



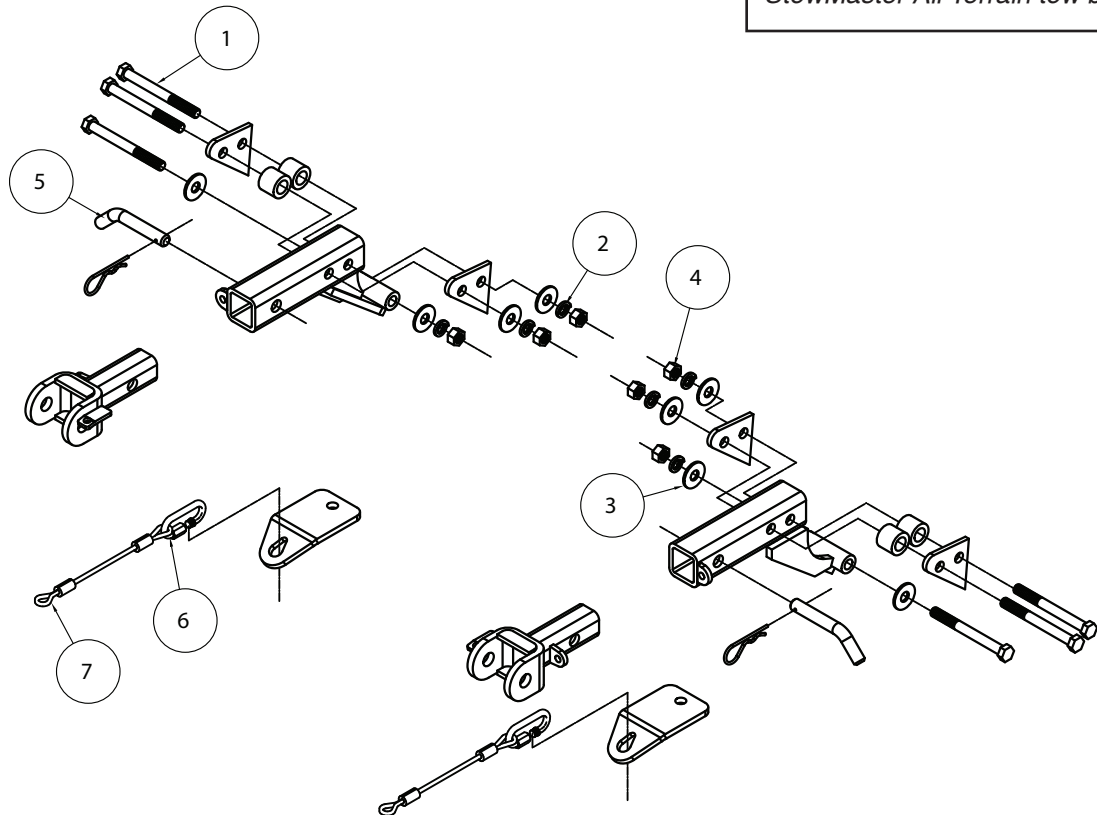
# MOUNTING BRACKET KIT INSTALLATION INSTRUCTIONS

**KIT# 2506-3**

02/20/13

**Important**

Note: this bracket will not accommodate the Guardian rock shield, some models of the Tow Defender, Stowaway or the StowMaster and StowMaster All Terrain tow bars.



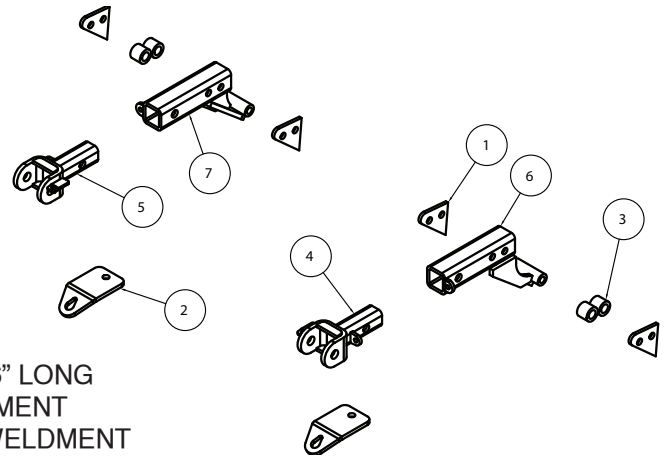
Item	Qty	Length	Width	Hardware	Part No.
1	6	5"	1/2"	BOLT	350107-00
2	6		1/2"	LOCK WASHER	350309-00
3	8		1/2"	FLAT WASHER	350308-00
4	6		1/2"	NUT	350258-00
5	2			DRAW PIN/SPRING PIN	357035-00
6	2			CABLE CONNECTORS	200008-00
7	2	12"		CABLES	650648-12



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Item	Qty.	Part #	Description
1.....	4 .....	A-000915 .....	BACKING PLATE
2.....	2 .....	B-000361 .....	SAFETY CABLE PLATE
3.....	4 .....	A-001080 .....	TUBE SPACER - 1 1/4" DIA x 1 1/16" LONG
4.....	1 .....	C-000782 .....	DRIVER SIDE ARM BRACE WELDMENT
5.....	1 .....	C-000781 .....	PASSENGER SIDE ARM BRACE WELDMENT
6.....	1 .....	C-000639A.....	DRIVER SIDE RECEIVER BRACE WELDMENT
7.....	1 .....	C-000640A.....	PASSENGER SIDE RECEIVER BRACE WELDMENT

**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.



# MOUNTING BRACKET KIT INSTALLATION INSTRUCTIONS

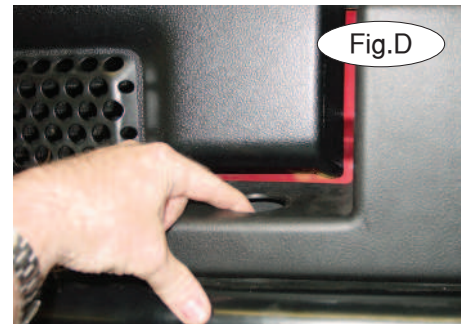
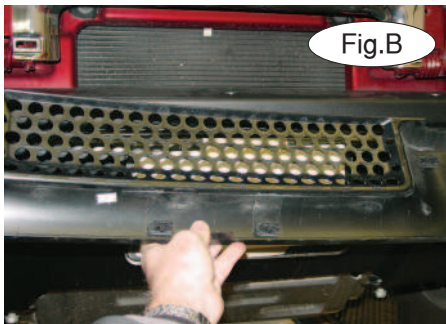
**KIT# 2506-3**

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This bracket kit is one of our MX series, which is designed for use with our motorhome-mounted tow bars.

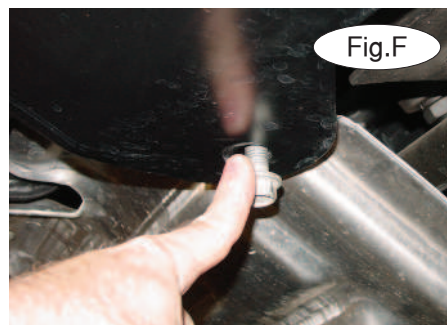
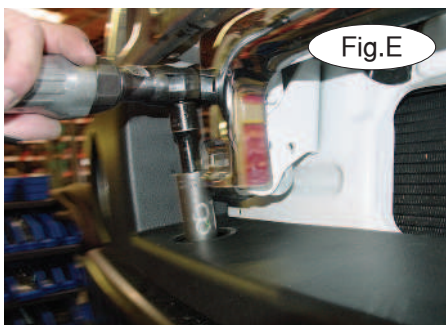
The kit consists of two receiver braces, front braces, lower cable plates and a hardware pack. The main braces mount below the front bumper fascia to the front frame tubes and take the place of the existing tow loops (Fig.A).

Start by laying the kit out according to the illustration. This will give you a visual idea of how the kit installs and also confirm that the kit components are present and accounted for. *Note:* photo A shows the installation of the XL version of the kit.

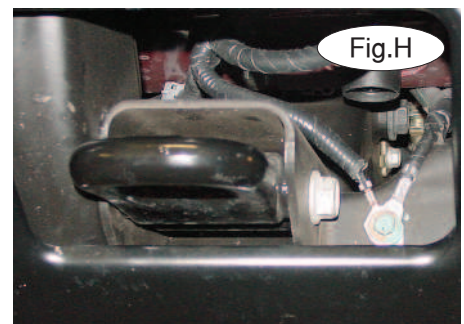


1. **Important:** please use all supplied bolts and parts and read all instructions carefully before beginning this installation. The majority of questions you may have can be answered within the text, and proper installation will ensure safe and secure travel. Now, begin the installation. To gain access to the top bumper mounting bolts remove the small lower front grille by pulling forward sharply, then removing two top caps in the bumper (Fig.B,C).

2. Locate and remove two top bumper- mounting bolts, located in the two access holes in the top of the bumper (Fig.D,E). Now remove two lower mounting bolts and set the bumper aside (Fig.F,G).



3. Locate the front tow hooks in the frame tubes and remove them. The front of the receiver braces will utilize this mounting area (Fig.G,H).





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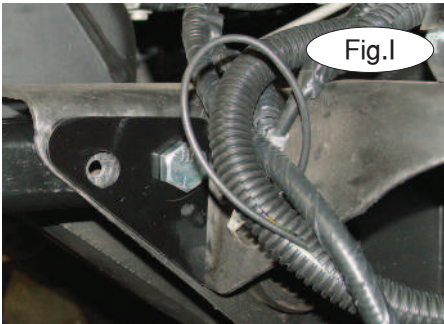


Fig.I

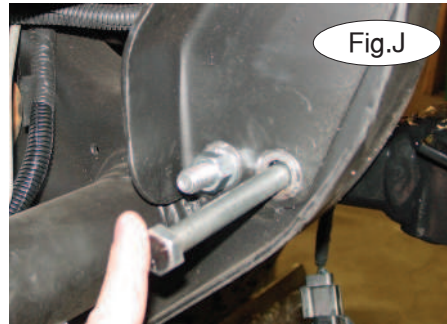


Fig.J

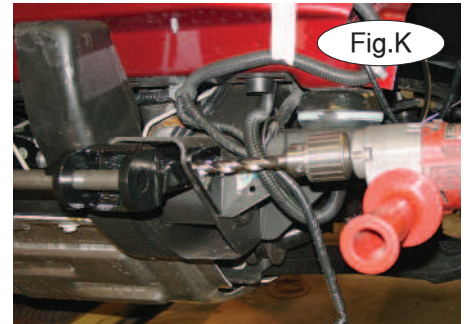


Fig.K

4. Insert the braces as shown into the front of the frame tubes, then bolt through the rear mounting hole, the frame, backing plates and 1.0625" spacers with a 1/2" x 5" bolt, flat washer, lock washer and nut on each side (Fig.I). Put the front bolt in the existing hole on the inside of the frame tube to align the brace then tighten the rear bolt to hold the side plate and brace in alignment (Fig.J).

5. Using the backing plate as a drill template drill through the outside of the frame with a 17/32" drill bit. Do this on each brace (Fig.K).

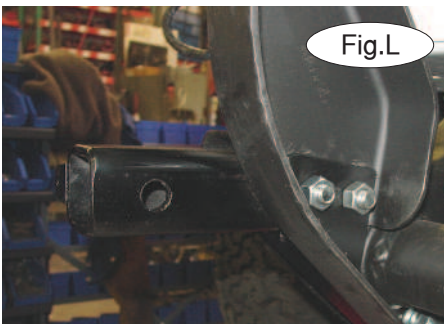


Fig.L

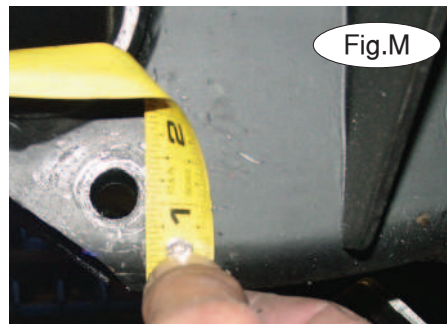


Fig.M

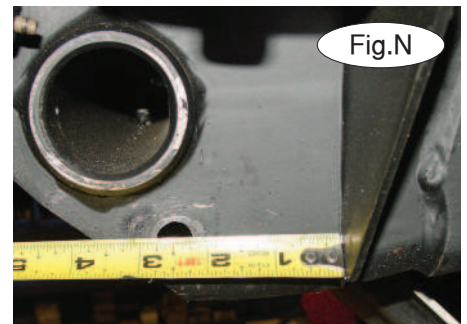


Fig.N

6. Bolt through the braces with this additional front bolt align the braces with each other then tighten to hold the position (Fig.L).

7. Now we have to drill through both sides of the frame to bolt through the lower mounting spacer. Measure 1 1/8" from the bottom of the frame and 2 1/2" forward of the frame gusset (Fig.M,N). Mark a hole center, then drill through the frame and brace.

8. Bolt through the braces with 1/2" x 5" bolts, flat washers, lock washers and nuts then torque all mounting bolts to the torque specifications below (Fig.O).

9. Reinstall the front bumper and grille reversing steps 1 and 2 with the exception of the two bottom bumper bolts. Find the lower safety cable plates (Item 4 on the hardware list) and bolt these plates to the bottom of the bumper using the existing bumper bolts (Fig.P).

10. Install the front braces and pin with 5/8" draw pins and 3/16" spring pins (Fig.O).

11. Install the tow bar according to the manufacturer's instructions.

12. Attach the included safety cables to the safety cable mounting plates with the included cable connectors. Attach the safety cables to the main receiver brace.

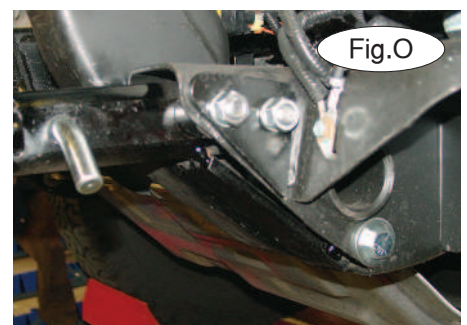


Fig.O

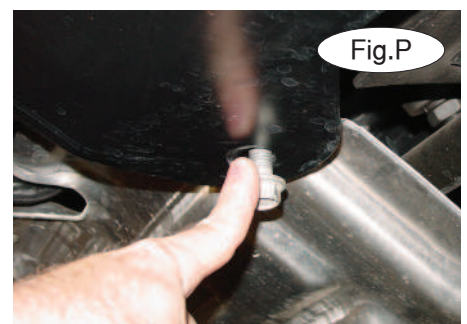


Fig.P



# MOUNTING BRACKET KIT INSTALLATION INSTRUCTIONS

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## **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**

<i>Thread Size</i>	<i>Grade</i>	<i>Torque</i>
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**

<i>Thread Size</i>	<i>Grade</i>	<i>Plated / Unplated</i>
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**

<i>Thread Size</i>	<i>Grade</i>	<i>Plated / Unplated</i>
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.