



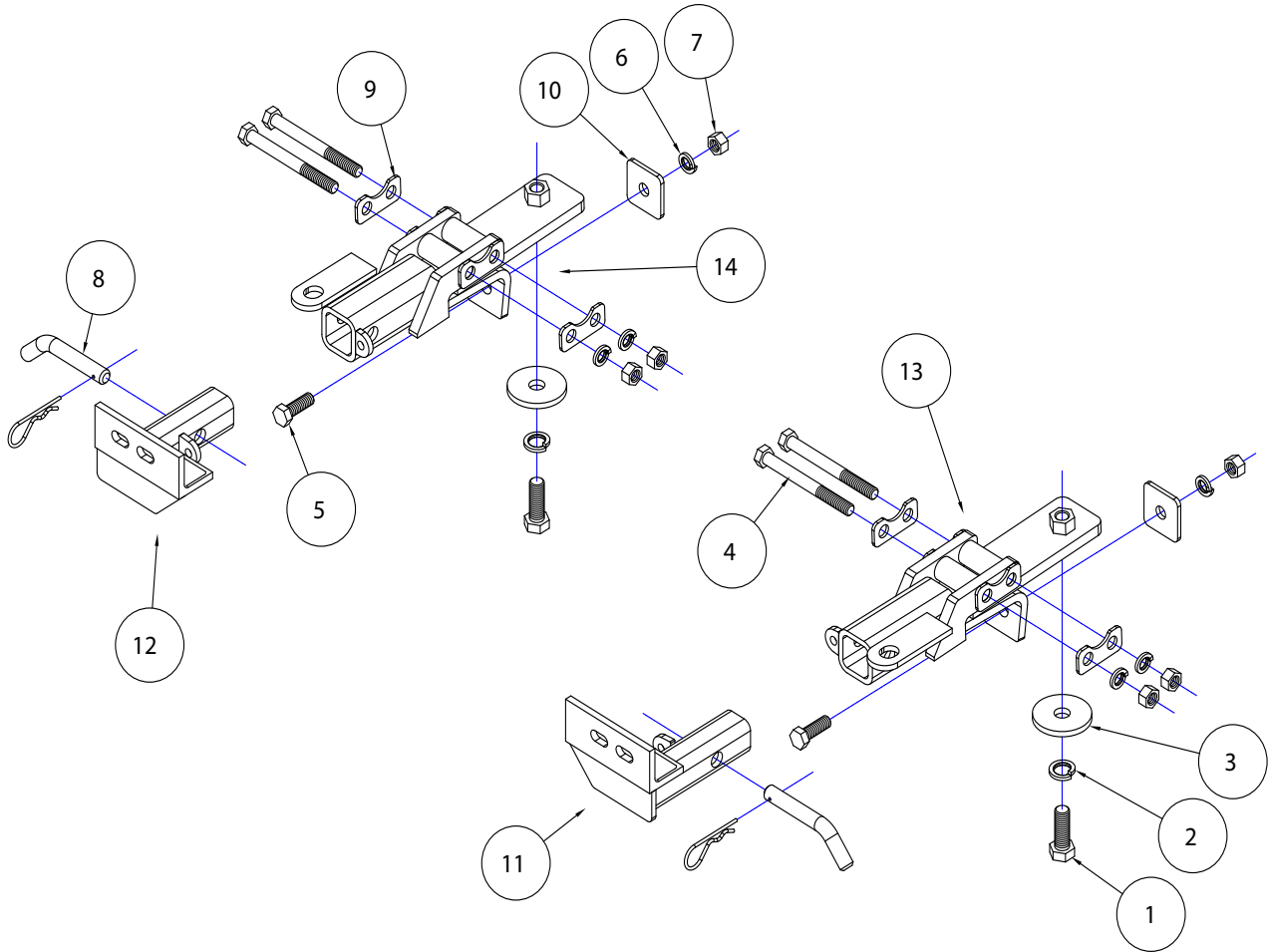
BASEPLATE KIT INSTALLATION INSTRUCTIONS

KIT# 3176-1

12/22/17
KS

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ROADMASTER, INC.



ITEM	QTY	NAME	PART #
1	2	5/8" x 2" BOLT	350150-00
2	2	5/8" LOCK WASHER	350313-00
3	2	5/8" PLATE WASHER	350352-00
4	4	1/2" x 5" BOLT	350107-00
5	2	1/2" x 1 1/2" BOLT	350095-00
6	6	1/2" LOCK WASHER	350305-00
7	6	1/2" HEX NUT	350258-00
8	2	DRAW PIN WITH CLIP	357035-00
9	4	1 1/8" x 2 9/16" BACKING PLATE	A-005218
10	2	3/16" x 2" x 2" BACKING PLATE	A-001066
11	1	DRIVER SIDE ARM	C-002638
12	1	PASSENGER SIDE ARM	C-002639
13	1	DRIVER SIDE RECEIVER	C-002640
14	1	PASSENGER SIDE RECEIVER	C-002641



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

The main receiver braces mount to the frame rails. 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 baseplates *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 and lock washers on all fasteners.

WARNING

Failure to heed these warnings or follow the installation instructions may result in a voided warranty, loss of towed vehicle, personal injury or death.

- Do not weld or modify this baseplate or its components. Welding or modification will void the warranty.
- Do not use this document as a basis to design/fabricate a baseplate, as it may not show all parts or structural components.
- We strongly recommend professional installation.
- If the towed vehicle has been in an accident, it must be properly repaired before attaching the baseplate. Do not install the baseplate if any structural frame damage is found.
- The installer must use all bolts and parts supplied. If running changes were made by the vehicle manufacturer after this kit was designed, some bolts or other fasteners may no longer be the correct size. It is the installer's responsibility to verify this kit is securely fastened to the vehicle.
- Use Loctite® Red on all bolts used to secure this baseplate. Torque all bolts to the specifications found at the end of these instructions. Do not over-torque the bolts or failure may occur.
- The installer must inspect the baseplate to ensure adequate clearance, particularly around hoses, air conditioner lines, radiators, etc. or non-warranty failure may result.
- Roadmaster manufactures many styles of baseplates. If your baseplate 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.
- Some motorhome chassis have such a tight turning radius that you can damage your motorhome, towed vehicle, tow bar or baseplate 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 your 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 or vehicles.
- 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. See cable instructions for proper routing. Failure to do so will result in non-warranty damage and/or the loss of the towed vehicle.
- This kit is designed for use with ROADMASTER tow bars and ROADMASTER adapters only. Using this kit with other brands, without an approved ROADMASTER adapter, may result in non-warranty damage or injury.
- Receiver extensions and out-of-level towing situations of 3 inches or more. This can cause the system to swing much higher and lower, causing excessive strain on the tow bar, baseplate and frame. That can cause the towing system to fail, causing property damage, personal injury or even death. If you must use a receiver extension or drop hitch to tow, it will reduce your receiver's weight capacity by 1/3 to avoid damaging your system. Never use more than one extension and/or drop hitch, as this will void your warranty.
- Every 3,000 miles, the owner must inspect all mounting points for cracks or fatigue, and check the fasteners for proper torque, according to the bolt torque requirements chart on the last page of these instructions.
- The owner must follow the vehicle manufacturer's instructions to prepare the vehicle for towing. Failure to do so may cause severe damage to the vehicle.
- This baseplate is only warranted for the original installation. Installing a used baseplate on another vehicle is not recommended and will void the warranty.

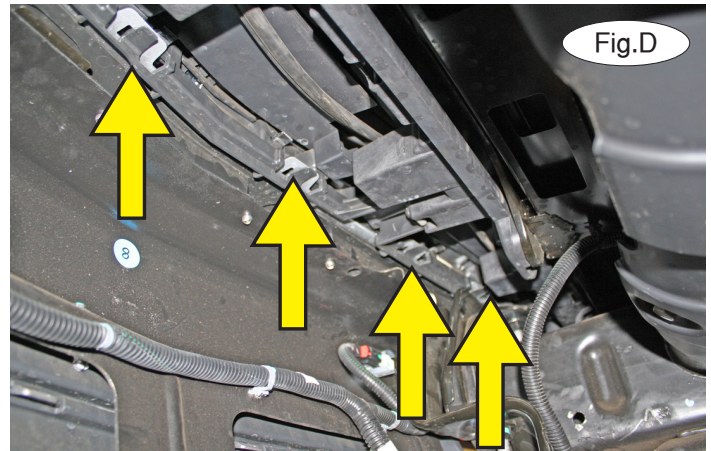


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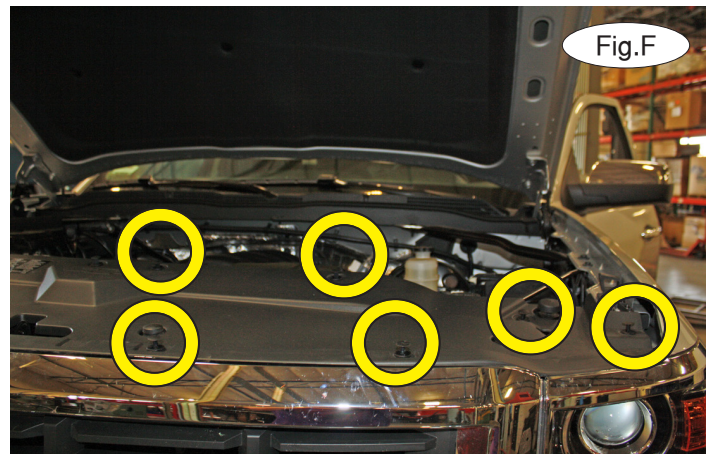
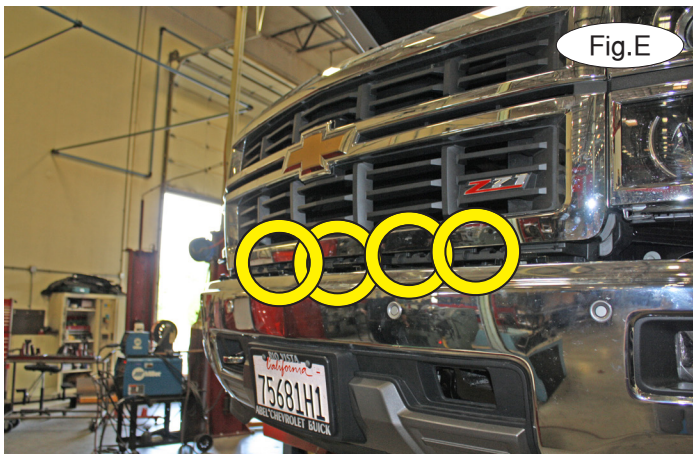
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1. **Important:** please use all supplied bolts and parts and read all instructions carefully before beginning this installation. The majority of questions you may have can be answered within the text, and proper installation will ensure safe and secure travel. Now, begin the installation. **For 2015 and earlier models:** on each side, remove two 7mm (head) bolts attaching the center fascia trim to the fender liner (Fig.C). **For 2016 and later models:** proceed to step 4.

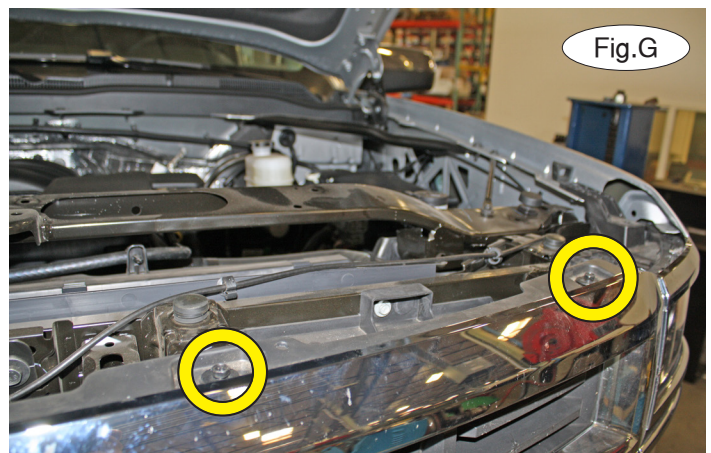
2. Release six clips attaching the center fascia trim to the back of the grille. Four of the six clips are shown in Figure D (passenger side). Pull out on the corner of the fascia while pulling down on the black tab on each clip to remove the center fascia trim.



3. Remove four 10mm (head) bolts from the bottom of the grille (Fig.E).

4. On each side, remove 6 plastic fasteners attaching the radiator cover to the core support (Fig.F – passenger side).

5. On each side, remove two 10mm (head) bolts attaching the top of the grille to the core support (Fig.G).





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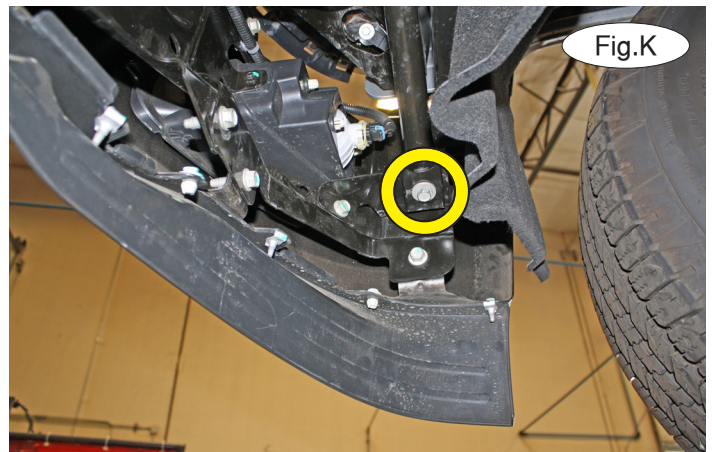
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6. For 2015 and earlier models: skip to step 7. For 2016 and later models: on each side, pull up on the corner of the upper grille to pull the aligning pin out of the slot (Fig.H). Ensuring that the pin is properly released, get a firm grip on the side of the fascia and pull straight out on it to release the clips from the side and bottom of the upper grille (Fig.I). Now, skip to step 8.



7. Carefully pull on the lower corner of the grille to release it from the locking clip (Fig.J – passenger side).

8. On each side, remove one 15mm (head) bolt attaching the bumper to the stabilizer bar (Fig.K – passenger side).

9. On the passenger side only, disconnect the wiring harness and then detach the wiring harness retainer from the bumper (Fig.L).



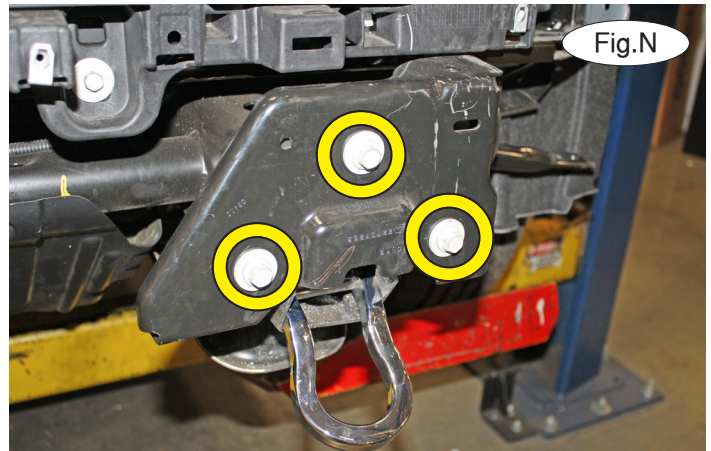
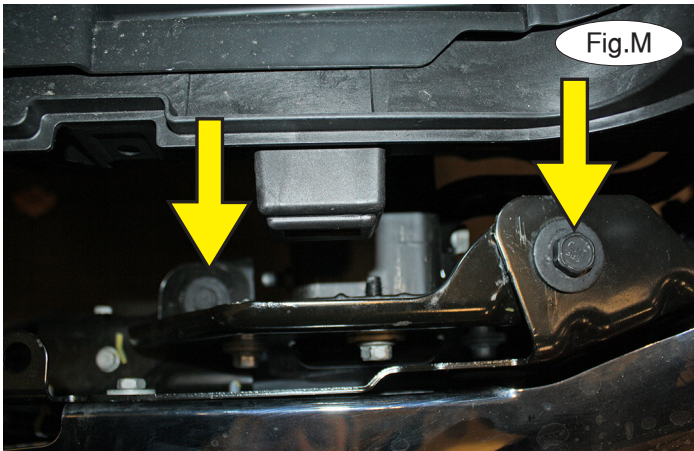


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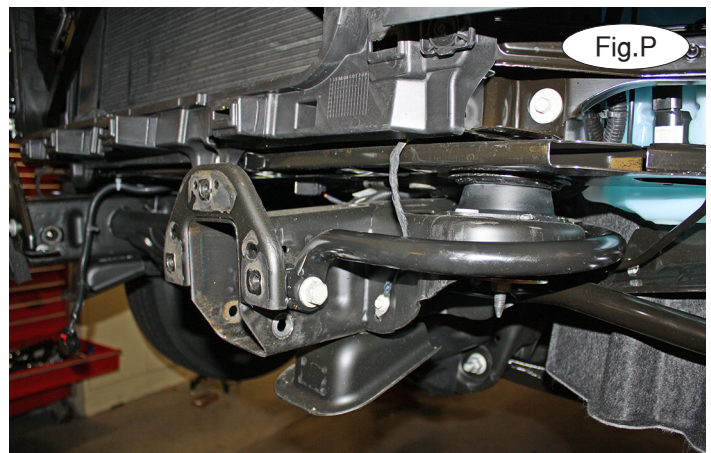
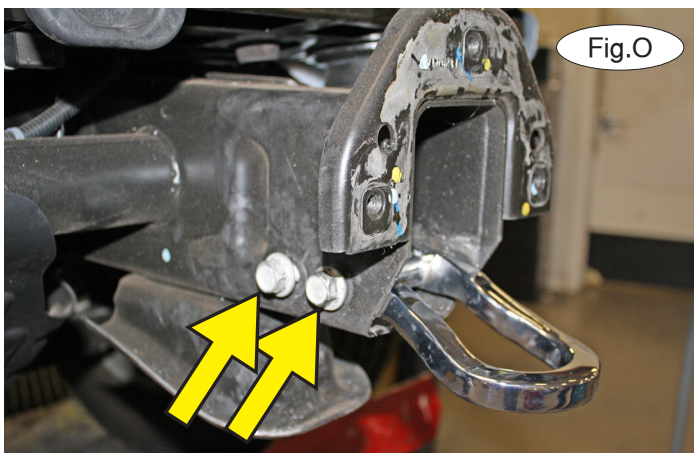
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10. On each side, remove two 18mm (head) bolts attaching the bumper to the frame (Fig.M – passenger side). Now, remove the bumper. *Note:* this step will require two people due to the weight of the bumper.

11. On the driver's side only, remove three 15mm (head) bolts attaching the bumper mounting plate to the frame rail (Fig.N).



12. Remove one 18mm (head) bolt and nut, and one 18mm (head) bolt attaching the tow hook to the frame rail (Fig.O).

13. Working on one side at a time, insert the driver's side main receiver brace into the tow hook opening, and onto the front of the frame rail. *Note:* ensure that the safety cable tab is to the outside of the vehicle (Fig.P).

14. Attach the main receiver brace to the bottom of the frame rail by bolting one of the supplied 5/8" x 2" bolts, lock washers and plate washers through the existing hole at the bottom of the frame and into the existing weld nut in the main receiver brace (Fig.Q). *Note:* ensure proper alignment, as the bolts will receive Loctite® Red and will be torqued at the end of these instructions.



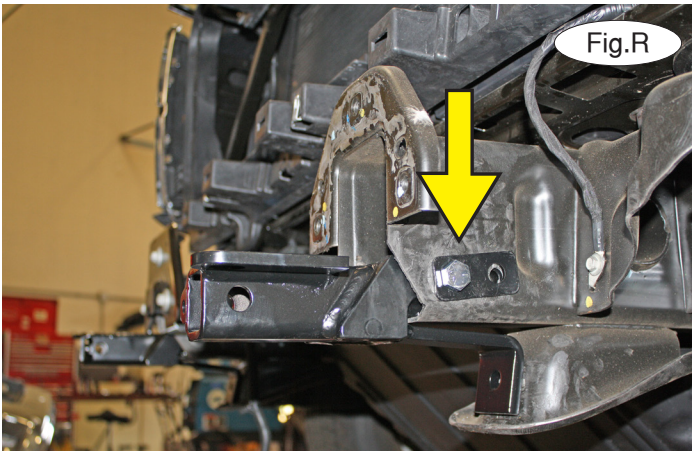


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15. On the outside of the frame rail, insert one of the supplied $\frac{1}{2}$ " x 5" bolts through one of the $\frac{1}{4}$ " x $1\frac{1}{4}$ " x $2\frac{3}{4}$ " backing plates (with two $\frac{9}{16}$ " holes) and into the existing hole at the front of the driver's side frame rail, which was used to attach the tow hook (Fig.R). *Note:* due to manufacturing variances, this hole may need to be enlarged. *Note:* due to running changes, the backing plates used in this step may look slightly different. If they do, use the drawing on page 1 to orient them correctly.



16. Using the pre-existing hole on the inside of the frame rail and the hole in the main receiver brace as a template, drill a $\frac{17}{32}$ " hole through the interior side of the frame rail and through the backing plate you installed in the previous step (Fig.S).

17. From the outside of the frame rail, insert another $\frac{1}{2}$ " x 5" bolt through the backing plate and the hole you drilled in the previous step. On the inside of the frame rail, position another $\frac{1}{4}$ " x $1\frac{1}{4}$ " x $2\frac{3}{4}$ " backing plate (with two $\frac{9}{16}$ " holes) over the bolts. Then, attach the backing plate with two $\frac{1}{2}$ " lock washers and nuts (Fig.T).

18. Using the lower hole in the main receiver brace as a template, drill a $\frac{17}{32}$ " hole through the lower frame reinforcement (Fig.U).



19. Now, using one of the supplied $\frac{1}{2}$ " x $1\frac{1}{2}$ " bolts, bolt through the brace and the hole drilled in the lower frame reinforcement in the previous step. Finish with a $\frac{3}{16}$ " x 2" x 2" backing plate and $\frac{1}{2}$ " lock washer and nut (Fig.V).



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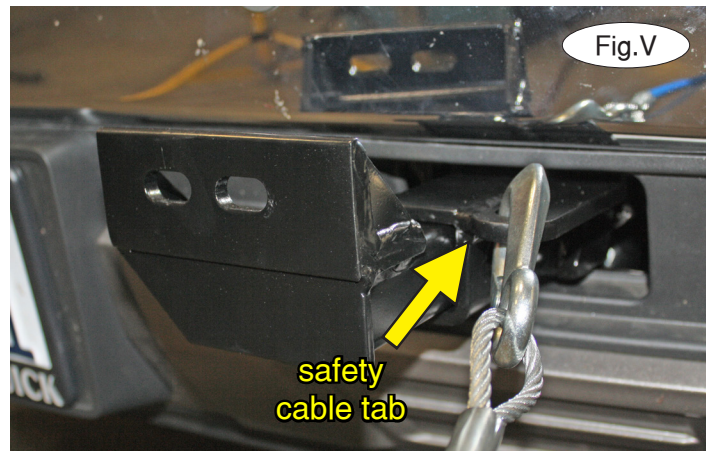
20. Use the drawing on page 1 as a guide to ensure the bracket is centered on the car and that the attachment points for the quick-disconnects are 28½" from center to center. Tighten all bolts to the bolt torque requirements found at the end of these instructions. *Note:* use Loctite® Red on all nuts and bolts.

21. **For 2015 and earlier models with tow hook openings:** proceed to the next step. **For 2015 and earlier models without tow hook openings:** trim the fascia as shown in Figure W, using the yellow lines as an approximate reference for trimming. **For 2016 and later models:** trim the fascia as shown in Figure X, using the yellow lines as a guide.

22. Reinstall the fascia, bumper and bumper mounting plate, reversing steps 1 through 10. *Note:* ensure that the bumper aligns on top of the stabilizer bar when reversing step 7.

23. Insert the removable front bracket arms into the front receiver braces, and secure them in place with the supplied 5/8" draw pins and spring pins.

24. Install the tow bar to the mounting bracket according to the manufacturer's instructions. Attach the ends of the safety cables to the tow vehicle's safety cables and tow bar.



IMPORTANT!

Safety cables are required by law. When towing, connect safety cables to the safety cable tabs shown in Figure V. 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 receivers 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.



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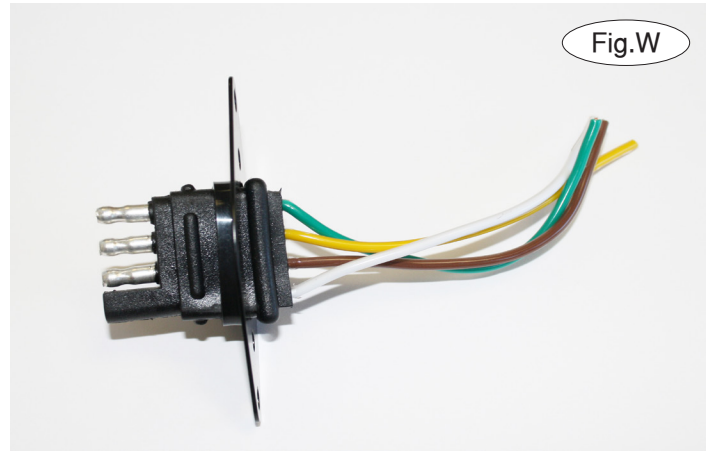
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Three options for attaching the wiring plug to the main receiver brace

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.W). 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.



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
5/16-18	5	13 ft./lb.
3/8-16	5	23 ft./lb.
7/16-14	5	37 ft./lb.
1/2-13	5	57 ft./lb.
5/8-11	5	112 ft./lb.

METRIC BOLTS

Thread Size	Grade	Torque
6mm-1.0	8.8	6 ft./lb.
8mm-1.0	8.8	18 ft./lb.
8mm-1.25	8.8	16 ft./lb.
10mm-1.25	8.8	36 ft./lb.
10mm-1.5	8.8	31 ft./lb.

METRIC BOLTS

Thread Size	Grade	Torque
12mm-1.25	8.8	64 ft./lb.
12mm-1.5	8.8	60 ft./lb.
12mm-1.75	8.8	55 ft./lb.
14mm-2.0	8.8	88 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.