



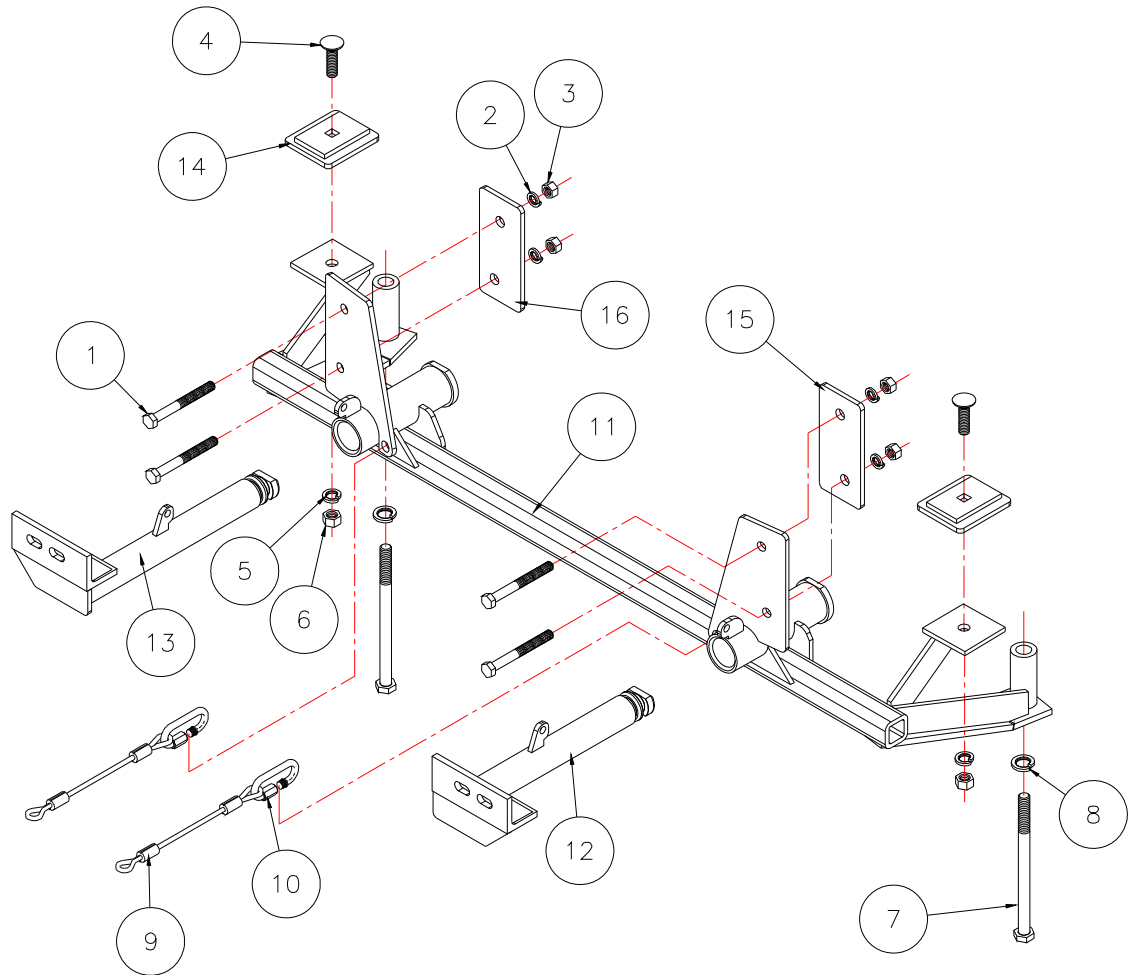
MOUNTING BRACKET KIT **KIT# 523133-1**

INSTALLATION INSTRUCTIONS

02/14/05
RV

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ROADMASTER, INC.



Item	Qty.	Length	Width	Description	Part #
1	4	4"	7/16"	BOLT	350084-00
2	4		7/16"	LOCK WASHER	350307-00
3	4		7/16"	NUT	350256-00
4	2	1 3/4"	1/2"	CARRIAGE BOLT	350363-00
5	2		1/2"	LOCK WASHER	350309-00
6	2		1/2"	NUT	350258-00
7	2	200mm	14mm	14mm X 2.0 X 200mm BOLT	355910-20
8	2		14mm	LOCK WASHER	355740-00
9	2	8"		SAFETY CABLES	500646-08
10	2			CABLE CONNECTOR	200008-00
11	1			MAIN RECEIVER BRACE WELDMENT	C-001208
12	2			DRIVER SIDE ARM WELDMENT	C-001209
13	1			PASSENGER SIDE ARM WELDMENT	C-001210
14	1			BACKING PLATE WELDMENT	C-001211
15	1			DRIVER SIDE REAR BACKING PLATE	A-001939
16	1			PASSENGER SIDE REAR BACKING PLATE	A-001940



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This is one of our XL series brackets, which allows the visible front portion of the bracket to be easily removed from the front of the vehicle (Fig.A). The bracket consists of a main receiver brace, two removable front bracket arms, and a hardware pack. The main receiver brace mounts to the bumper core, the frame, and the subframe. The removable front bracket arms fit into 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 & 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

- Do not use this document for custom fabrication as it may not show all parts or structural components.
- ROADMASTER will not be responsible for any damage or injury resulting from any modification or alteration.
- The owner must inspect all mounts and brackets before each use for cracks or other signs of fatigue. Also, inspect the fasteners for proper torque, according to the torque chart.
- The owner must check the 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.
- The installer must read the instructions and use all bolts and parts supplied.
- If the towed vehicle has been in an accident, it must be properly repaired before attaching the brackets. Do not install the brackets if any structural frame damage is found. Failure to repair the damage may result in loss of your towed vehicle.
- Some motorhome chassis have such a tight turning radius that you can damage your motorhome, towed vehicle or tow bar while turning sharply. Before getting on the road, test your turning radius in an empty parking lot. Damage that results from turning too sharply is not covered by warranty.
- The driver must not back up the motorhome with the towed vehicle attached or non-warranty damage will occur to your towing system or towed vehicle.
- The safety cables must connect the towing vehicle to the towed vehicle frame to frame, with the cables crossed. Refer to the cable instructions for proper routing.
- Make sure there is enough slack in the safety cables at the motorhome to allow for sharp turns.
- Use caution when handling the tow bar – if your hands, fingers or any part of your body are caught between moving components, they can be pinched, cut or otherwise injured.
- This bracket is designed for use with ROADMASTER tow bars and ROADMASTER adaptors. Using this bracket with other brands, without an approved ROADMASTER adaptor, may result in non-warranty damage or injury.
- Important! This bracket is only warranted for the original installation. Installing a used bracket on another vehicle is not recommended and will void the warranty.
- Upon final installation, the installer must inspect the bracket to ensure adequate clearance, particularly around hoses, AC lines, radiators, etc., or non-warranty damage will result.



WARNING

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



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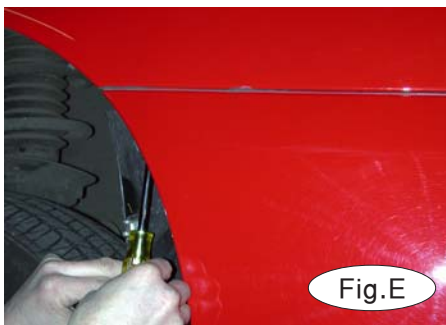
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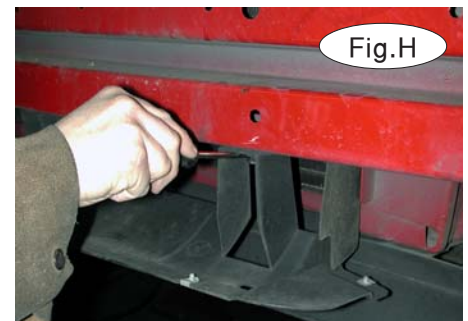
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1. Start by removing three plastic fasteners attaching the fascia to the radiator support (Fig.B).
2. Then, remove two 7mm bolts (on each side) attaching the fascia to the fender liner (Fig.C).
3. Remove thirteen 7mm bolts across the bottom of the fascia (Fig.D).



4. On each side, remove two 7/16" speed nuts attaching the fascia to the fender. One is located along the edge of the fender well (Fig.E), the other is located at the corner of the headlight and the fender.
5. Unplug the fog lights, if the vehicle is so equipped. Pull down and forward to remove the fascia (Fig.F).
6. Remove one plastic fastener and remove the shock absorption core (Fig.G).
7. Remove three plastic fasteners and remove the center air deflector (Fig.H). The center air deflector will not be reattached. *Note:* retain the air deflectors and any attachment hardware in case the bracket is ever removed.





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Fig.I



Fig.J



Fig.K

8. Detach the bumper core by removing three 13mm bolts on each side. The first two bolts are on the outside (Fig.I); the third is approximately a foot from the outside (Fig.J). The bumper core will be reattached following the next step; you can remove the bumper core entirely by removing two plastic fasteners (Fig.K) or allow it to hang.

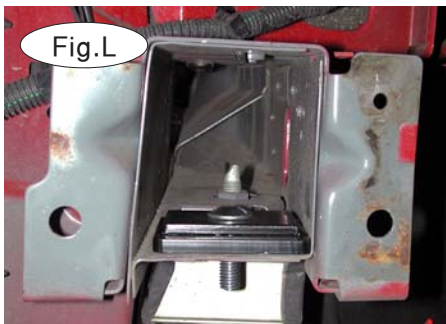


Fig.L



Fig.M



Fig.N

9. Position one of the supplied 3" x 3½" backing plates, with a ½" x 1¾" carriage bolt, into the existing hole in the front of the frame, at the bottom of one of the frame rails (Fig.L). Repeat for the other side

10. Reinstall the bumper core, reversing step 8.

11. Support the subframe (Fig.M).

12. Remove an 18mm head front subframe mounting bolt, as well as a bushing cup, from each side (Fig.N).

13. Bolt the main bracket brace to the subframe and the frame rail – align the holes in the main bracket brace over the holes for the front subframe mounting bolts you removed in the previous step, and also under the two carriage bolts you positioned in the frame rail in step 9. On each side, set one of the bushing cups you removed in the previous step between the main bracket brace and the subframe.



Fig.O

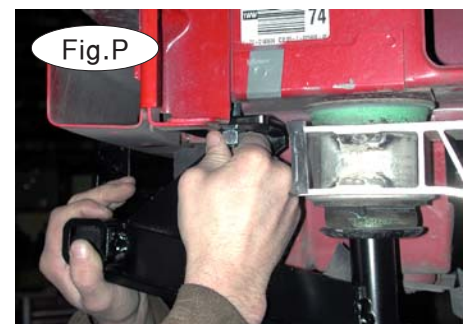


Fig.P

Slide a 14mm lock washer onto one of the supplied 14mm x 2.0 x 200mm bolts. Apply thread lock to the bolt, then thread the bolt through the rear support of the main brace and into the subframe (Fig.O). Repeat for the other side.

Thread a ½" nut and lock washer onto the carriage bolt you positioned in the frame rail in step 9 (Fig.P). Repeat for the other side. Torque all bolts to the specifications at the end of these instructions.



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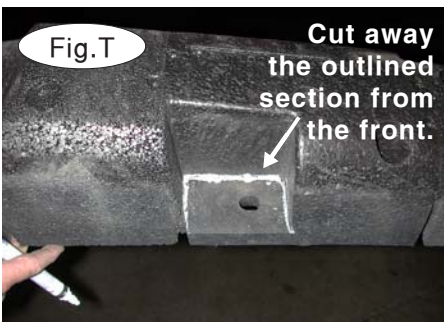


14. Attach the main brace to the bumper core – the two pre-drilled holes on each side of the brace (Fig.Q) should align with existing holes in the bumper core; however, due to manufacturing variances, they may not. If this is the case, drill out the holes in the bumper core, using the holes in the brace as templates (Fig.Q).

Position one of the supplied 2 $\frac{3}{4}$ " x 6" backing plates behind the bumper core (Fig.R), so that the holes in the backing plate align with the holes in the brace. *Note:* be careful to move the wiring harness out of the way.

Slide two of the supplied 7/16" x 4" bolts through the two holes in the main brace (Fig.S) and through the backing plate. Secure each bolt with a 7/16" lock washer and nut. Torque to the specifications at the end of these instructions.

Repeat for the other side.



15. In order to allow clearance over the main brace bumper core support, it is necessary to trim the shock absorption core before reinstalling it. **Cut away** the section in the front outlined in white, in Figure T. **Shave away** the section in the back outlined in white, in Figure U. Test fit the core to see if more needs to be shaved from the back, before reinstalling it.

16. Before reinstalling the fascia, remove one horizontal rib (on each side) from the grille, as indicated in Figure V.

17. Reinstall the fascia, reversing steps 1 through 5.



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- 18. Fit the front bracket arms into the front receiver braces, and secure them in place with the supplied 5/8" draw pins and spring pins (Fig.W).
- 19. Attach the 8" safety cables with the cable connectors (Q-Links) to the front of the receiver braces (Fig.W).
- 20. Attach the ends of the safety cables to the tow vehicle's safety cables and tow bar.
- 21. Install the tow bar to the mounting bracket according to the manufacturer's instructions.

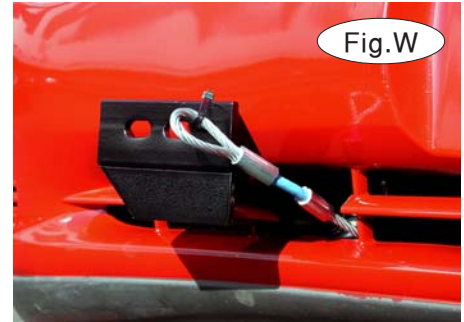


Fig.W

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.