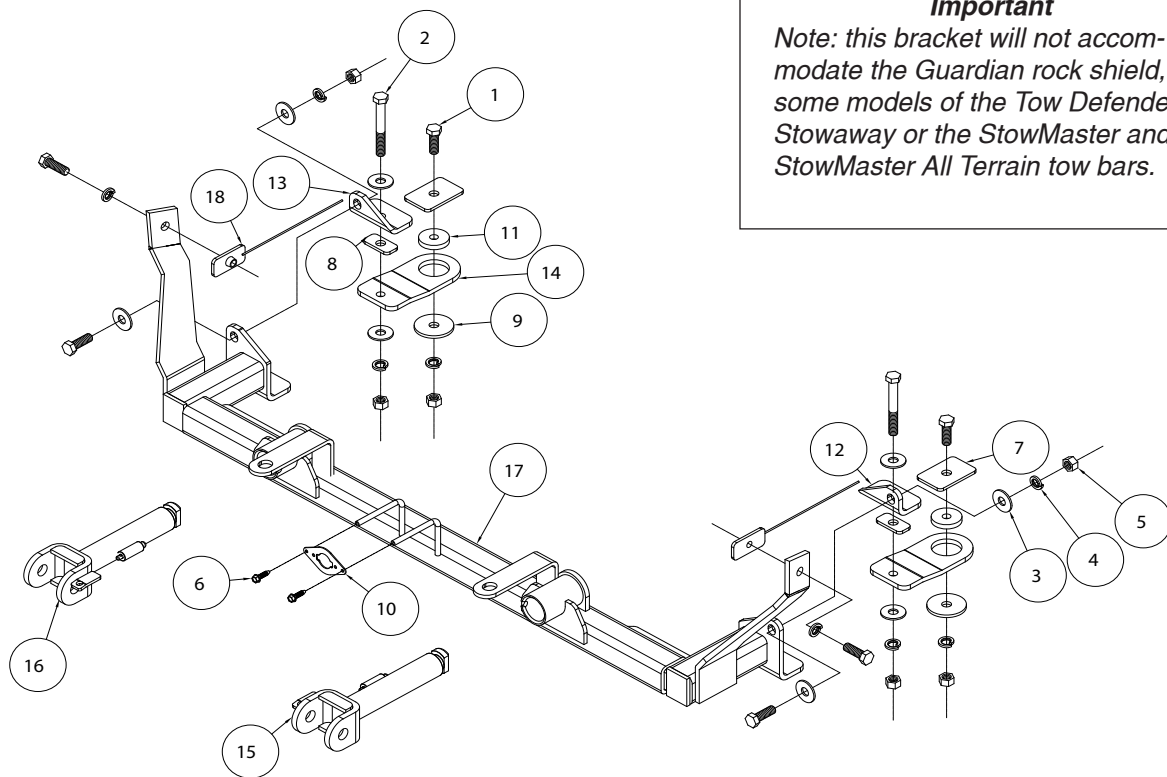




MOUNTING BRACKET KIT INSTALLATION INSTRUCTIONS

KIT# 524435-5

08/09/13



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	NAME	PART #
1.....	6.....	1/2" x 1 1/2" BOLT.....	350095-00
2.....	2.....	1/2" x 4" BOLT.....	350105-00
3.....	8.....	1/2" FLAT WASHER.....	350308-20
4.....	8.....	1/2" LOCK WASHER.....	350309-00
5.....	6.....	1/2" HEX NUT.....	350258-00
6.....	2.....	#10 x 3/4" SELF TAPPING SCREW.....	350247-35
7.....	2.....	2" x 3" BACKING PLATE.....	A-000147
8.....	2.....	1" x 2" BACKING PLATE.....	A-000842
9.....	2.....	1/2" PLATE WASHER.....	A-003086
10.....	1.....	WIRE MOUNTING PLATE.....	A-003801
11.....	2.....	3/8" SPACER.....	A-004428
12.....	1.....	DRIVER SIDE REAR MOUNTING PLATE.....	B-002375
13.....	1.....	PASSENGER SIDE REAR MOUNTING PLATE.....	B-002376
14.....	2.....	SPACER PLATE.....	B-002377
15.....	1.....	DRIVER SIDE ARM.....	C-002383
16.....	1.....	PASSENGER SIDE ARM.....	C-002384
17.....	1.....	MAIN RECEIVER.....	C-002588
18.....	2.....	1 1/4" x 2 1/2" BACKING PLATE W/8" ROD.....	C-002589



MOUNTING BRACKET KIT INSTALLATION INSTRUCTIONS

KIT# 524435-5

08/09/13

This is one of our EZ5 Twistlock 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 upper rear support braces, two lower rear support plates, two removable front braces, and a hardware pack.

The main receiver brace mounts to the sub-frame and support braces. 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.



WARNING

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

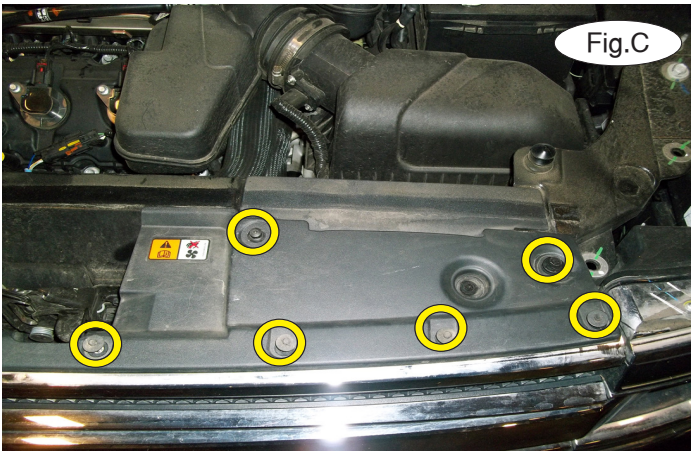
- **Installation of most mounting brackets requires moderate mechanical aptitude and skills.** We strongly recommend professional installation by an experienced installer.
- **The installer must read the instructions and use all bolts and parts supplied.** Failure to do so could result in loss of the 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# 524435-5

08/09/13



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. On each side, remove four 5.5mm (head) screws, one 10mm bolt and one plastic fastener attaching the radiator cover to the core support (Fig.C – driver's side).

2. On each side, carefully pop off the chrome strip from the center of the upper grille (Fig.D).



3. On each side, remove one 10mm (head) bolt attaching the upper grille to the core support (Fig.E).

4. Carefully pull off the upper grille to release it from the fascia (Fig.F).

5. On each side, remove one plastic fastener attaching the fascia support to the core support (Fig.G).

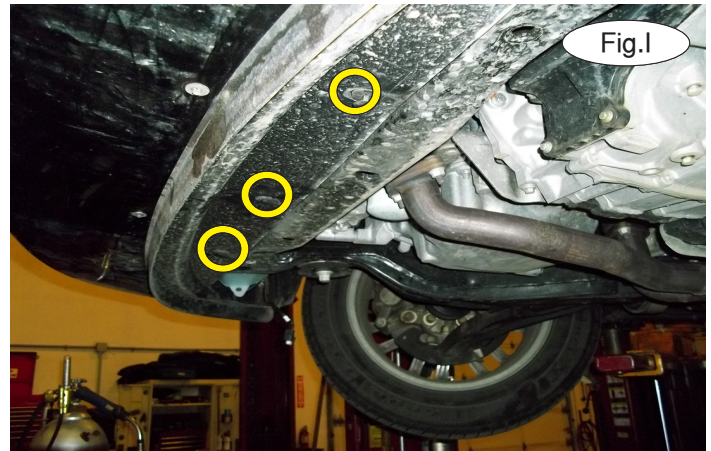
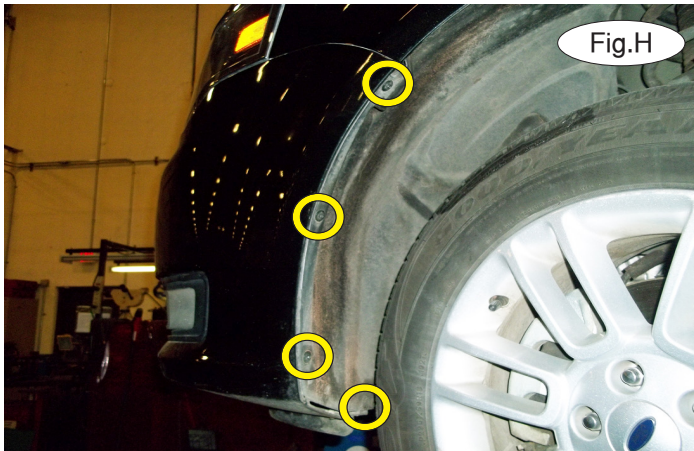




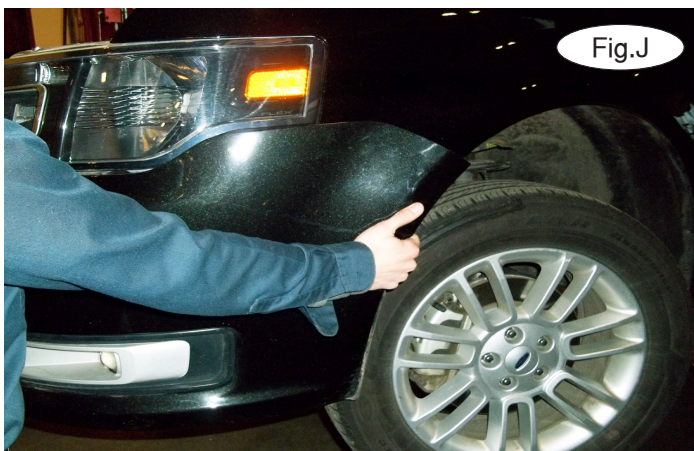
MOUNTING BRACKET KIT INSTALLATION INSTRUCTIONS

KIT# 524435-5

08/09/13



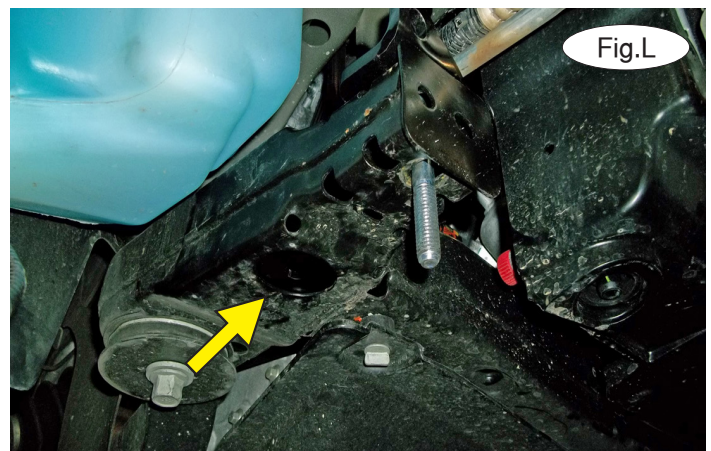
6. On each side, remove three 5.5mm screws and one plastic fastener attaching the fender liner to the fender (Fig.H).
7. Remove three plastic fasteners attaching the lower fascia to the subframe (Fig.I).



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

9. On each side, place the upper rear mounting plate on top of the subframe and using a $\frac{1}{2}$ " x 4" bolt and one $\frac{1}{2}$ " flat washer, bolt down through the plate and through the subframe. The yellow arrow in Figure K indicates the upper rear mounting plate on the passenger side. *Note:* ensure proper alignment, as the bolts will receive Loctite® Red and will be torqued at the end of these instructions.

10. On each side, place one of the supplied $\frac{3}{16}$ x 2" x 3" backing plates inside the large, oval hole in the bottom of the subframe. Center the backing plate in the hole and ensure it is laying completely flat (Fig.L – passenger side).

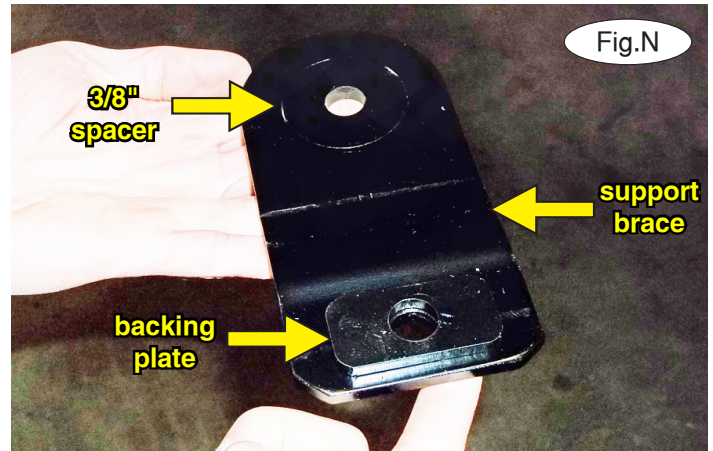
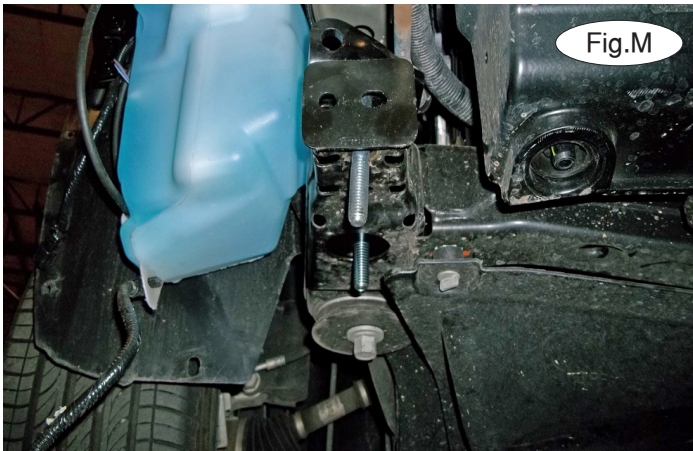




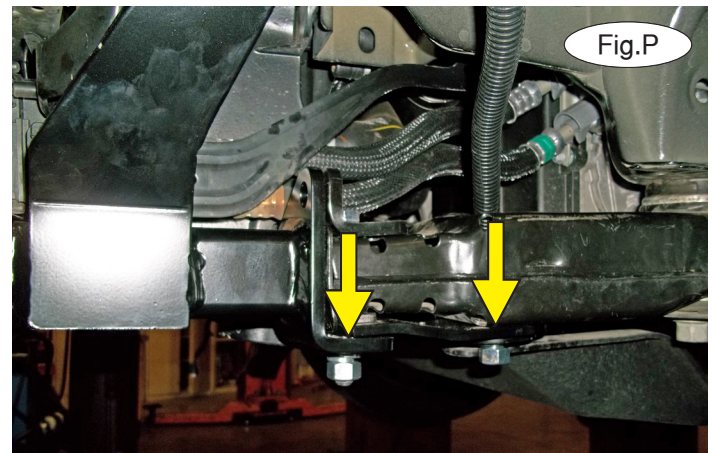
MOUNTING BRACKET KIT INSTALLATION INSTRUCTIONS

KIT# 524435-5

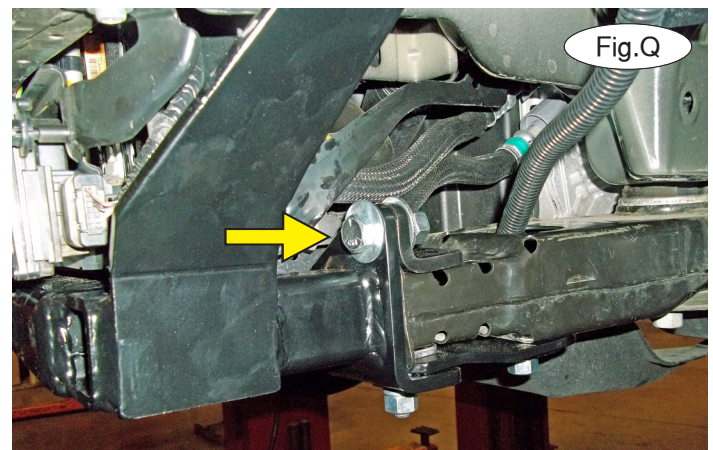
08/09/13



11. On each side, using one of the supplied $\frac{1}{2}$ " x $1\frac{1}{2}$ " bolts, bolt down through the pre-existing hole in the top of the sub-frame and through the backing plate you installed in the previous step (Fig.M – passenger side).
12. On each side, arrange the support brace with a $\frac{5}{16}$ " spacer in the large hole and a $\frac{3}{16}$ " x 1 " x 2 " backing plate over the squared end, as shown in Figure N. Now, place the arrangement over the bolts you just installed in the two previous steps, ensuring that the $\frac{3}{8}$ " spacer is in the large oval hole. Use a $\frac{1}{2}$ " plate washer, lock washer and nut on the rearmost hole only (Fig.O).



13. Place the rear horizontal mount on the bottom of the main receiver brace over the stud exposed in the previous step. On each side, finish the bolts with a $\frac{1}{2}$ " flat washer, lock washer and nut (Fig.P).
- Now, using one of the supplied $\frac{1}{2}$ " x $1\frac{1}{2}$ " bolts and a $\frac{1}{2}$ " flat washer, bolt through the uppermost subframe mount and finish with a $\frac{1}{2}$ " flat washer, lock washer and nut (Fig.Q).

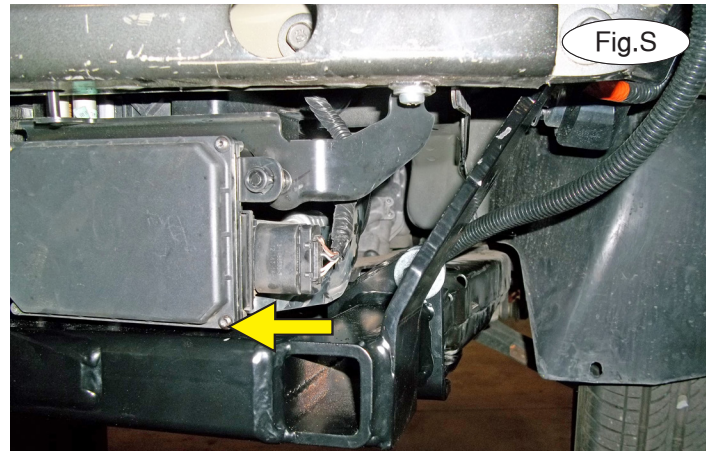
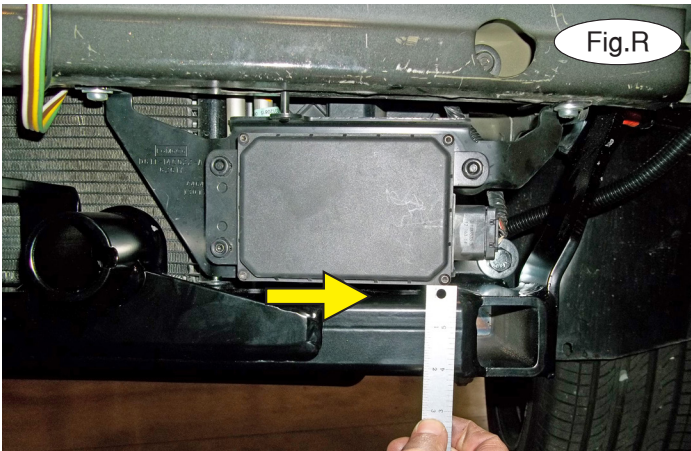




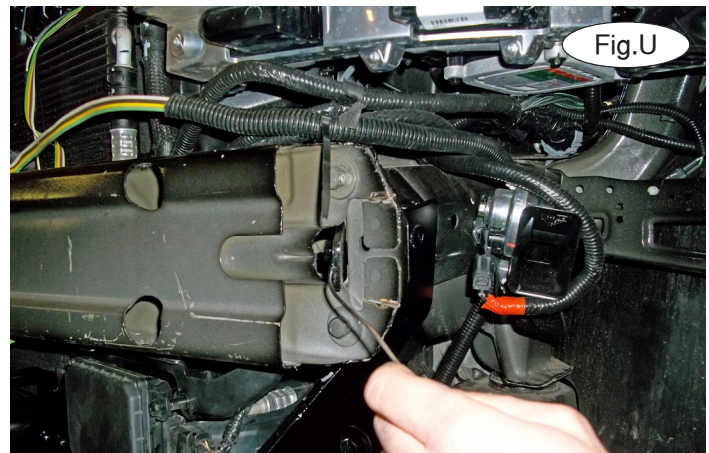
MOUNTING BRACKET KIT INSTALLATION INSTRUCTIONS

KIT# 524435-5

08/09/13



14. Measure to make certain that the ACC unit is properly spaced from the main receiver brace so there isn't any contact between them. There should be approximately $\frac{1}{4}$ " of space between the bottom of the ACC unit and the main receiver (Fig.R). **Note: ensure the bracket is properly aligned before proceeding to the next step (Fig.S).**



15. On each side, use the upper mounting point of the main receiver brace as a template for drilling. Drill a $\frac{1}{2}$ " hole through the side of the frame (Fig.T).

16. On each side, place a $\frac{3}{16}$ " x $1\frac{1}{4}$ " x $2\frac{1}{2}$ " threaded backing plate with rod inside the bumper core and over the hole you drilled in the previous step (Fig.U).

17. On each side, use one of the supplied $\frac{1}{2}$ " x $1\frac{1}{2}$ " bolts to bolt through the upper mounting point of the main receiver brace, frame rail and into the backing plate inserted in the previous step (Fig.V).

18. Tighten all bolts to the bolt torque requirements found at the end of these instructions. **Note: use Loctite® Red on all nuts and bolts.**

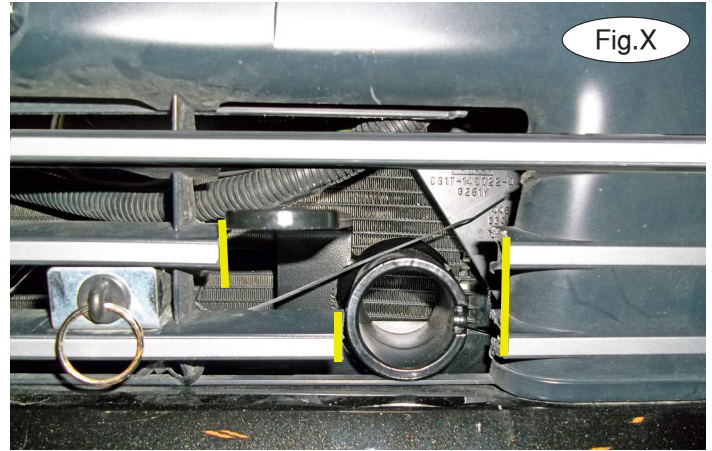
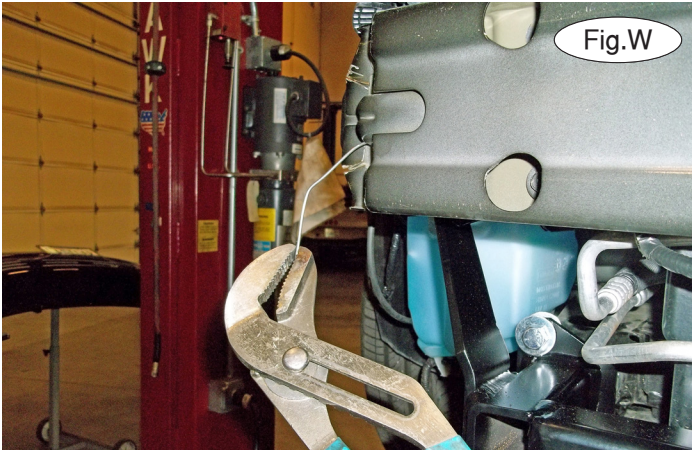




MOUNTING BRACKET KIT INSTALLATION INSTRUCTIONS

KIT# 524435-5

08/09/13



19. On each side, use a pair of channel locks to bend the rod on the backing plate out of the way (Fig.W).
20. Trim the fascia using the yellow lines in Figure X as a guide to allow clearance for the main receiver brace.
21. Reinstall the fascia, reversing steps 1-8.



16. **Note: the following four images are for illustration purposes only, as your specific application may be slightly different.**

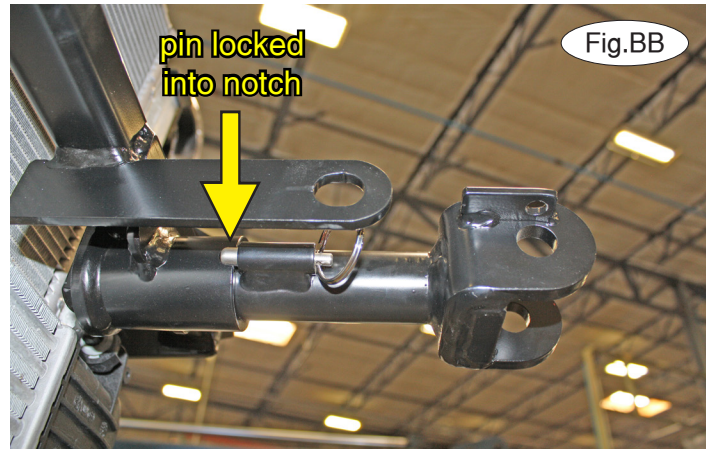
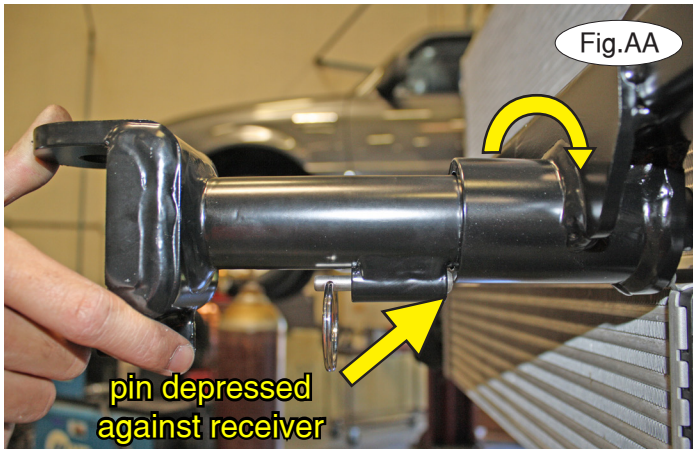
The spring-loaded pin on the removable arm snaps into a notch on the receiver, locking the removable arm into its final towing position. Before inserting each arm into the receiver, verify that the spring is working by ensuring that the spring-loaded pin moves easily back and forth within the barrel when pulled and that it can be pulled flush with the face of the barrel (Fig.Y and Fig.Z).



MOUNTING BRACKET KIT INSTALLATION INSTRUCTIONS

KIT# 524435-5

08/09/13



17. On each side, insert the removable front bracket arm into the front receiver 90 degrees from its final towing position, depressing the spring-loaded pin against the receiver (Fig.AA). Now, twist back 90 degrees until the spring-loaded pin snaps into place in the notch on the receiver, locking the arm into place in its final towing position (Fig.BB).

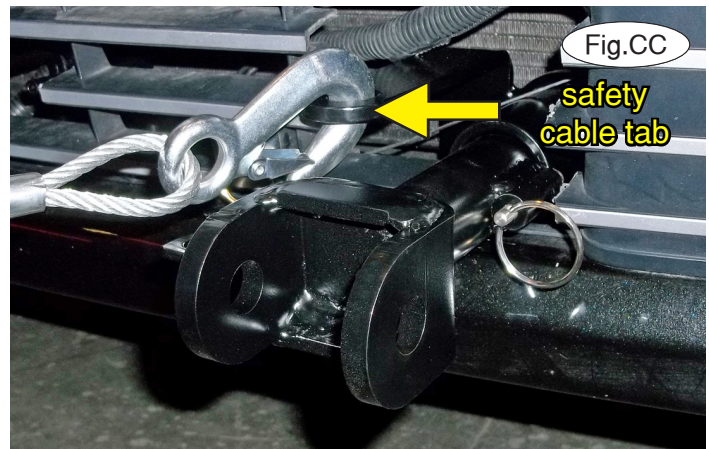
Please note: it is the owner's responsibility to ensure the locking of the pins before towing. Otherwise, failure of the towing system will result.

18. 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 shown in Figure CC. 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

KIT# 524435-5

08/09/13

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.DD). 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.

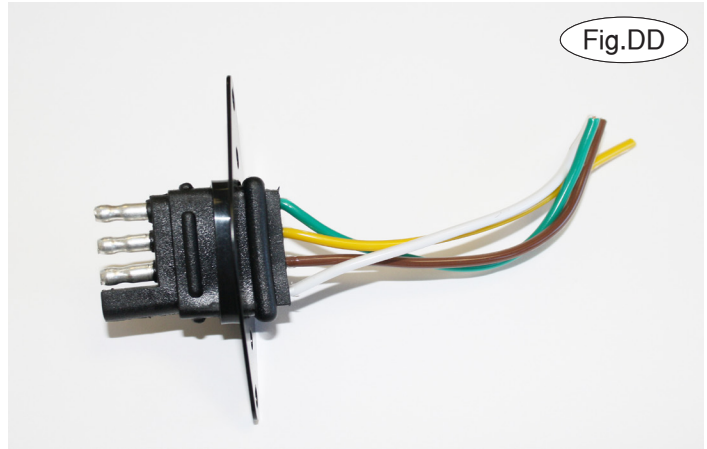


Fig.DD

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.