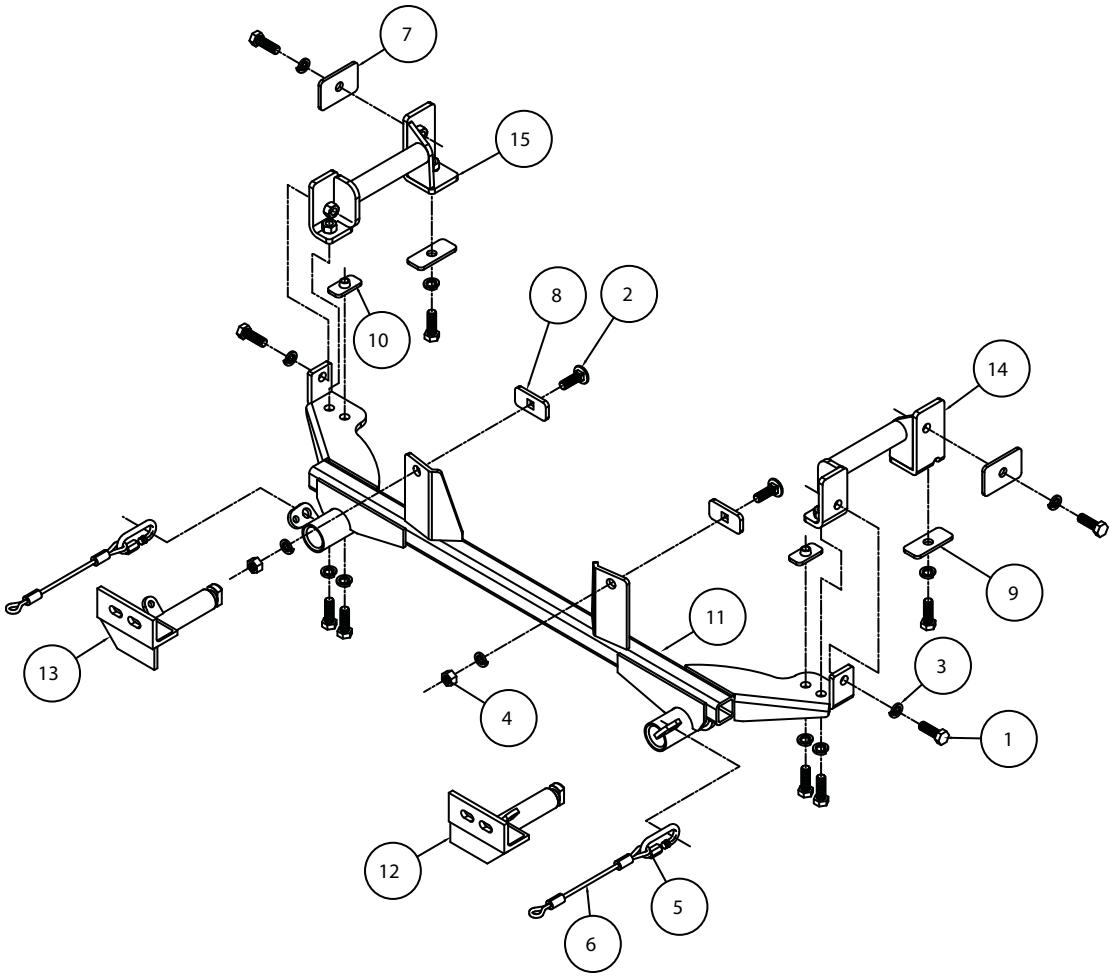
MOUNTING BRACKET KIT INSTALLATION INSTRUCTIONS

KIT# 524425-1

09/03/13
KS

ROADMASTER, Inc. 6110 NE 127th Ave. Vancouver, WA 98682 360-896-0407 fax 360-735-9300 www.roadmasterinc.com



ITEM	QTY	NAME	MATERIAL
1	10	1/2” x 1 1/2” BOLT	350095-00
2	2	1/2” x 1 1/4” CARRIAGE BOLT	350361-00
3	12	1/2” LOCK WASHER	350309-00
4	2	1/2” HEX NUT	250258-00
5	2	QUICK LINK	200008-00
6	2	SAFETY CABLE 8”	650646-08
7	2	3/16” x 2” x 3” BACKING PLATE	A-000147
8	2	1/4” x 1 1/4” x 2 1/2” SQ. HOLE BACKING PLATE	A-000440
9	2	3/16” x 1 1/4” x 3” BACKING PLATE	A-000317
10	2	3/16” PLATE x 1” x 2” THREADED BACKING PLATE	A-003074
11	1	MAIN RECEIVER	C-002057
12	1	DRIVER SIDE ARM	C-002058
13	1	PASSENGER SIDE ARM	C-002059
14	1	DRIVER SIDE BRACE	C-002060
15	1	PASSENGER SIDE BRACE	C-002061
16	2	ZIP TIE	300140-10

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This is one of our EZ2 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 removable front braces, and a hardware pack.

The main receiver brace mounts to the 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 warranteed for the original installation.** Installing a used bracket on another vehicle is not recommended and will void the warranty.

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Fig.C


Fig.D

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. Remove four plastic fasteners attaching the top of the fascia to the core support (Fig.C).

2. On each side, remove three T30 Torx bolts attaching the headlights to the core support and fender (Fig.D). Remove the headlights, unplug them, and set them aside.

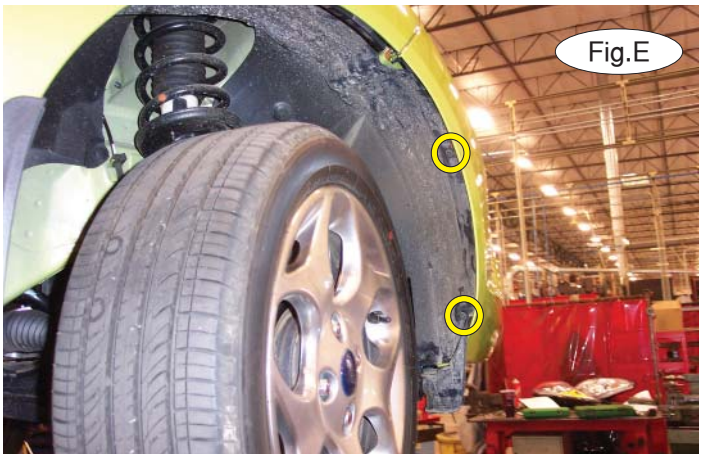
Fig.E


Fig.F

3. On each side, remove two T25 Torx bolts attaching the fender liner to the fascia (Fig.E).

4. Remove three 5.5mm screws attaching the lower fascia to the center splash shield (Fig.F).

5. On each side, remove three 8mm (head) bolts attaching the corner of the fascia to the center splash shield. Their approximate locations inside the fascia are noted in Figure G.


Fig.G

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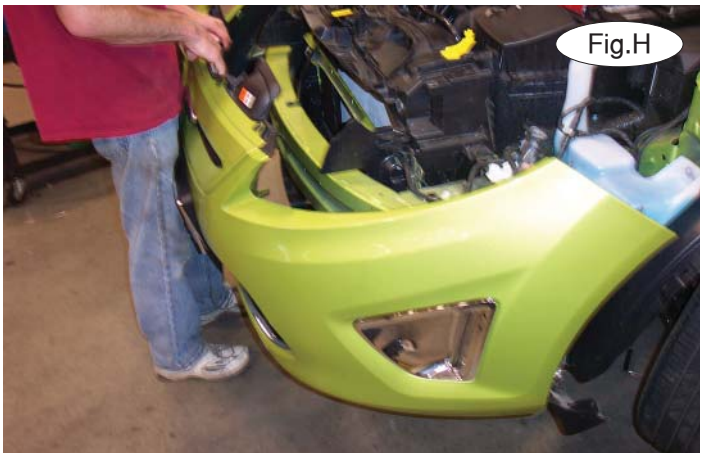
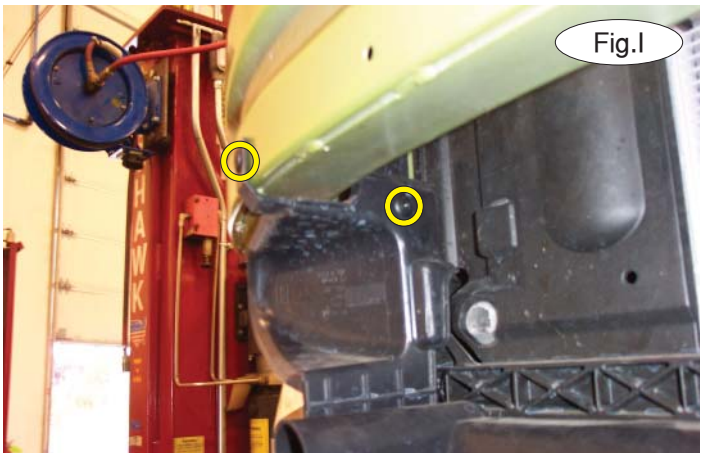
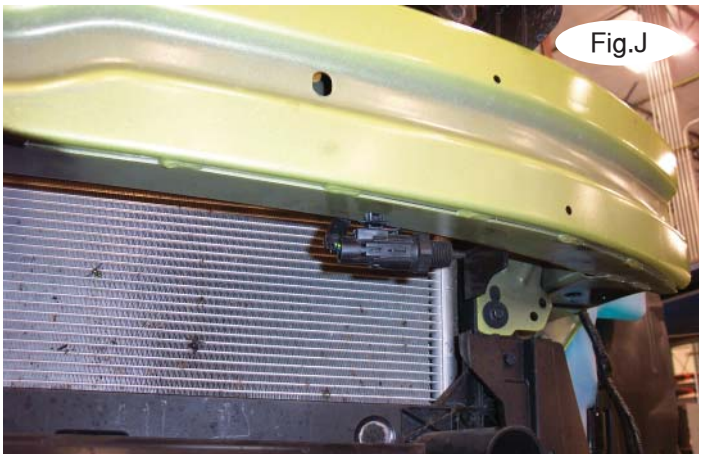
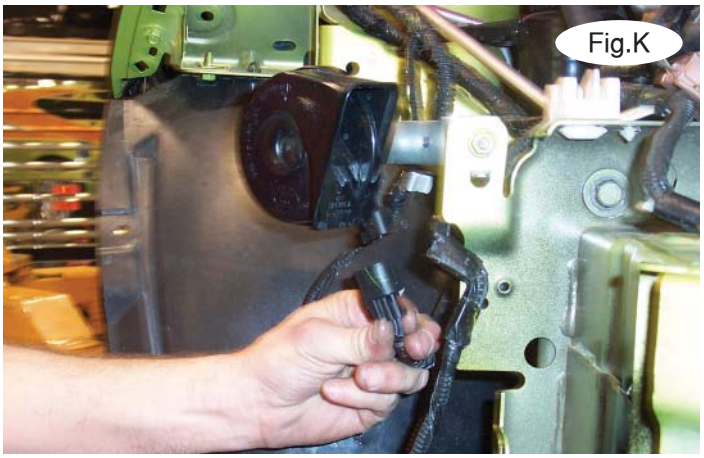




6. Lift up and forward to remove the fascia (Fig.H), then unplug the side marker lights.

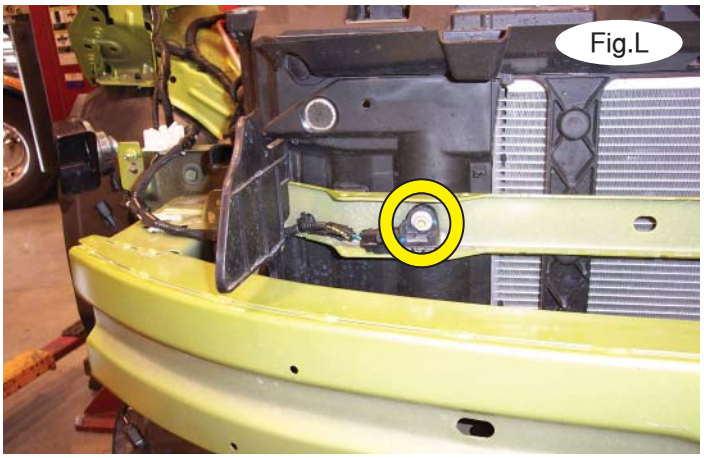
7. On each side, remove two plastic fasteners attaching the side air deflector to the bumper core (Fig.I). They will not be replaced. *Note:* retain the air deflectors and attachment hardware so they can be replaced if the bracket is ever removed.





8. Remove one plastic fastener attaching the ambient temperature sensor to the bottom of the bumper core (Fig.J).

9. Unplug the horn (Fig.K). Remove two 10mm nuts connecting the air bag sensors to the bumper core (Fig.L – passenger side).



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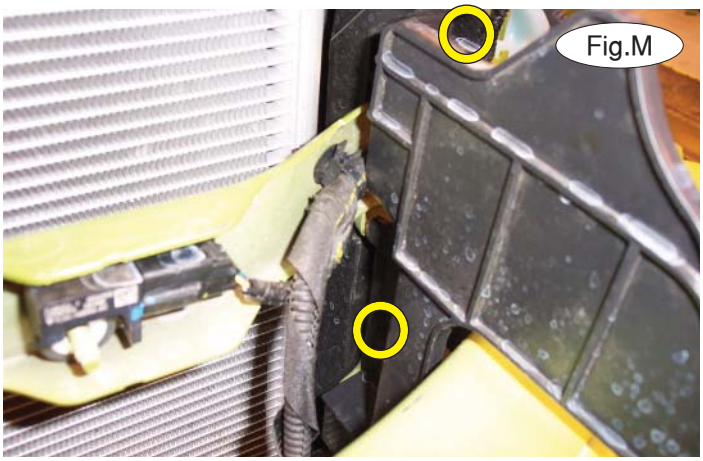
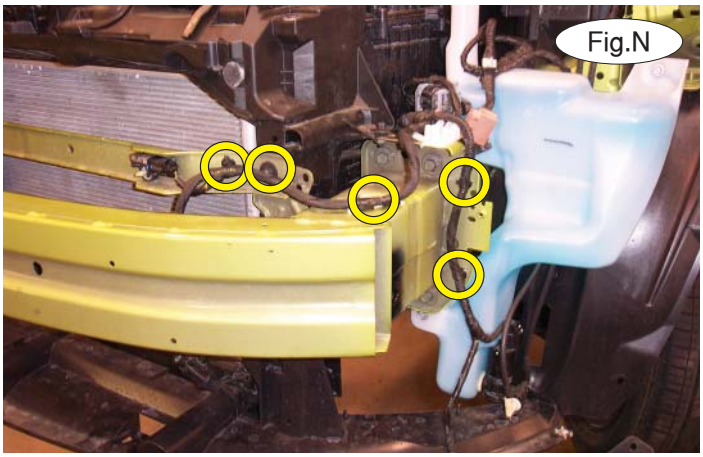
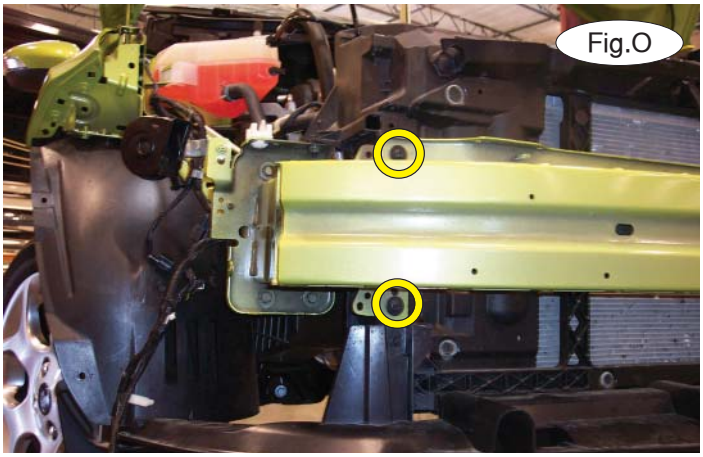




10. Remove two plastic fasteners attaching the upper air deflectors to the core support and bumper core (Fig.M).

11. Remove five plastic fasteners on the driver's side and four plastic fasteners on the passenger side attaching the wiring harnesses to the bumper core (Fig.N – driver's side).



12. On each side, remove two 8mm (head) bolts attaching the core support to the bumper core (Fig.O). Now, remove two 10mm (head) bolts attaching the core support to the bumper core and one 10mm (head) bolt attaching the hood latch support to the bumper core (Fig.P).

13. Use a floor jack to support the core support (Fig.Q).

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Fig.R


Fig.S

14. On each side, remove four 13mm (head) bolts attaching the bumper core to the frame rails (Fig.R).

15. Place the bumper core bottom face-up on a workbench. Locate the existing hole in the bottom of the bumper core and enlarge it to 9/16" using a die grinder.

16. Place the main receiver brace over the bottom of the bumper core, aligning the pre-existing holes in the outside mounting points with the holes you enlarged in the previous step (Fig.S).


Fig.T


Fig.U

17. Working on the passenger side, place one of the supplied ½" lock washers over one of the supplied ½" x 1½" bolts. Place a 1" x 2" threaded backing plate inside the bumper core (Fig.T). Bolt through the inside mounting point of the main receiver brace, the bumper core and into the backing plate (Fig.U).

18. Insert a fish wire through the rear mounting point of the main receiver brace and into the bumper core (Fig.V).


Fig.V

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Fig.W

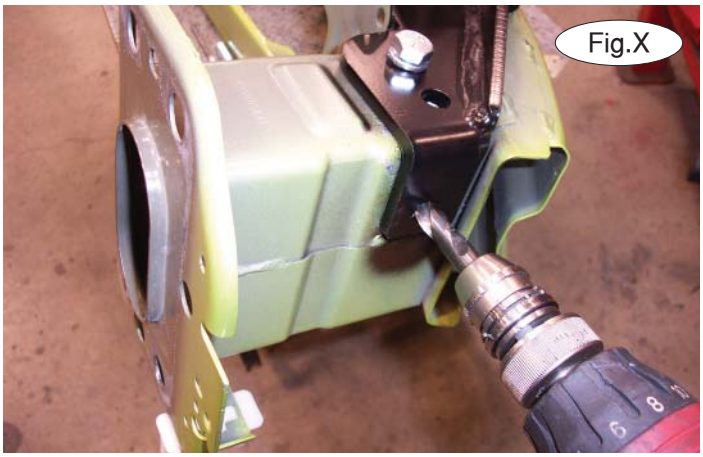
Fig.X

19. Place one of the supplied ½" x 1½" carriage bolts over a ¼" x 1¼" x 2½" backing plate. Place it on the fish wire and pull it through the bumper core and out through the rear mounting point of the main receiver brace. Finish with a ½" lock washer and ½" nut (Fig.W).

20. Using the side mounting point of the main receiver brace as a template, drill a ½" hole through the side of the bumper core (Fig.X).

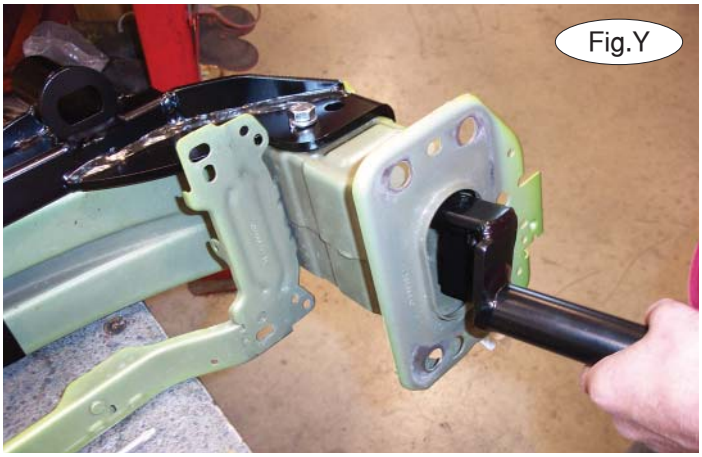
Fig.Y

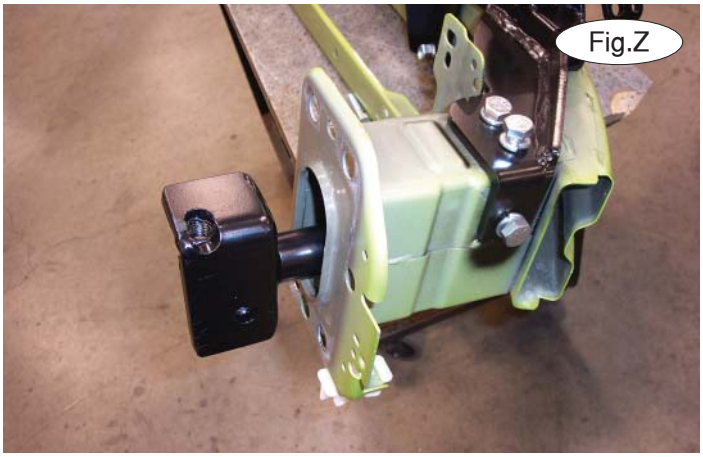
Fig.Z

21. Place the rear support into the bumper core (Fig.Y). Align it with the outside holes in the main receiver brace, and bolt it into place using the supplied ½" x 1½" bolt and ½" lockwasher (Fig.Z). *Note:* make certain that the rear brace is not overlapping the backing plates.

22. Repeat steps 17 through 21 for the driver's side.

23. Replace the bumper core bolts you removed in step 14 and leave loose for now (Fig.AA).

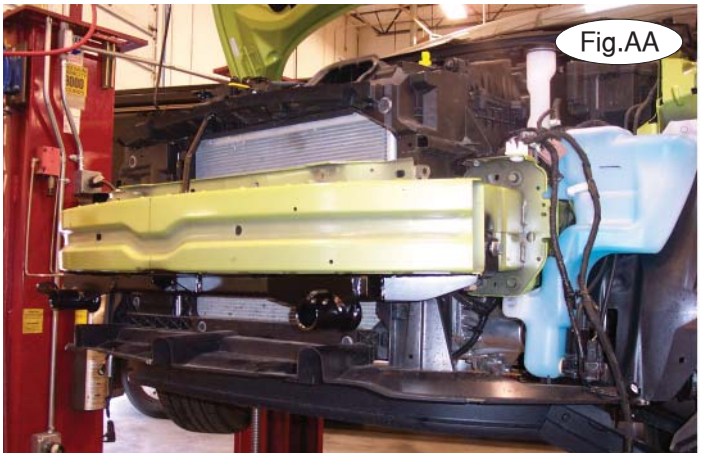
Fig.AA

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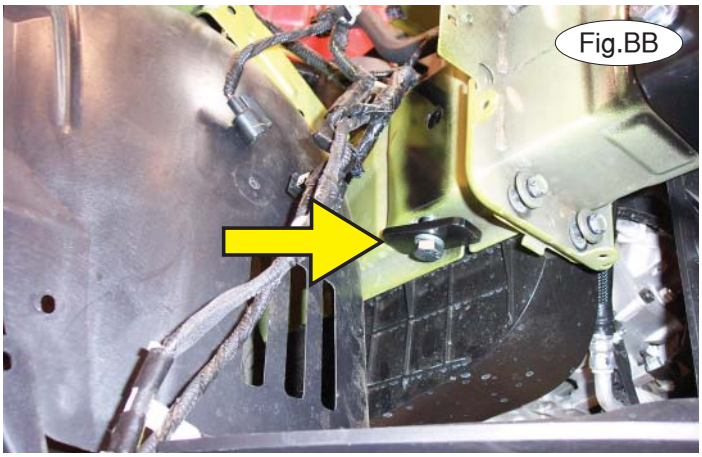
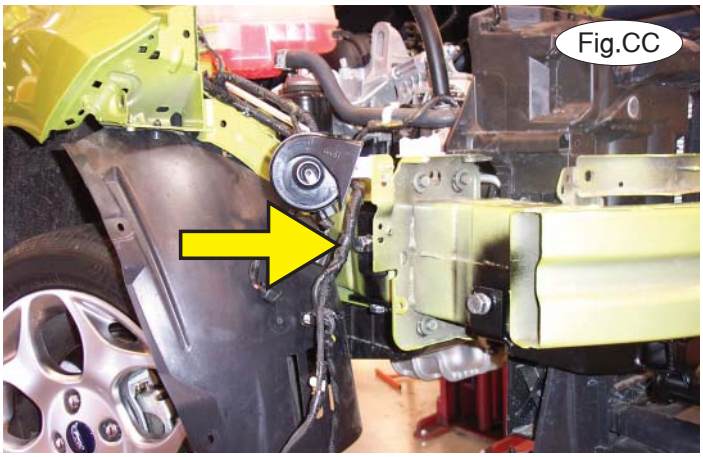
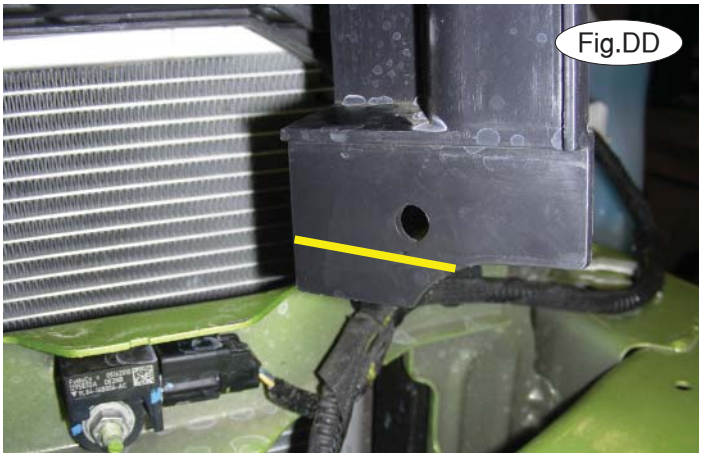
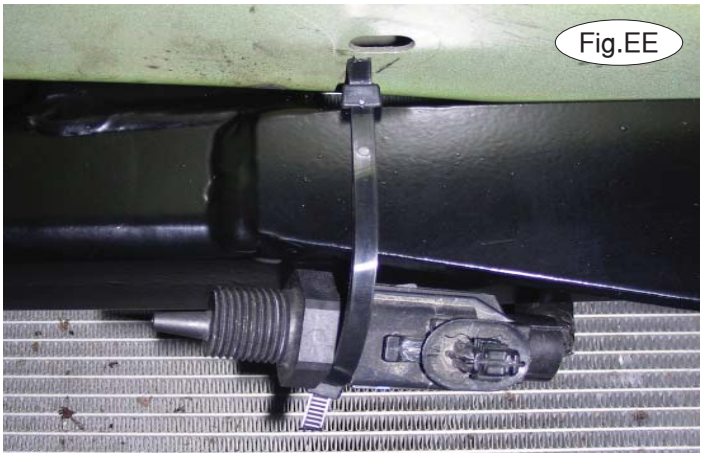




24. Working on the passenger side, place a ½" lock washer and a 3/16" x 1¼" x 3" backing plate over a ½" x 1½" bolt and bolt through the bottom of the frame rail and into the main receiver brace (Fig.BB).

25. Place a ½" lock washer and a 3/16" x 2" x 3" backing plate over a ½" x 1½" bolt and bolt through the side of the frame rail and into the rear support brace (Fig.CC).





26. Repeat steps 24 and 25 for the driver's side.

27. Replace and tighten the core support bolts, making certain that the core support seats correctly by aligning it with the outline of the washer on the back of the three bolts.

28. Torque all bolts to the bolt torque requirements found at the end of these instructions, beginning with the bolts at the rear of the bumper core.

29. Reassemble the fascia, reversing steps 1 through 6.

30. Trim the air deflectors using the yellow line in Figure DD as a guide for trimming.

31. Using the two supplied zip ties, mount the ambient temperature sensor to the main receiver brace (Fig.EE).

32. Trim the fascia using the yellow lines in Figure FF as a guide for trimming.

33. Insert the removable front bracket arms into the front receiver braces, and twist each one 90 degrees to lock.

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34. Attach the 8" safety cables with the cable connectors (Q-Links) to the front of the receiver braces (Fig.GG).

35. Attach the ends of the safety cables to the tow vehicle's safety cables.

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

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.

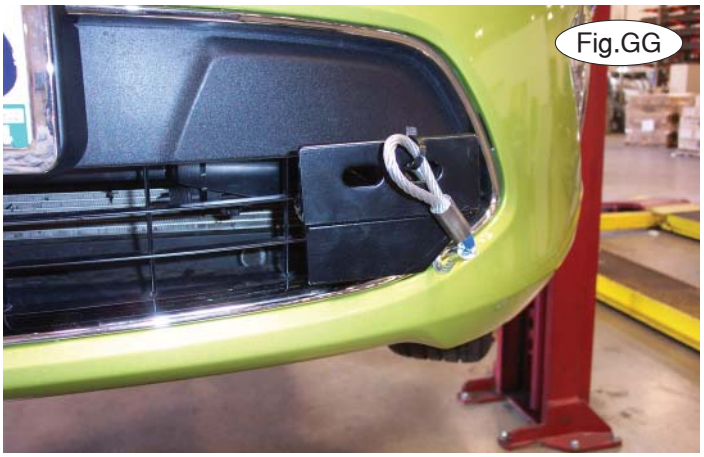
Fig.GG

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.