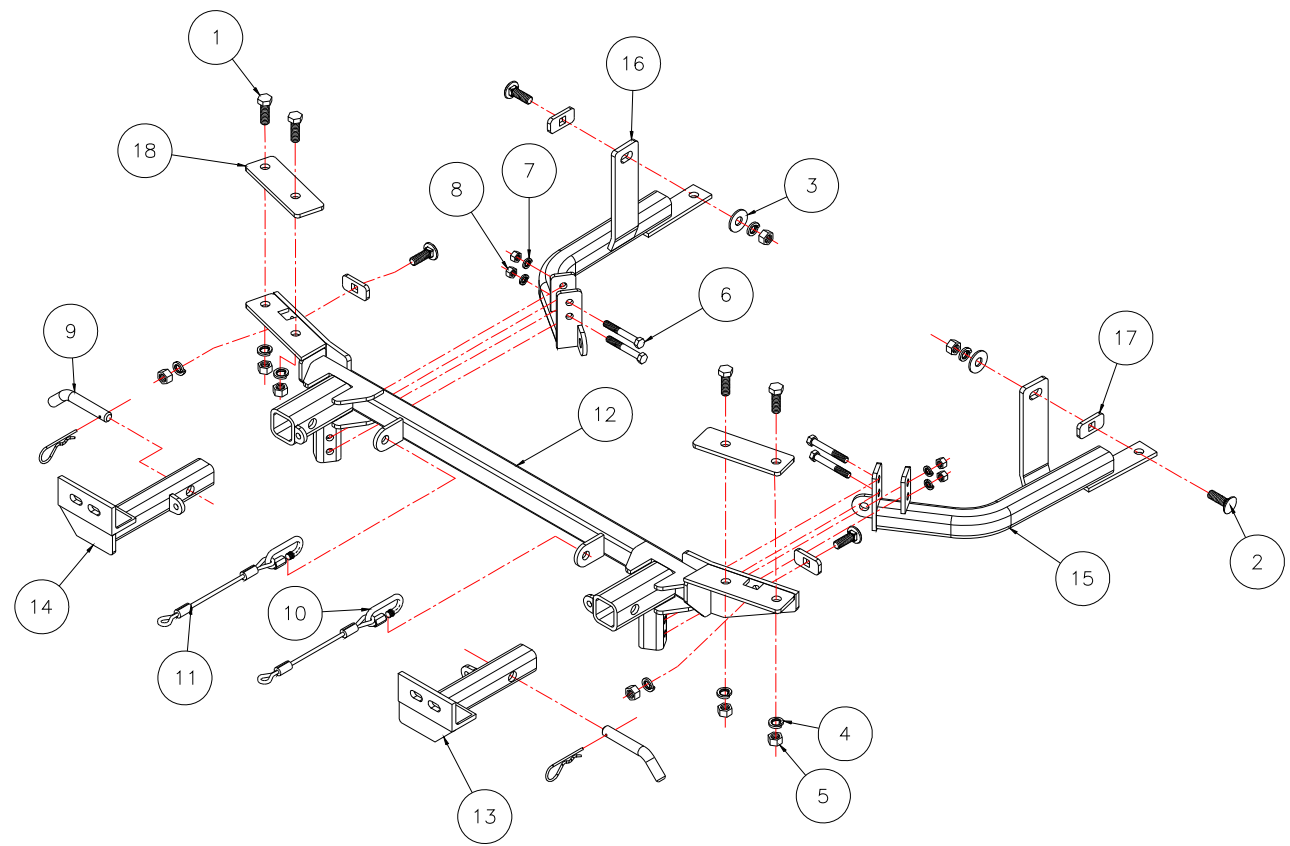




MOUNTING BRACKET KIT INSTALLATION INSTRUCTIONS

KIT# 3136-1



Item	Qty.	Length	Width	Description	Part#
1	4	1 1/2"	1/2"	BOLT	350095-00
2	4	1 1/2"	1/2"	CARRIAGE BOLT	350362-00
3	2		1/2"	FLAT WASHER	350308-00
4	8		1/2"	LOCK WASHER	350309-00
5	8		1/2"	NUT	350258-00
6	4	2 3/4"	3/8"	BOLT	350061-00
7	4		3/8"	LOCK WASHER	350305-00
8	4		3/8"	NUT	350254-00
9	2			DRAW PIN/SPRING PIN	350357-00
10	2			CABLE CONNECTOR	200008-00
11	2	10"		10" SAFETY CABLE	500646-10
12	1			RECEIVER BRACE WELDMENT	C-001215
13	1			DRIVER SIDE ARM BRACE WELDMENT	C-001216
14	1			PASSENGER SIDE ARM BRACE WELDMENT	C-001217
15	1			DRIVER SIDE LOWER WELDMENT	C-001374
16	1			PASSENGER SIDE LOWER WELDMENT	C-001375
17	4			1" X 2" SQUARE HOLE BACKING PLATE	A-000040
18	2			2" X 6 1/2" TWO HOLE BACKING PLATE	A-001953



MOUNTING BRACKET KIT INSTALLATION INSTRUCTIONS

KIT# 3136-1

This is one of our XL series brackets, which allows the visible front portion of the brackets to be easily removed from the front of the vehicle (Fig.A and Fig.B). The bracket kit consists of a main brace, two removable front braces, and a hardware pack.

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.

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.
- 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.
- 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.
- 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.
- 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# 3136-1

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 the 7mm bolts (one on each side) on the top corner of the fascia, near the fender well (Fig.C).

2. Then, also on each side, remove the two plastic fasteners near the bottom of the fender well (Fig.D).

3. Remove the plastic fasteners on the bottom of the splash shield – there are five on the driver's side, and four on the passenger side (Fig.E).



4. Disconnect the fog lights, if the vehicle is so equipped.

5. On each side of the fascia, pull out and forward to remove the fascia (Fig.F)

6. Remove one plastic fastener in the center of the shock absorption pad (Fig.G), and remove the shock absorption pad.

7. On the driver's side, remove two plastic fasteners attaching the splash shield to the subframe (Fig.H). On the passenger side, there are three. Remove these also.



MOUNTING BRACKET KIT INSTALLATION INSTRUCTIONS

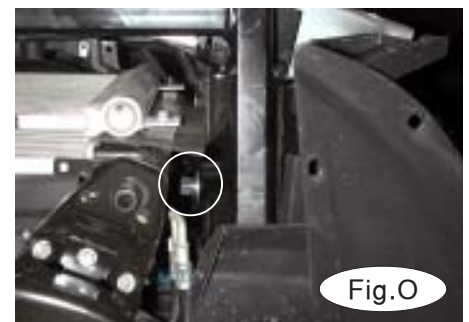
KIT# 3136-1



8. At the bottom of both fender wells, remove one 7mm bolt holding the fender well to the splash shield (Fig. I).
9. Now, support the center of the subframe (Fig.J).
10. Remove the two 21mm (head) front subframe bolts, one on each side (Fig.K).



11. Remove the center air deflector by removing four plastic fasteners (Fig.L)
12. Numbers 15 and 16 must be assembled to number 12 before installing (see drawing on page 1). Place the driver's side lower weldment over the lower support on the main bracket brace. Bolt into place using two 3/8" x 2 3/4" bolts, lock washers and nuts. Repeat the process for the other side.
13. Position the main bracket brace so that the two holes at each side and to the back of the brace align to the holes for the subframe bolts you removed in step 10. Apply thread lock to the bolts. Then, bolt the two stock 21mm (head) subframe bolts back into place (Fig.M).
14. The brace will be bolted to the frame rails, and also to the bumper core. First, bolt the center of the brace to the frame rail – fishwire one of the supplied 1" x 2" backing plates and a 1/2" x 1 1/2" carriage bolt into the subframe, through the square opening in the lower frame rail (Fig.N). From the other side, thread a 1/2" flat washer, lock washer and nut onto the bolt (Fig.O). Repeat for the other side.





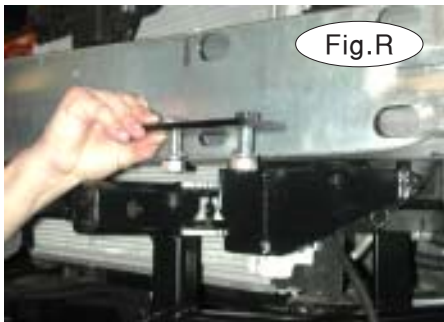
MOUNTING BRACKET KIT INSTALLATION INSTRUCTIONS

KIT# 3136-1

15. The front of the brace is attached to the frame rail and the bumper core. First, using the hole in the brace as a template, drill a 17/32" hole through the frame rail (Fig.P). Then, fishwire one of the supplied 1" x 2" backing plates and a 1/2" x 1 1/2" carriage bolt through the same square opening you used in step 13 (Fig.N). From the other side, thread a 1/2" flat washer, lock washer and nut onto the bolt. Repeat for the other side.



16. Now, using the two holes at the top of the main brace as templates, drill two more 17/32" holes through the bumper core (Fig.Q).



17. Position a 1/4" x 2" x 6 1/4" backing plate over the two holes, then put two 1/2" x 1 1/2" bolts through the holes, as shown in Figure R. Thread a 1/2" lock washer and nut onto each bolt (Fig.R). Repeat for the other side.

18. Torque all bolts to the specifications at the bottom of these instructions.

19. Trim the passenger side splash panel so that it can be reattached. Use the orange outline in Figure S as a reference.

20. Trim a section from each side of the center air deflector you removed in step 11, in order to accommodate the bracket. Use the white marker in Figure T as a reference. Then, reattach the center air deflector.

21. This bracket kit fits a variety of vehicles. For each application, trim the grille or fascia to allow clearance for the removable front braces. Test fit the fascia to see if this is the case, before reinstalling it.



MOUNTING BRACKET KIT INSTALLATION INSTRUCTIONS

KIT# 3136-1

Figures U through Z illustrate three 2005-2007 Saturn vehicles – U and V are an Ion 1 sedan; W and X are an Ion 2; and Y and Z are an Ion 3.

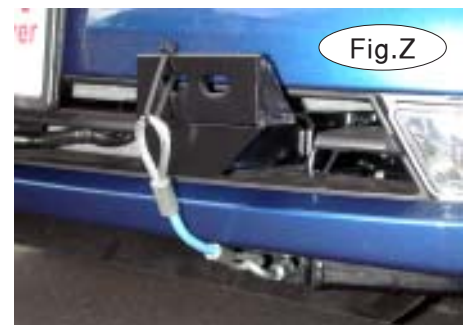
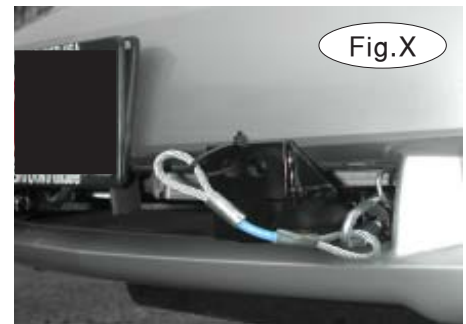
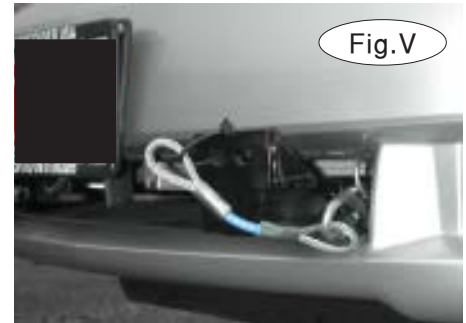
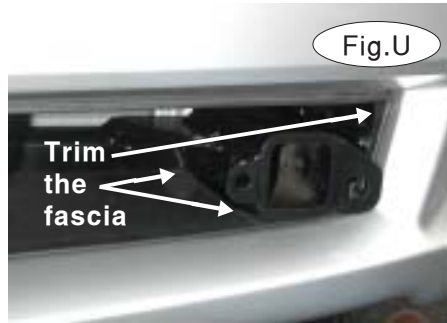
22. Reattach the splash shield, shock absorption pad and fascia by reversing steps 1 through 8.

23. 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 (Figures V, X and W).

24. Attach the 10" safety cables with the cable connectors (Q-Links) to the front of the receiver braces (Figures V, X and W).

25. Attach the ends of the safety cables to the tow vehicle's safety cables and tow bar.

26. 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.