

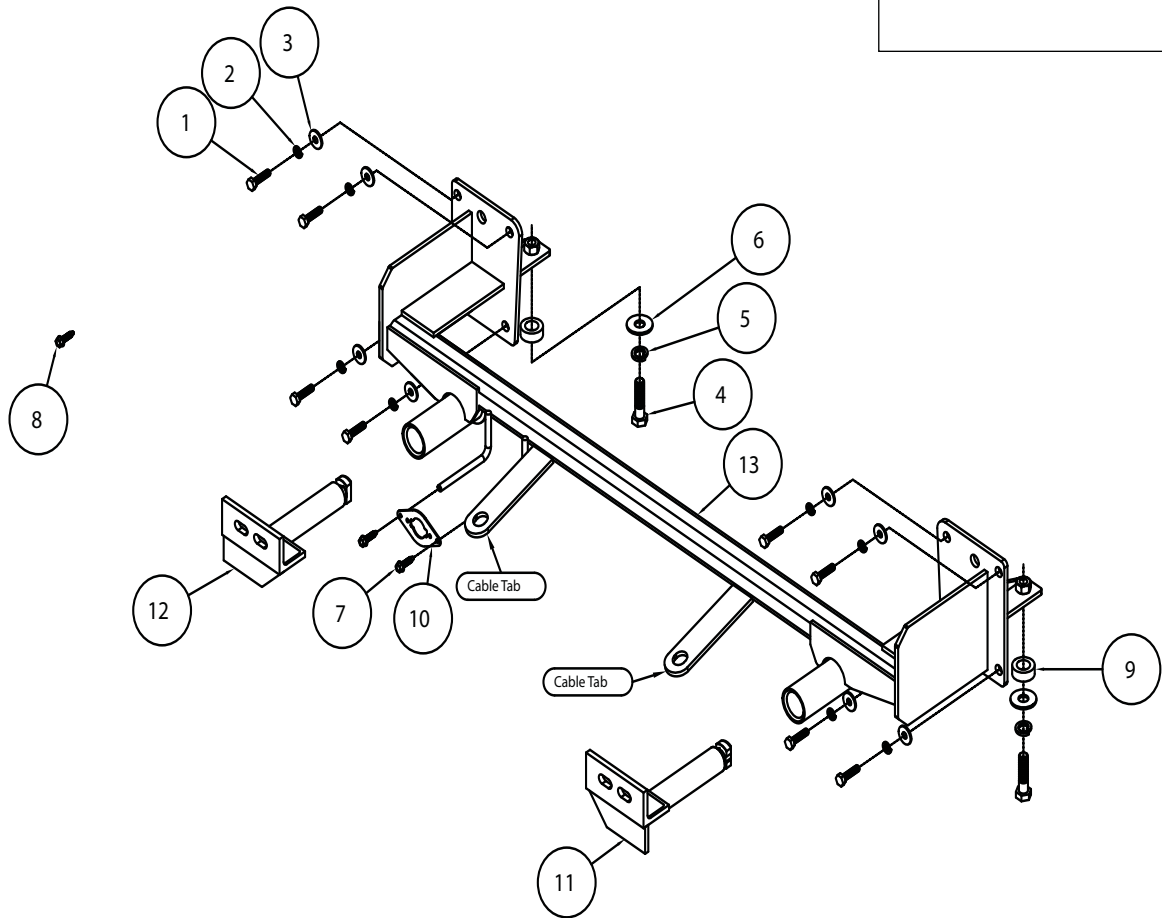


# MOUNTING BRACKET KIT INSTALLATION INSTRUCTIONS

**KIT# 521633-1**

11/11/13

*Special tools required:  
cut-off wheel*



ITEM	QTY	NAME	MATERIAL
1	8	8mm x 1.25 x 30mm BOLT	356001-00
2	8	8mm LOCK WASHER	355705-00
3	8	8mm x FENDER WASHER	355702-00
4	2	1/2" x 2" BOLT	350097-00
5	2	1/2" LOCK WASHER	350309-00
6	2	1/2" FLAT WASHER	350308-00
7	2	#10 x 3/4" SELF DRILLING SCREW	350247-35
8	1	1/4" x 3/4" SELF DRILLING SCREW	357250-00
9	2	1 1/4" O.D. x 0.25 WALL x 1/2" PIPE SPACER	A-000783
10	1	WIRE MOUNTING PLATE	A-003801
11	1	DRIVER SIDE ARM	C-002350
12	1	PASSENGER SIDE ARM	C-002351
13	1	MAIN RECEIVER	C-002352



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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; 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 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.

## WARNING

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 non-warranty 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 warranted 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 by removing four 10mm (head) bolts and two plastic fasteners attaching the top of the fascia to the core support (Fig.C – driver's side).

2. On each side, remove three plastic fasteners attaching the fascia to the core support and the fender liner (Fig.D).



3. On each side, remove one 10mm (head) screw attaching the corner of the fascia to the fender liner (Fig.E).

4. Pull out on the corners of the fascia to remove it from the locking strip (Fig.F). Pull out and forward to remove the fascia. Disconnect the fog lights, if the vehicle is so equipped.

5. Remove the shock absorption pad. *Note:* the shock absorption pad will not be replaced. Retain the shock absorption pad in case the bracket is ever removed.

6. On the passenger side only, remove one 10mm (head) bolt attaching the horn bracket to the bumper core (Fig.G). Let it hang down for now.





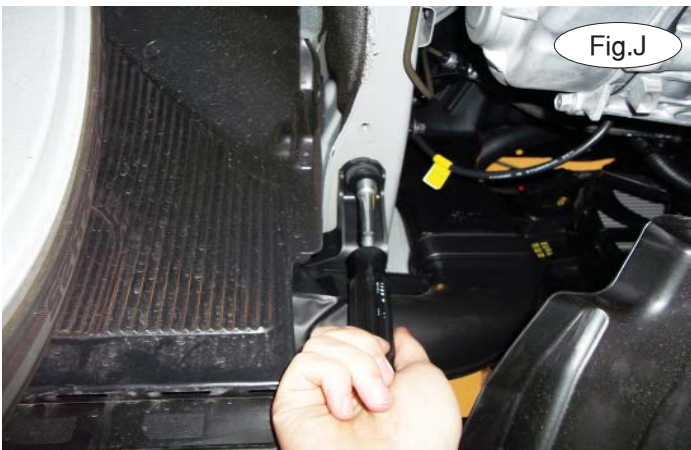
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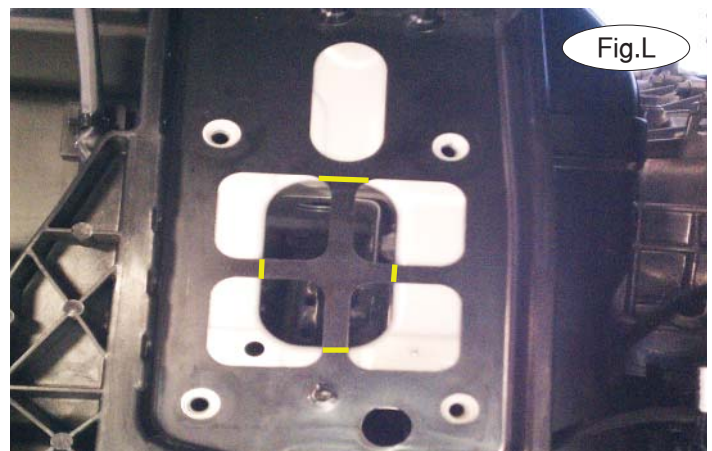
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7. On each side, remove one 10mm (head) nut and four 12mm (head) bolts attaching the bumper core to the frame rail (Fig.H). *Note:* the bumper core will not be replaced. Retain the bumper core in case the bracket is ever removed.
8. On the driver's side only, remove two 10mm (head) bolts attaching the splash shield to the bottom of the frame (Fig.I). Let it hang down for now.



9. On the driver's side only, temporarily remove the air box by removing three 10mm (head) bolts (Fig.J and Fig.K).
10. On each side, trim the webbing covering the end of the frame rail using a cut-off wheel. Use the yellow lines in Figure L as a reference for trimming.





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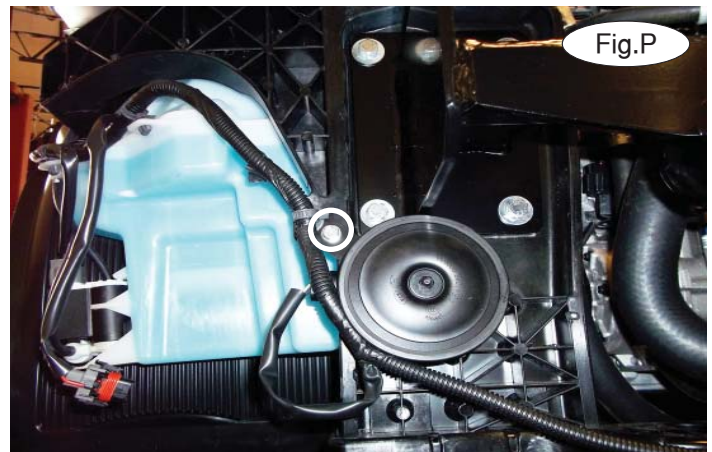
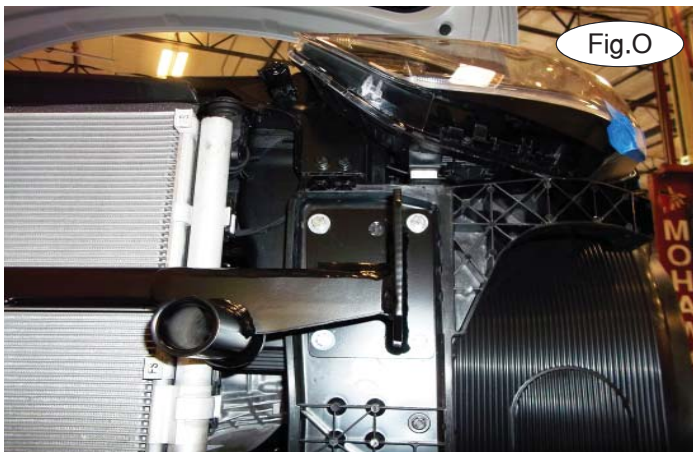
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11. On each side, place a ½" x 1¼" x .25 wall pipe spacer over the hole on the inside of the frame rail (Fig.M).

12. On each side, place the main receiver brace inside the frame rails over the pipe spacers you just installed, aligning the holes on the end of the frame rail with those in the main receiver brace. Place a ½" lock washer and fender washer over each ½" x 2" bolt, and then bolt up through the frame rail, pipe spacer and into the weld nut in the end of the main receiver brace (Fig.N – driver's side). *Note:* use Loctite® Red on all nuts and bolts used for mounting this bracket.



13. Place an 8mm lock washer and fender washer over each 8mm x 1.25 x 30mm bolt, and then on each side, bolt the main receiver brace to the end of the frame rail using (Fig.O).

14. Tighten all bolts to the bolt torque requirements found at the end of these instructions, starting with the bumper core mounting bolts.

15. Remount the horn using the supplied 3/8" self-tapping screw (Fig.P).

16. **For Turbo models only:** trim the intercooler air dam as shown in Figure Q. **For non-Turbo models:** proceed to the next step.

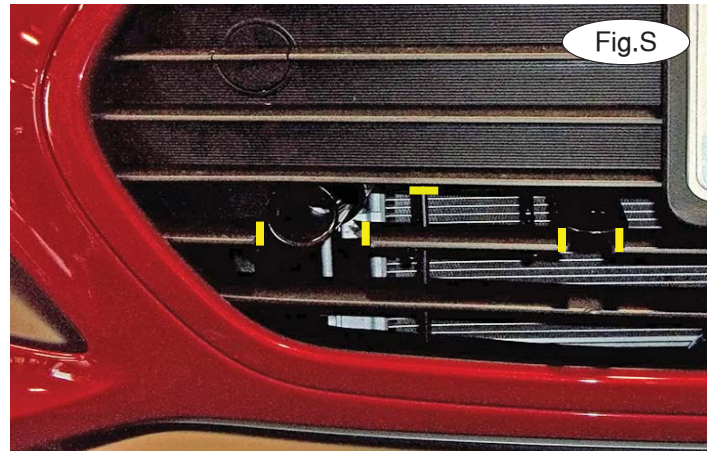




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17. Hold the fascia in place over the receivers and mark it for trimming. **For non-Turbo models:** trim the fascia using the yellow lines in Figure R as a reference. **For Turbo models:** trim the fascia using the yellow lines in Figure S as a reference.

18. Now, trim the lower splash shield using the yellow lines in Figure T as a reference.

19. Reinstall the fascia, reversing steps 1 through 4.

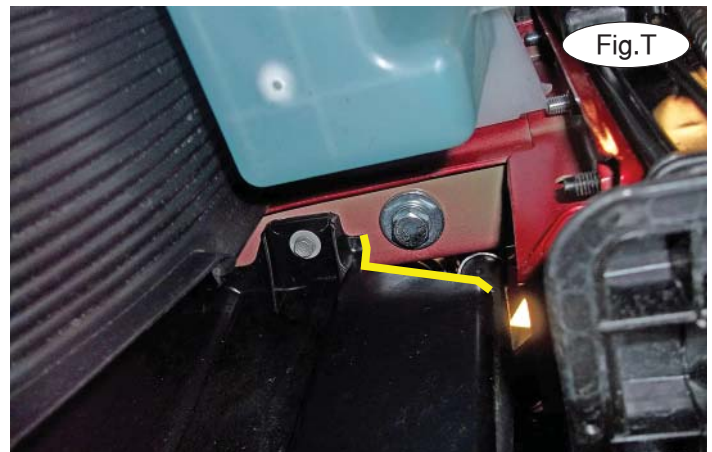
20. Insert the removable front bracket arms into the front receiver braces, and twist each one 90 degrees to lock.

21. Install the tow bar to the mounting bracket according to the manufacturer's instructions.

### **IMPORTANT!**

**Safety cables are required by law. When towing, connect safety cables to the safety cable tabs illustrated on page 1. Make certain there is adequate slack in the cables to allow a full turning radius; otherwise, damage will result. If necessary, longer cables or cable extensions are available.**

*Note:* if the bracket is so equipped, the holes in the alignment tabs which are welded to the arms and main receiver braces are for padlocks only. Under no circumstances should you bolt the alignment tabs together. Bolting the alignment tabs together may result in non-warranty damage to the bracket.





# MOUNTING BRACKET KIT INSTALLATION INSTRUCTIONS

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

**For six-wire plugs:** use the two supplied 3/4" 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.U) 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.

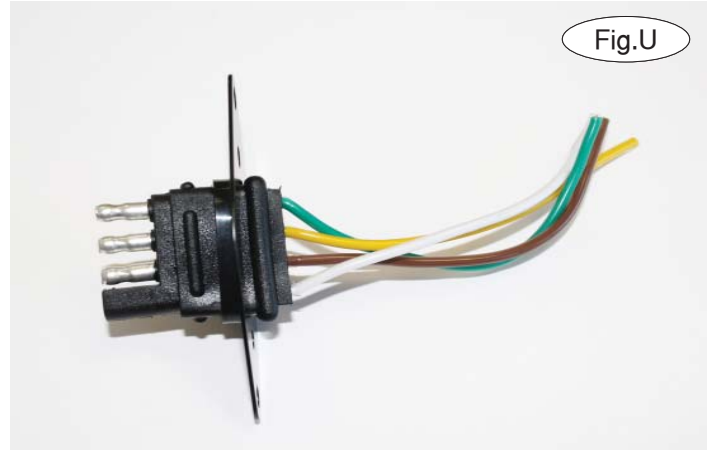


Fig.U

## 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.