/2" x 2 1/2" BACKING PLATE W/ ROUND HOLE.....	A-000134
12.....	2.....	1" O.D. x 0.219 WALL x 2 1/4" TUBE SPACER.....	A-000621
13.....	2.....	1" O.D. x 0.219 WALL x 1 1/2" TUBE SPACER.....	A-000872
14.....	4.....	1" O.D. x 0.219 WALL x 1 5/8" TUBE SPACER.....	A-001442
15.....	2.....	1/4" x 1" x 3" BACKING PLATE W/ SQ. HOLE.....	A-001483
16.....	1.....	DRIVER SIDE REAR BRACE.....	C-001634
17.....	1.....	PASSENGER SIDE REAR BRACE.....	C-001635
18.....	1.....	DRIVER SIDE RECEIVER.....	C-001636
19.....	1.....	PASSENGER SIDE RECEIVER.....	C-001637
20.....	1.....	DRIVER SIDE ARM.....	C-001638
21.....	1.....	PASSENGER SIDE ARM.....	C-001639
22.....	2.....	ZIP TIE.....	300140-8
23.....	2.....	1/4" x 3/4" SELF-TAPPING SCREW.....	350271-00



# BASEPLATE KIT INSTALLATION INSTRUCTIONS

**KIT# 521233-1**

02/18/08  
KS

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

This 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 consists of a main receiver brace, two removable front braces and a hardware pack.

The main receiver brace mounts to the frame rails and the bumper core. The removable front braces install in the main receiver brace.

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.



Fig.A



Fig.B

**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.



# BASEPLATE KIT INSTALLATION INSTRUCTIONS

**KIT# 521233-1**

02/18/08  
KS

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



Fig.C



Fig.D



Fig.E

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 two T24 Torx bolts attaching the grille to the core support (Fig.C).
2. Push forward on two plastic clips located on either side of the hood latch (Fig.D) and pull up and forward to remove the grille.
3. Remove two T27 Torx bolts attaching the fascia to the core support (Fig.E).



Fig.F

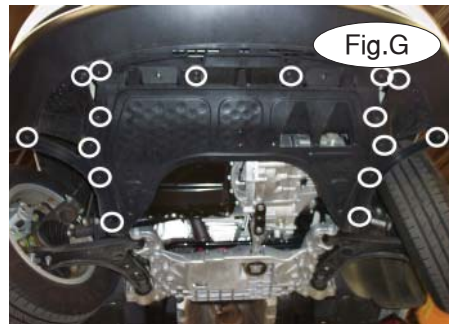


Fig.G



Fig.H

4. On each side, remove three T25 Torx bolts attaching the fender liner to the fascia and one T25 Torx bolt attaching the fender liner to the corner of the fascia (Fig.F).
5. Remove 16 T25 Torx bolts attaching the lower splash shield to the fascia and fender liners (Fig.G).
6. Push down on two plastic clips in the center of the grille opening and pull forward on the fascia to remove it (Fig.H). Disconnect the side marker lights.



Fig.I

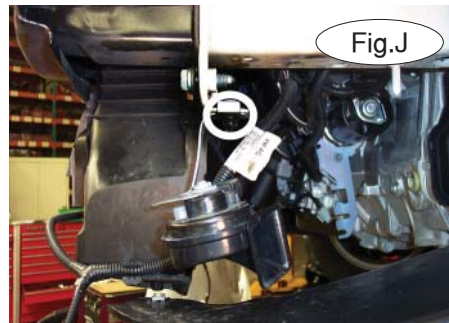


Fig.J

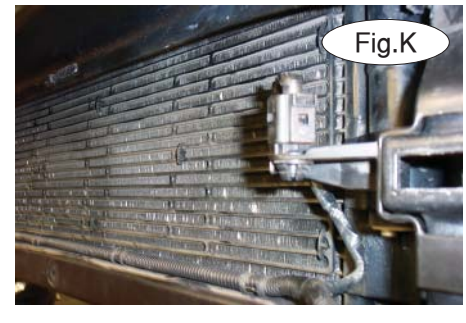


Fig.K

7. Pull forward to remove the foam shock absorption pad (Fig.I).
8. On each side, remove the horn on the end of the frame rails by removing a 13mm (head) bolt (Fig.J – driver's side).
9. Disconnect the ambient temperature sensor from the air deflector (Fig.K).



# BASEPLATE KIT INSTALLATION INSTRUCTIONS

**KIT# 521233-1**

02/18/08  
KS

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

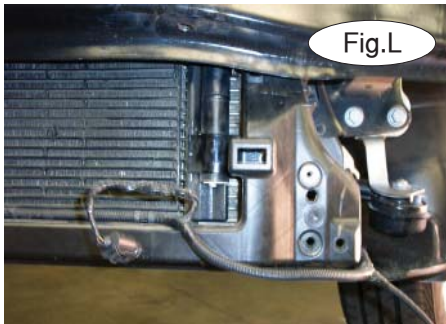


Fig.L

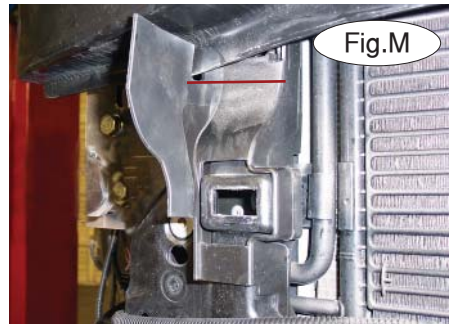


Fig.M

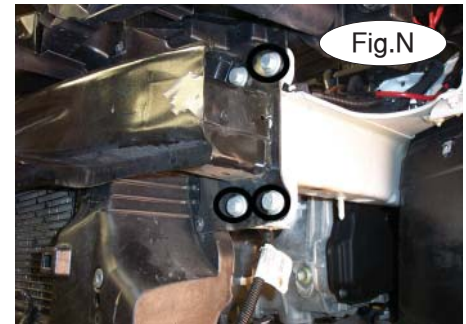


Fig.N

10. Remove the air deflector (Fig.L) and trim the lower half using the red line in Figure M as a reference. Replace the air deflector.

11. Working on the driver's side, remove the upper and two lower 16mm (head) bolts from the bumper core (Fig.N).

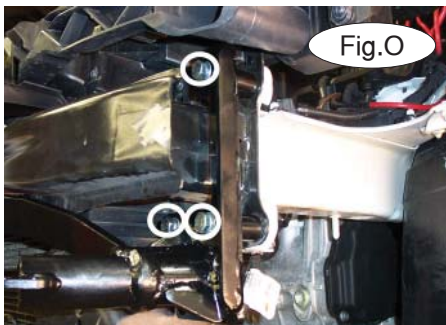


Fig.O



Fig.P

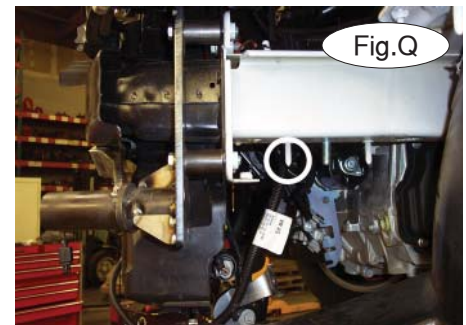


Fig.Q

12. Bolt the driver's side main receiver brace to the end of the frame rail using the three provided 10mm x 1.5 x 70mm bolts, lock washers and flat washers. *Note:* place a 1-5/8" pipe spacer between the main receiver brace and the frame rail on each bolt (Fig.O).

13. Clamp the bumper core mounting points against the bottom of the bumper (Fig.P) and tighten to the bolt torque requirements found at the end of these instructions.

14. Cut off the stud marked in Figure Q.



Fig.R

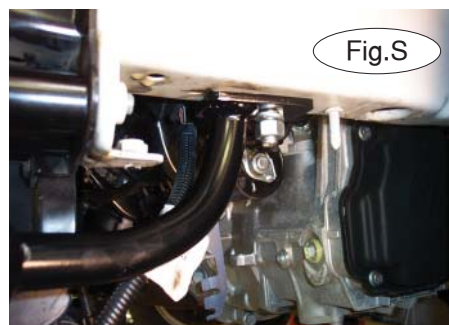


Fig.S



Fig.T

15. Fishwire the 1/2" x 1 1/2" carriage bolt and 1/4" x 1" x 3" backing plate through the large existing rear hole in the frame rail and out through the existing forward hole in the frame rail (Fig.R).

16. Place the driver's side rear brace over the bolt fishwired in the previous step. Bolt it into place using a 1/2" x 1" bolt, lock washer and nut (Fig.S).

17. Bolt the rear brace to the main receiver brace. The inner hole uses a 1/2" x 1" bolt, lock washer and nut; the outer hole uses a 1/2" x 1" bolt and lock washer (Fig.T).



# BASEPLATE KIT INSTALLATION INSTRUCTIONS

**KIT# 521233-1**

02/18/08  
KS

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



Fig.U

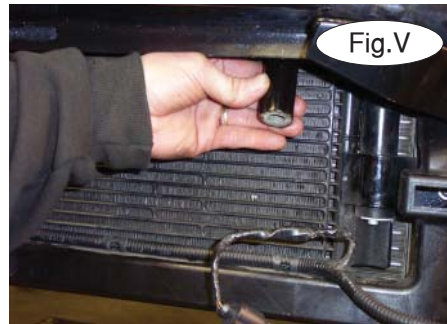


Fig.V

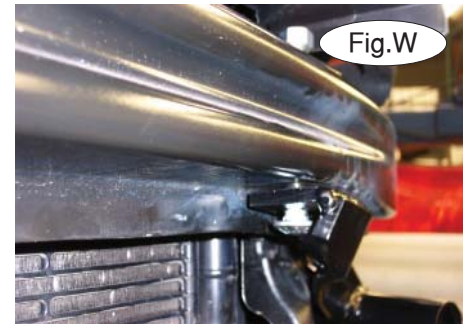


Fig.W

18. Utilizing the bumper core mounting point and pre-existing  $\frac{1}{2}$ " holes in the main receiver brace as templates, drill through the main receiver brace and the bumper core with a 12" drill bit (Fig.U).

19. Place a 1" x 2 $\frac{1}{4}$ " pipe spacer inside the bumper core (Fig.V). Place a  $\frac{1}{4}$ " x 1 $\frac{1}{2}$ " x 2 $\frac{1}{2}$ " backing plate over the bolt and bolt into place using a  $\frac{1}{2}$ " lock washer and nut (Fig.W). Using the supplied  $\frac{1}{2}$ " x 4" carriage bolt, bolt through the main receiver brace, bottom of the bumper core, pipe spacer and the top of the bumper core.

20. Repeat steps 11 through 19 for the passenger side. *Note:* when repeating step 12 for the passenger side, the two lower mounting points on the front of the frame rail use a  $\frac{1}{2}$ " pipe spacer, and the upper mounting point uses a 1  $\frac{5}{8}$ " pipe spacer.

21. Using the supplied zip tie, attach the ambient temperature sensor to the wiring harness located across the front of the core support.



Fig.X



Fig.Y



Fig.Z

22. The fascia will need to be trimmed to allow clearance for the main receiver braces. Remove the passenger side grille insert, and trim the rear of the grille opening using the red lines in Figure X as a guide. Trim the passenger side grille insert using the red lines in Figure Y as a guide. *Note:* use a small amount of contact adhesive to hold the grille inserts in place after trimming.

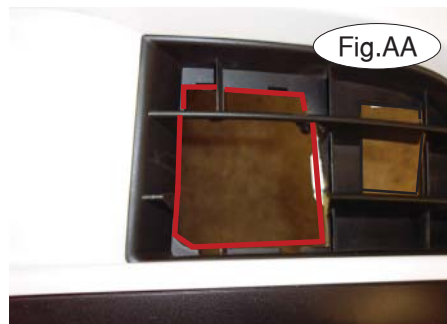


Fig.AA

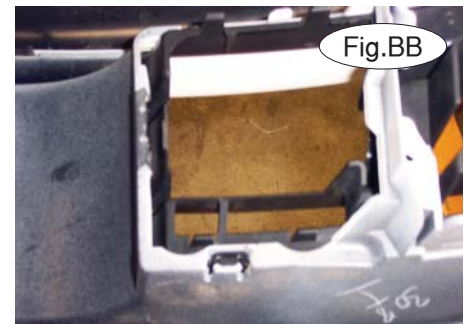


Fig.BB

23. Remove the driver's side grille insert, and trim the rear of the grille opening using the red lines in Figure Z as a guide. Trim the driver's side grille insert using the red lines in Figure AA as a guide. Figure BB shows how the driver's side grille opening should appear after trimming, when viewed from the back side of the fascia. *Note:* use a small amount of contact adhesive to hold the grille inserts in place after trimming.



# BASEPLATE KIT INSTALLATION INSTRUCTIONS

**KIT# 521233-1**

02/18/08  
KS

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



Fig.CC

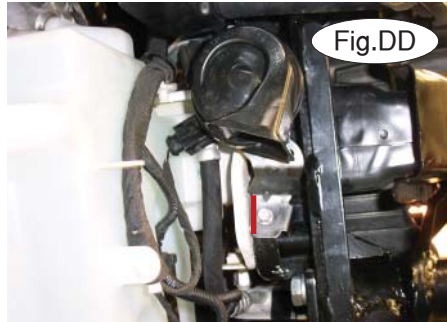


Fig.DD

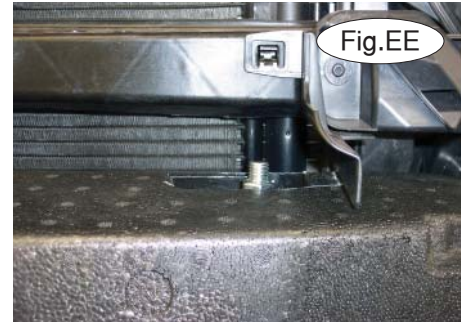


Fig.EE

24. On the driver's side only, use a pair of pliers to bend flat one of the alignment tabs on the horn mount, then mount the horn to the factory horn mount (Fig.CC).

25. Trim the inside edge of the horn mount on the passenger side only. Use the red line in Figure DD as a guide for trimming. Using the supplied 3/4" self-tapping screw, attach the horn to the bumper core flange.



Fig.FF



Fig.GG

- 26. Torque all bolts to the bolt torque requirements found at the end of these instructions.
- 27. Hold the foam shock absorption pad in place and trim to allow clearance for the upper (Fig.EE) and lower (Fig.FF) mounting points of the main receiver braces.
- 28. Reinstall the fascia, reversing steps 1 through 7.
- 29. Insert the removable front bracket arms into the front receiver braces, and twist each one 90 degrees to lock.
- 30. Attach the 8" safety cables with the cable connectors (Q-Links) to the front of the receiver braces (Fig.GG).
- 31. Attach the ends of the safety cables to the tow vehicle's safety cables.
- 32. 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

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.