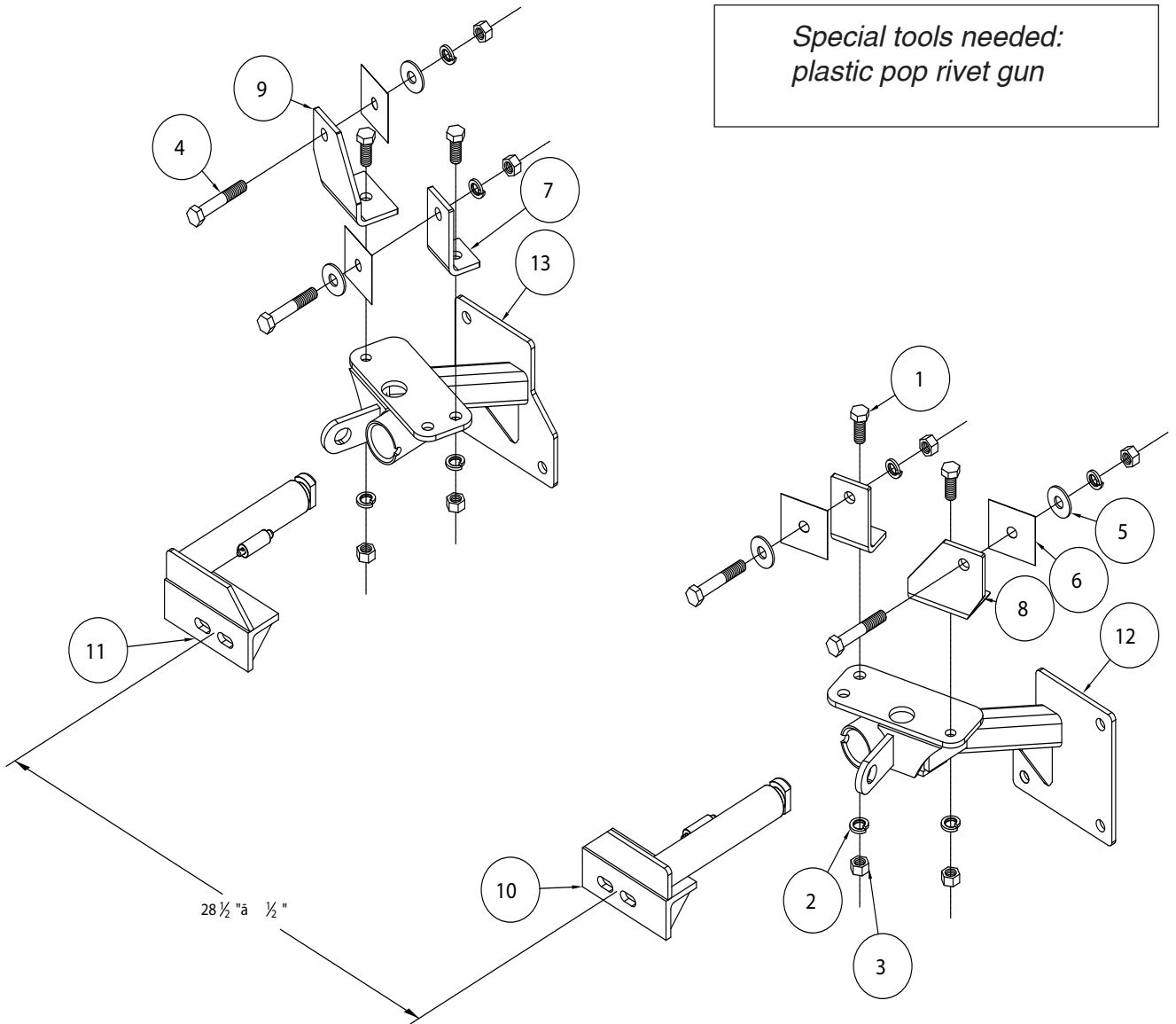




MOUNTING BRACKET KIT INSTALLATION INSTRUCTIONS

KIT# 521447-4

*Special tools needed:
plastic pop rivet gun*



ITEM	QTY	NAME	PART #
1	4	1/2" x 1 1/4" BOLT	350094-00
2	8	1/2" LOCK WASHER	350309-00
3	8	1/2" HEX NUT	350258-00
4	4	1/2" x 3" BOLT	350101-00
5	4	1/2" FLAT WASHER	350308-00
6	4	MYLAR WASHER x 2 1/2" x 2 1/2"	A-004268
7	2	CENTER MOUNTING TAB	B-002489
8	1	DRIVER SIDE MOUNTING TAB	B-002490
9	1	PASSENGER SIDE MOUNTING TAB	B-002491
10	1	DRIVER SIDE ARM	C-002686
11	1	PASSENGER SIDE ARM	C-002687
12	1	DRIVER SIDE RECEIVER	C-002688
13	1	PASSENGER SIDE RECEIVER	C-002689
14	4	PLASTIC POP RIVET	350431-00
15	1	LED WIRING INSTRUCTIONS	85-5241-00



MOUNTING BRACKET KIT INSTALLATION INSTRUCTIONS

KIT# 521447-4

This is one of our EZ4 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 two main receiver braces, four support plates, two removable front braces, and a hardware pack.

The main receiver braces mount to the support plates, frame rails and the bumper core. 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

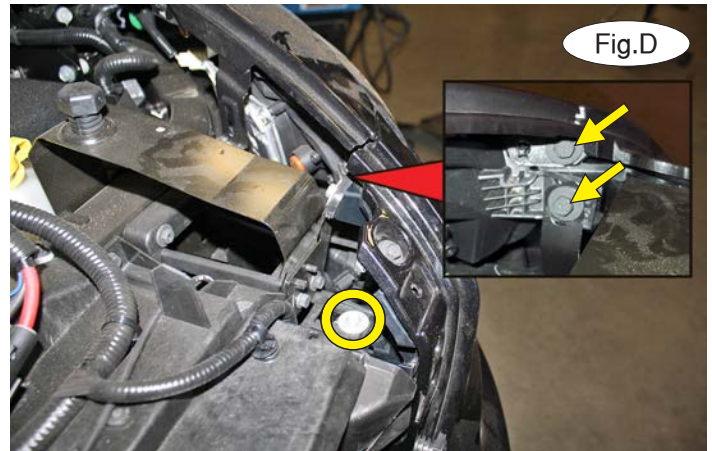
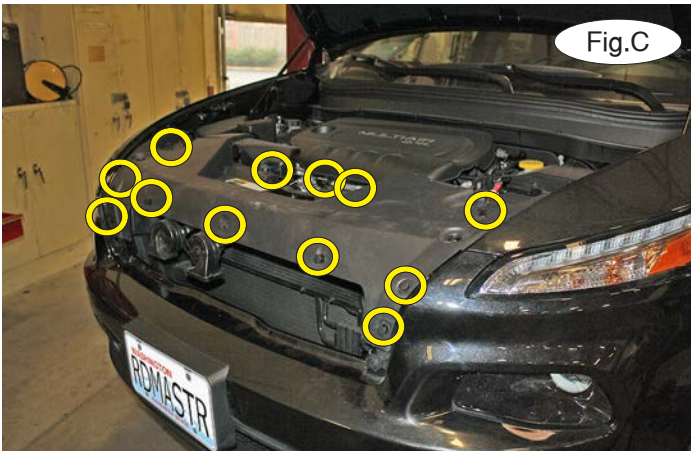
Failure to follow these instructions can result in property damage, personal injury or even death.

- 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.



MOUNTING BRACKET KIT INSTALLATION INSTRUCTIONS

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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 12 plastic fasteners attaching the radiator cover to the core support (Fig.C).

2. On each side, remove three 10mm (head) bolts attaching the fascia to the core support (Fig.D).



3. On each side, pull out to detach the fender trim clips, using caution so you don't break one (Fig.E) and then remove three 8mm (head) screws attaching the fender liner to the fascia (Fig.F).

4. Remove four 10mm (head) bolts attaching the fascia to the core support (Fig.G).



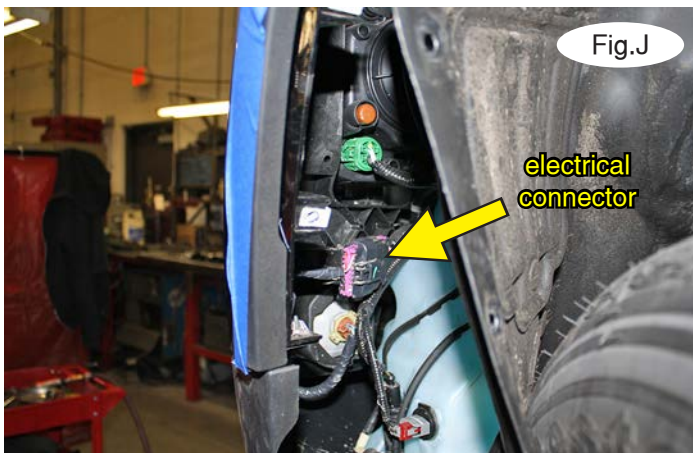


MOUNTING BRACKET KIT INSTALLATION INSTRUCTIONS

KIT# 521447-4



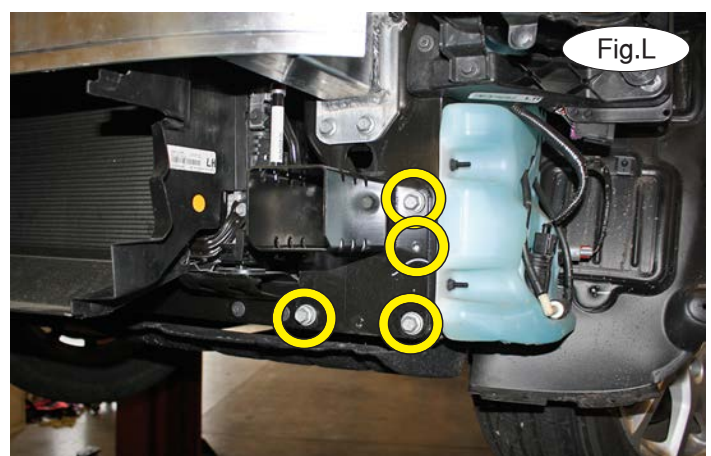
5. On each side, use a 1/4" drill bit to remove the two plastic pop rivets attaching the bottom of the fascia to the fender liner (Fig.H).
6. On each side, pull back the fender liner and remove one 10mm (head) bolt attaching the fascia to the fender (Fig.I).



7. On the driver's side only, disconnect the purple electrical connector and a plastic fastener attaching the wiring loom to the core support (Fig.J). **Note: make certain that the vehicle is not turned on while this connector is unplugged or it may trigger the 'Check Engine' light to illuminate.**

8. On each side, pull out and forward on the corners of the fascia to remove it (Fig.K).

9. On each side, remove one 10mm nut and three 15mm (head) bolts attaching the aluminum brackets to the subframe (Fig.L). The brackets will not be replaced. **Note:** retain the brackets in case the main receiver brace is ever removed from the vehicle.

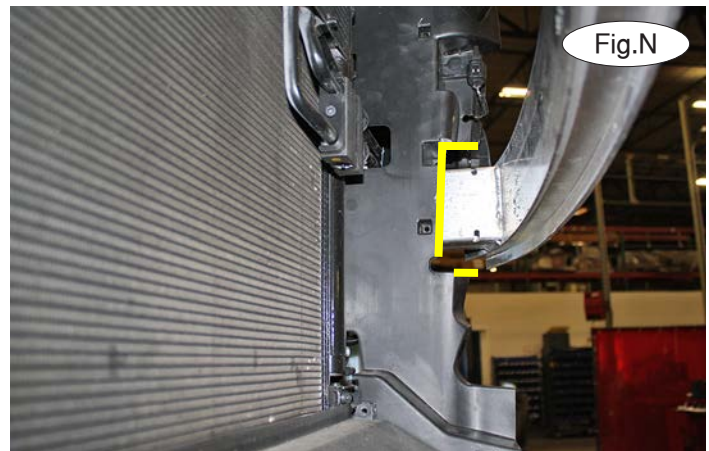
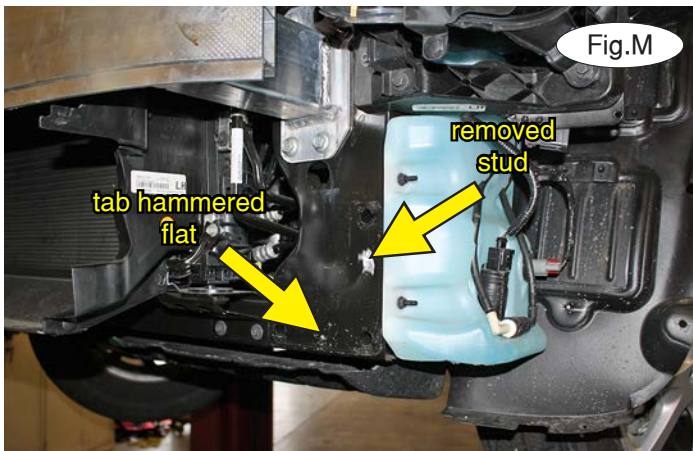


Caution! Under no circumstances should you attempt to move, adjust or disconnect the ACC unit, if the vehicle is so equipped. Doing so may cause cruise control malfunction and/or computer error codes that may require the dealership to repair or reset.



MOUNTING BRACKET KIT INSTALLATION INSTRUCTIONS

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10. On each side, use a cut-off wheel to remove the exposed stud and use a hammer to flatten the alignment tab (Fig.M).
11. On each side, trim the air dam as shown in Figure N to allow clearance for the main receiver brace.



12. On each side, place the main receiver brace over the aluminum bracket mounts and then replace the three 15mm (head) bolts you removed in step 9 (Fig.O). *Note:* before proceeding to drilling in the next step, ensure that the braces are level by measuring and comparing the distances from the bumper core on the inside and outside of each one. Then, torque the 15mm (head) bolts.

13. *Note:* use the drawing on page 1 as a guide to ensure the bracket is centered on the car and that the attachment points for the quick-disconnects are 28½" from center to center. Then, torque all the bolts to the bolt torque requirements found at the end of these instructions. ***Note: use Loctite® Red on the bolts. Otherwise, it will loosen and result in failure of the towing system.***

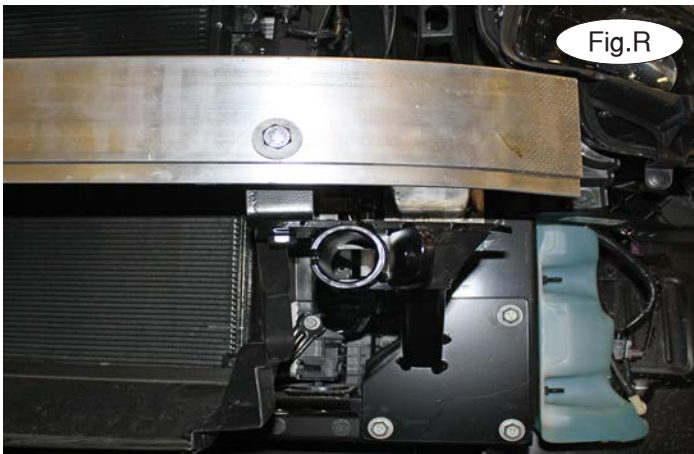


14. On each side, bolt the support plate to the rear inside mounting hole of the main receiver brace using one of the supplied ½" x 1¼" bolts, and a ½" lock washer and nut (Fig.P). Now, measure 2-5/8" up from the top surface of the main receiver brace and in line with the center of the support plate. Mark on center, and then drill a ½" hole through the bumper core and out existing hole in the support plate (Fig.Q). *Note:* ensure proper alignment, as the bolts will receive Loctite® Red and will be torqued at the end of these instructions.



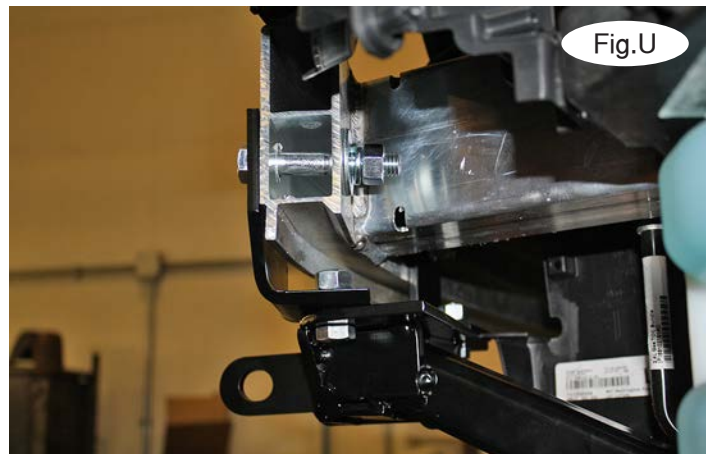
MOUNTING BRACKET KIT INSTALLATION INSTRUCTIONS

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15. On each side, place a Mylar washer between the support plate and the bumper core. Then, place a ½" flat washer over the supplied ½" x 3" bolt, and then bolt through the hole you drilled in the previous step, the bumper core, a Mylar washer and the support plate. Finish with a ½" lock washer and nut (Fig.R).

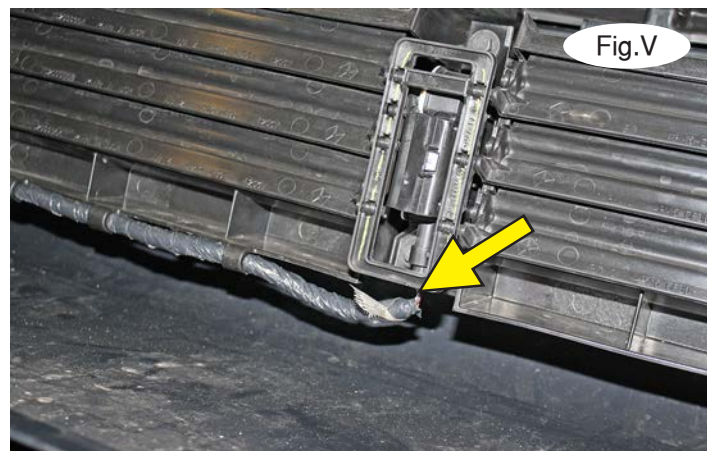
16. On each side, place the angled support plate over the outermost hole of the main receiver brace and using the supplied ½" x 1¼" bolt, bolt up through the main receiver brace and angled support plate and finish with a ½" lock washer and nut (Fig.S).



17. On each side, using the upper mounting point of the angled support plate as a template, drill a ½" hole through the bumper core (Fig.T). Now, place a Mylar washer between the plate and the bumper core and then bolt through using the supplied ½" x 3" bolt and finish with a ½" flat washer, lock washer and nut (Fig.U).

18. Tighten all bolts to the bolt torque requirements found at the end of these instructions. **Note: use Loctite® Red on the bolts. Otherwise, it will loosen and result in failure of the towing system.**

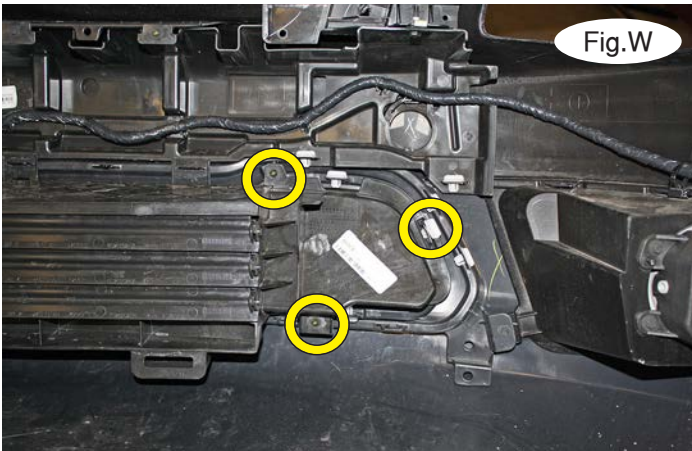
19. **If the vehicle is equipped with Active Grille Shutters:** disconnect the louver motor from the back of the fascia (Fig.V). **If the vehicle isn't equipped with Active Grille Shutters:** skip to step 22.





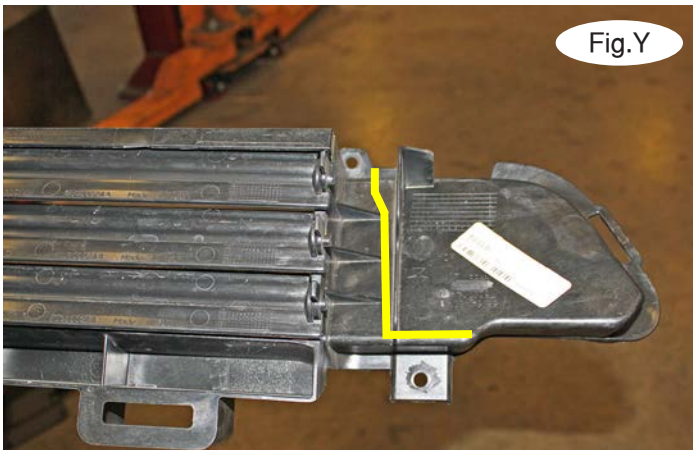
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20. On each side, remove two 7mm screws and one plastic fastener attaching the louver housing to the fascia (Fig.W). Pull out carefully to release the clips attaching the top and bottom of the louver housing to the fascia (Fig.X).

21. On each side, trim the louver housing as shown in Figure Y to allow clearance for the main receiver braces.



22. On each side, trim the fascia as shown in Figure Z using the yellow lines as references for trimming. **If the vehicle is equipped with Active Grille Shutters:** replace the louver housing and reconnect the louver motor. **If the vehicle isn't equipped with Active Grille Shutters:** proceed to the next step.

23. Reinstall the fascia, reversing steps 1-8. *Note:* use a pop rivet gun and the supplied pop rivets for reversing step 5.



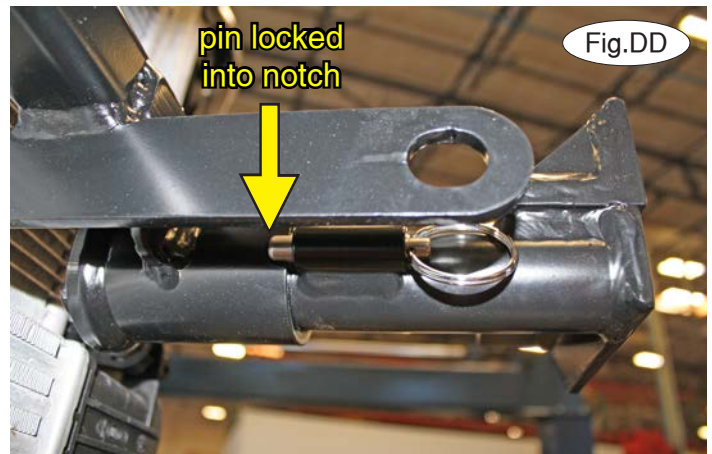
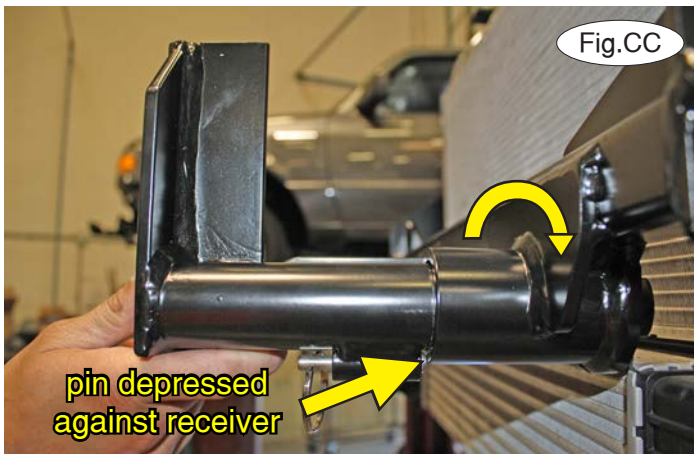
MOUNTING BRACKET KIT INSTALLATION INSTRUCTIONS

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24. **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.AA and Fig.BB).



25. 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.CC). 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.DD).

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.



MOUNTING BRACKET KIT INSTALLATION INSTRUCTIONS

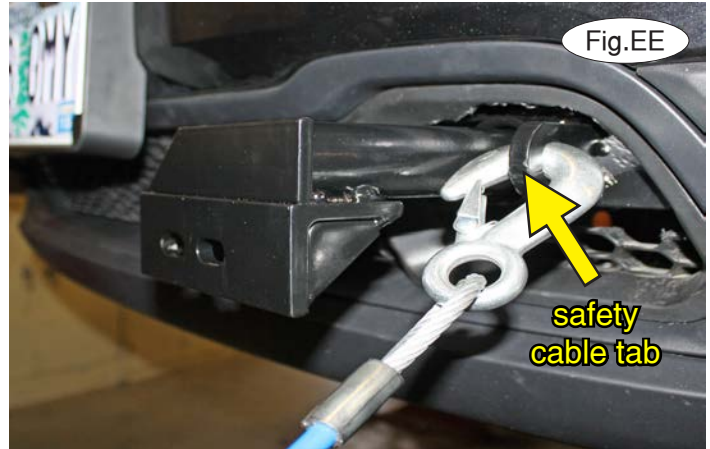
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26. Install the tow bar to the mounting bracket according to the manufacturer's instructions.

IMPORTANT!

Safety cables are required by law. When towing, connect safety cables to the safety cable tab shown in Figure EE. 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.



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.