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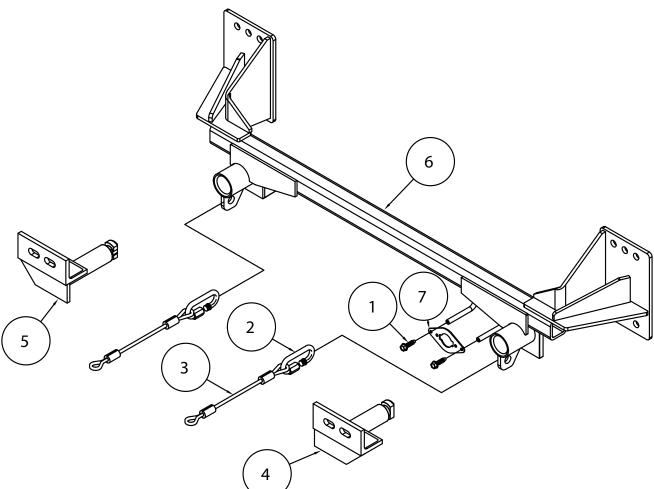
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### ROADMASTER

# MOUNTING BRACKET KIT KIT# 522013-1A INSTALLATION INSTRUCTIONS 04/16/13

ROADMASTER, Inc. 6110 NE 127th Ave. Vancouver, WA 98682 360-896-0407 fax 360-735-9300 www.roadmasterinc.com



		NAME	MATERIAL
1	. 2	. #10 x 3/4" SELF TAPPING SCREW	350247-35
2	. 2	. QUICK LINK	200008-00
3	. 2	. 8" SAFETY CABLE	650646-08
4	. 1	. DRIVER SIDE ARM	C-002321
5	. 1	. PASSENGER SIDE ARM	C-002322
6	. 1	. MAIN RECEIVER	C-002323
7	. 1	. WIRE PLUG MOUNTING PLATE	A-003801



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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 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 mounting points. 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.





**IMPORTANT:** All brackets **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

· Use lock washers on all fasteners

ROADMASTER Limited Warranty, including One-Year Conditional Warranty Text and Product Registration Card, in Carton.



Failure to follow these instructions can result in property damage, personal injury or even death.

- Installation of most mounting brackets requires moderate mechanical aptitude and skills. We strongly recommend professional installation by an experienced installer.
- The installer must read the instructions and use all bolts and parts supplied. Failure to do so could result in loss of the towed vehicle.
- · Use Loctite® Red on all bolts used for mounting this bracket.
- Every 3,000 miles, the owner must inspect the fasteners for proper torque, according to the bolt torque requirements chart on the last page of these instructions. The owner must also inspect all mounts and brackets for cracks or other signs of fatigue every 3,000 miles. Failure to do so could result in loss of the towed vehicle.
- The owner must check the vehicle manufacturer's instructions for the proper procedure(s) to prepare the vehicle for towing. Some vehicles must be equipped with a transmission lube pump, an axle disconnect, driveline disconnect or free-wheeling hubs before they can be towed. Failure to properly equip the vehicle will cause severe damage to the transmission.
- If running changes were made by the vehicle manufacturer after this bracket was designed, some bolts or other fasteners in the hardware pack may no longer be the correct size. It is the installer's responsibility to verify that the bracket is securely fastened to the vehicle and fitted with the correct hardware to account for these changes. Failure to securely fasten the bracket could result in loss of the towed vehicle.
- If the towed vehicle has been in an accident, it must be properly repaired before attaching the bracket. Do not install the bracket if any structural frame damage is found. Failure to repair the damage could result in the loss of the towed vehicle.

- Roadmaster manufactures many styles of brackets. If your bracket 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, resulting in non-warranty damage or personal injury.
- Some motorhome chassis have such a tight turning radius that you can
  damage your motorhome, towed vehicle, tow bar or bracket 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 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, motorhome and/or towed vehicle.
- 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. Refer to the cable instructions for proper routing. Failure to leave enough slack in the safety cables, or failure to connect the safety cables frame to frame, will result in the loss of the towed vehicle.
- This bracket is designed for use with ROADMASTER tow bars and ROADMASTER adaptors only. Using this bracket with other brands, without an approved ROADMASTER adaptor, may result in nonwarranty damage or injury.
- Do not use this document for custom fabrication, as it may not show all parts or structural components. Custom fabrication or an attempt to copy this bracket design could result in loss of the towed vehicle.
- Upon final installation, the installer must inspect the bracket to ensure adequate clearance, particularly around hoses, air conditioner lines, radiators, etc., or non-warranty damage to the towed vehicle will result.
- This bracket is only warranteed for the original installation. Installing a used bracket on another vehicle is not recommended and will void the warranty.



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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. Remove four T30 Torx bolts attaching the top of the fascia to the core support (Fig.C).
- 2. Remove three T30 Torx bolts attaching the bottom of the fascia to the radiator support, and two Phillips screws attaching the bottom of the fender liner to the fascia (Fig.D).





- 3. On each side, remove three Phillips screws attaching the fender liner to the fascia (Fig.E).
- 4. On each side, pull back the fender liner and remove one T30 Torx bolt attaching the fascia to the corner of the fender (Fig.F).
- 5. Pull back the fender liner and disconnect the side marker lights, turn signals and the fog lights, if the vehicle is so equipped.
- 6. Pull out and forward on the corners of the fascia to carefully remove it from the locking strips (Fig.G).





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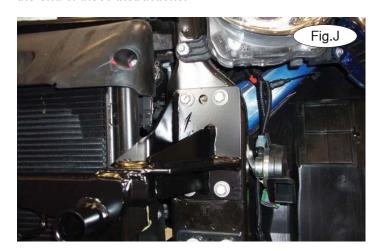
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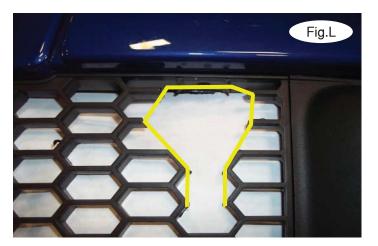


- 7. On each side, remove four 15mm (head) bolts and two 10mm nuts attaching the bumper core to the end of the frame rail. (Fig.H) The bumper core will not be replaced. **Turbo models only:** the 10mm nuts will be bolts. Leave the aluminum spacer in place (Fig.I). *Note:* retain the bumper core and attachment nuts for replacement in case the bracket is ever removed. The bolts will be replaced in the next step.
- 8. Place the main receiver brace over the ends of the frame rails. On each side, using four of the 15mm (head) bolts you removed in the previous step, bolt through the main receiver brace and into the frame rail, starting with the lowermost inside bolts (Fig.J). **Turbo models only:** replace all the bolts you removed in the previous step, bolt through the aluminum spacer and into the frame rail. *Note:* ensure proper alignment, as the bolts will receive Loctite® Red and will be torqued at the end of these instructions.





- 9. **Turbo models only:** trim the fascia and fog light housing, using the yellow lines in Figure K as a reference for trimming. **All other models:** trim the fascia, using the yellow lines in Figure L as a reference for trimming.
- 10. Tighten all bolts to the bolt torque requirements found at the end of these instructions. *Note:* use Loctite® Red on all nuts and bolts.





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- 11. Reinstall the fascia, reversing steps 1 through 6.
- 12. Insert the removable front bracket arms into the front receiver braces, and twist each one 90 degrees to lock.
- 13. Attach the 8" safety cables with the cable connectors (Q-Links) to the front of the receiver braces (Fig.M).
- 14. Attach the ends of the safety cables to the tow vehicle's safety cables.
- 15. Install the tow bar to the mounting bracket according to the manufacturer's instructions.

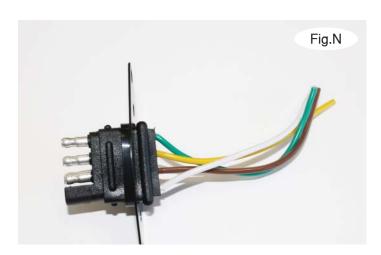


#### Three options for attaching the wiring plug to the main receiver brace

For six-wire plugs: use the two supplied 34" self-tapping screws to attach the electrical plug directly to the rods on the front of the main receiver brace.

For four-wire round plugs: attach to the plug mounting plate and then use the two supplied 3/4" self-tapping screws to attach the mounting plate to the rods on the front of the main receiver brace.

For four-wire flat plugs: place the plug through the mounting plug plate, and then secure it using the supplied zip tie on the front of the plug (Fig.N). Use the two supplied 34" self-tapping screws to attach the mounting plate to the rods on the front of the main receiver brace.



#### **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.						