



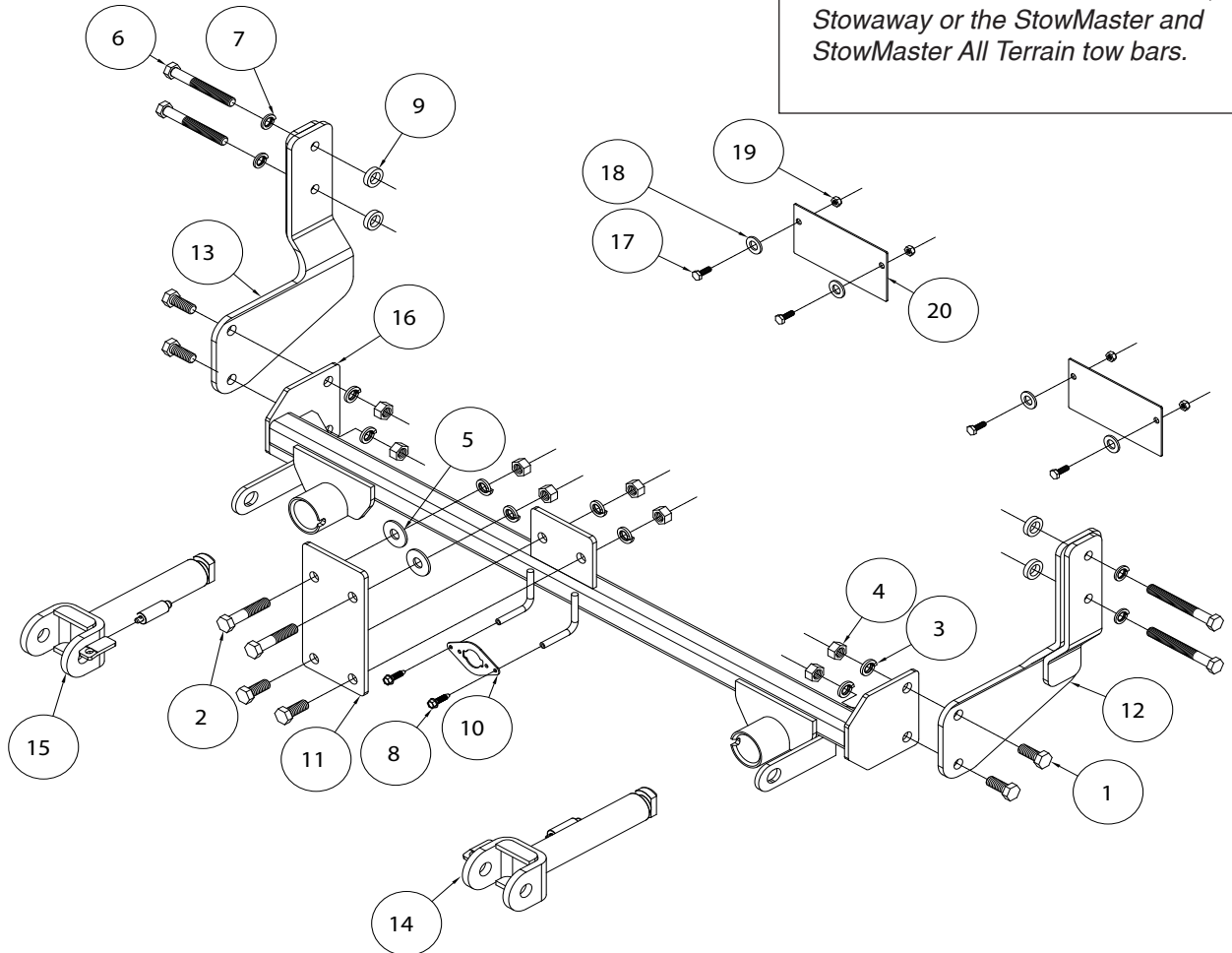
MOUNTING BRACKET KIT INSTALLATION INSTRUCTIONS

KIT# 521882-5

05/18/15

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 1/4" BOLTS	350094-00
2.....	2.....	1/2" x 2 1/2" BOLTS	350099-00
3.....	8.....	1/2" LOCK WASHER	350309-00
4.....	8.....	1/2" HEX NUT	350258-00
5.....	4.....	1/2" FLAT WASHER	350308-00
6.....	4.....	12mm x 1.5 x 110mm BOLT	357113-00
7.....	4.....	12mm LOCK WASHER	355725-00
8.....	2.....	#10 x 3/4" SELF TAPPING SCREW	350247-35
9.....	4.....	1" x 1/4" SPACER	A-001022
10.....	1.....	WIRE PLUG PLATE	A-003801
11.....	1.....	CENTER PLATE	A-004803
12.....	1.....	DRIVER SIDE BRACE	C-002787
13.....	1.....	PASSENGER SIDE BRACE	C-002788
14.....	1.....	DRIVER SIDE ARM	C-002383
15.....	1.....	PASSENGER SIDE ARM	C-002384
16.....	1.....	MAIN RECEIVER	C-002784
17.....	4.....	1/4" x 1" BOLT	350005-00
18.....	4.....	1/4" FLAT WASHER	350300-00
19.....	4.....	1/4" NYLOCK NUT	350251-01
20.....	2.....	FENDER PLUG PLATE	A-004843
21.....	1.....	ZIP TIE	300140-10



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This is one of our EZ5 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, rear braces 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.

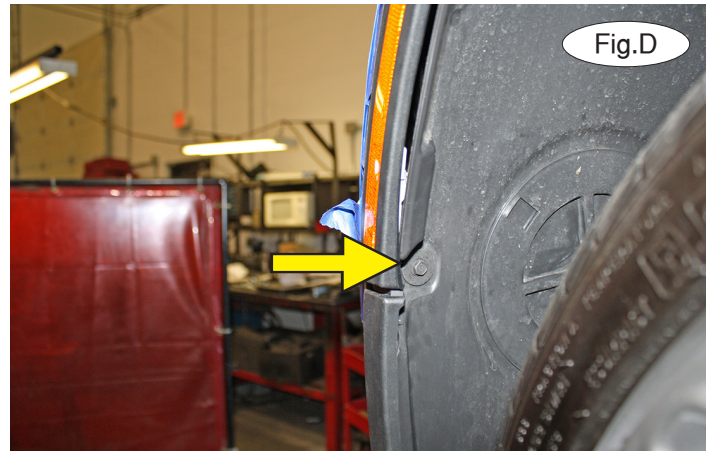
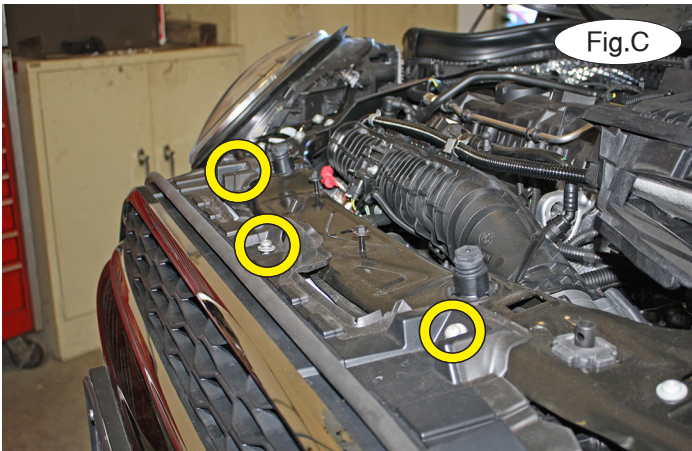
- Installation of most mounting brackets requires moderate mechanical aptitude and skills. We strongly recommend professional installation by an experienced installer.
- The installer must read the instructions and use all bolts and parts supplied. Failure to do so could result in loss of the towed vehicle.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



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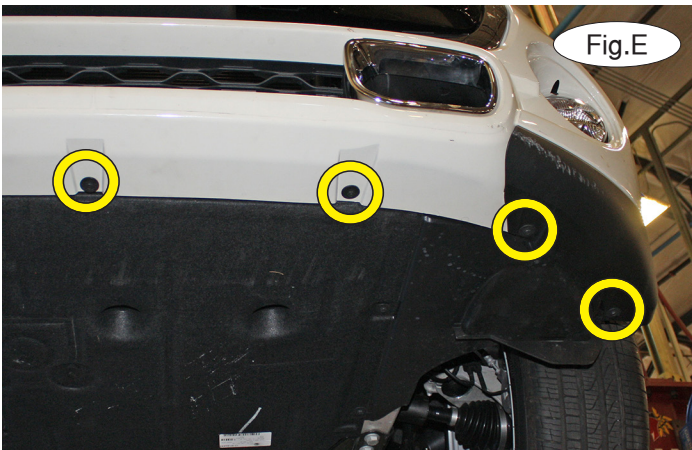
KIT# 521882-5

05/18/15



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 three T30 Torx (head) bolts attaching the upper fascia to the core support (Fig.C).

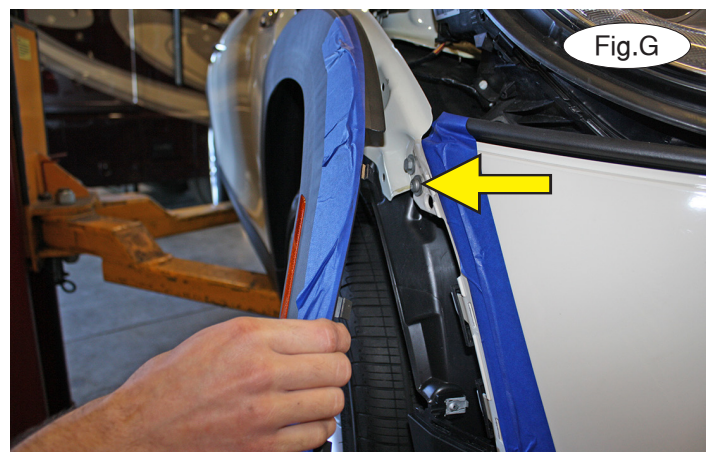
2. On each side, remove one 8mm (head) screw attaching the fascia to the fender liner (Fig.D).



3. On each side, remove three 8mm (head) screws attaching the fascia to the lower splash shielding and one in the middle (Fig.E).

4. On each side, carefully pull up and out on the fender trim, while releasing from inside the fascia the three clips that are along the forward edge of the trim. Then, continue to pull the trim away from the frame, releasing the two gray clips (Fig.F).

5. On each side, remove one T30 Torx bolt attaching the corner of the fascia to the fender (Fig.G – passenger side). Disconnect the side marker lights, if the vehicle is so equipped.





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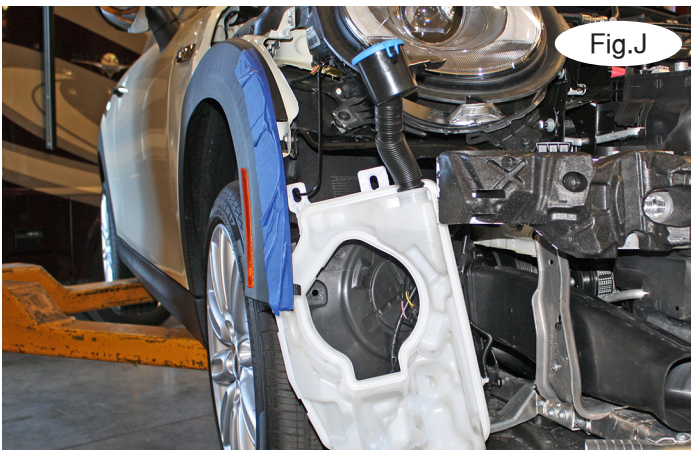
KIT# 521882-5

05/18/15



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

7. On the passenger side only, remove two T30 Torx (head) bolts attaching the top of the washer bottle to the frame (Fig.I). Pull up and out to release the bottle neck and then carefully lift the washer bottle out and maneuver the washer bottle around the framing. Secure it away from the frame for now (Fig.J).

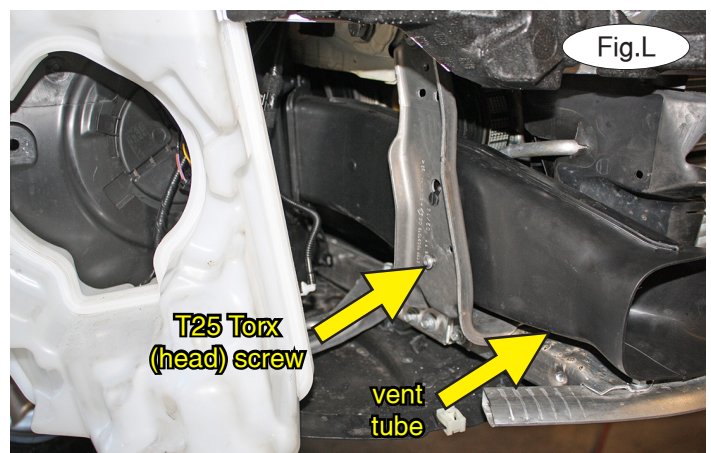


8. On each side, remove two plastic fasteners attaching the back end of the vent tube to the fender liner (Fig.K).

9. On each side, remove one T25 Torx (head) screw attaching the vent tube to the aluminum crossmember (Fig.L). Pull out the vent tube to remove it. The vent tubes will not be replaced.

Note: retain the vent tubes and attachment fasteners for replacement in case the bracket is ever removed.

Note: on the driver's side, the ambient temperature sensor will also need to be disconnected to remove the vent tube.

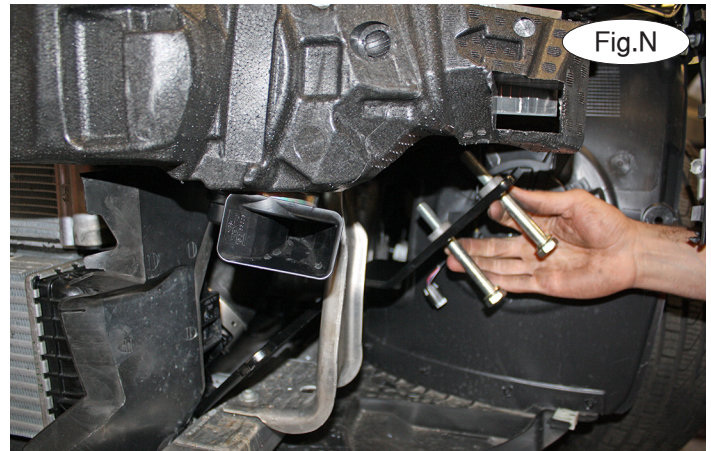
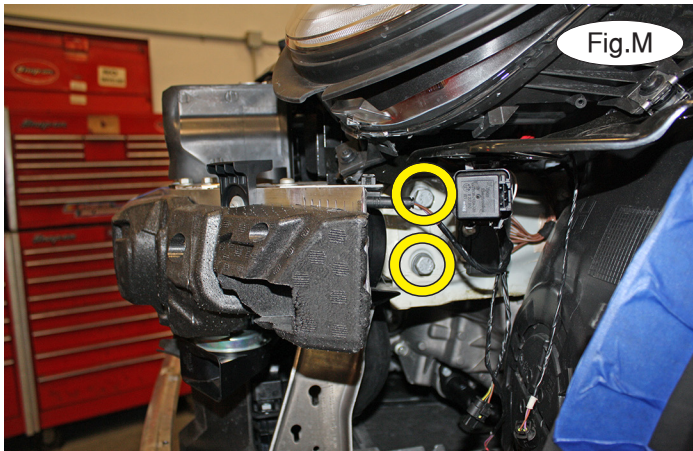




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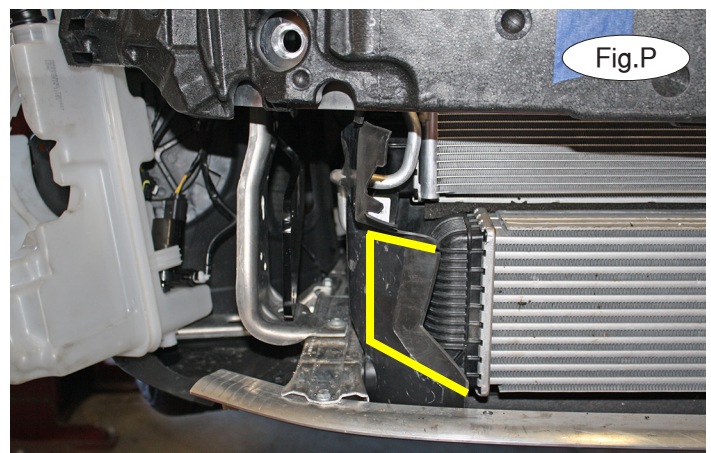
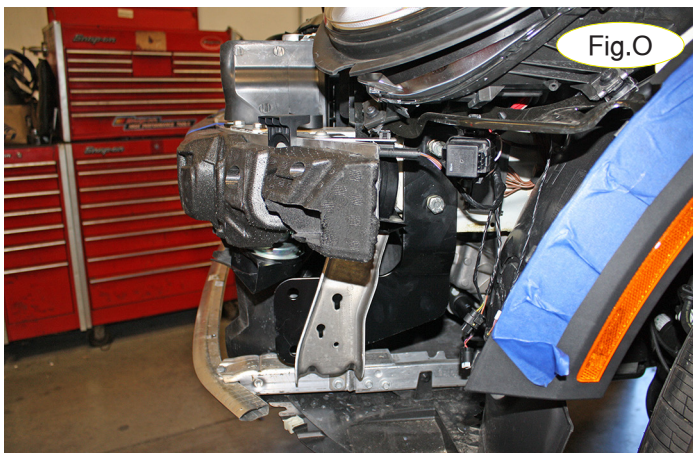
KIT# 521882-5

05/18/15



10. On each side, remove two 18mm (head) bolts clamping the bumper core to the frame (Fig.M).

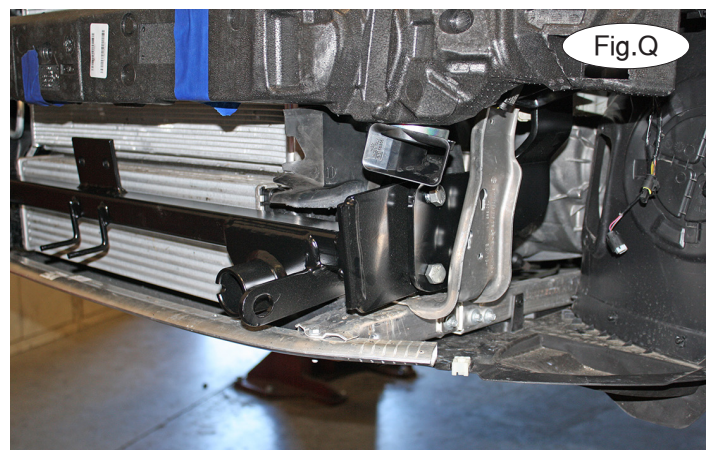
11. On the driver's side only, slide the driver's side rear mounting brace through the aluminum crossmembers. *Note:* use the drawing on page 1 of these instructions for a reference for determining the specific part for each side. Now, using the two supplied 12mm lock washers and 12mm x 1.5 x 110mm bolts, bolt through the upper mounting points, the rear mounting brace, the 1" x 1/4" x .188 wall pipe spacers, and into the frame rail (Fig.N and Fig.O). *Note:* ensure proper alignment, as the bolts will receive Loctite® Red and will be torqued at the end of these instructions.



12. Repeat step 11 for the passenger side of the vehicle.

13. On each side, use the yellow reference lines in Figure P to trim the air deflector to allow clearance for the main receiver brace. It should be approximately flush with the intercooler once it is trimmed.

14. Place the main receiver brace between the two rear mounting braces and on each side, using the two supplied 1/2" x 1 1/4" bolts, bolt through the rear mounting brace and the main receiver brace and finish with a 1/2" lock washer and nut (Fig.Q).

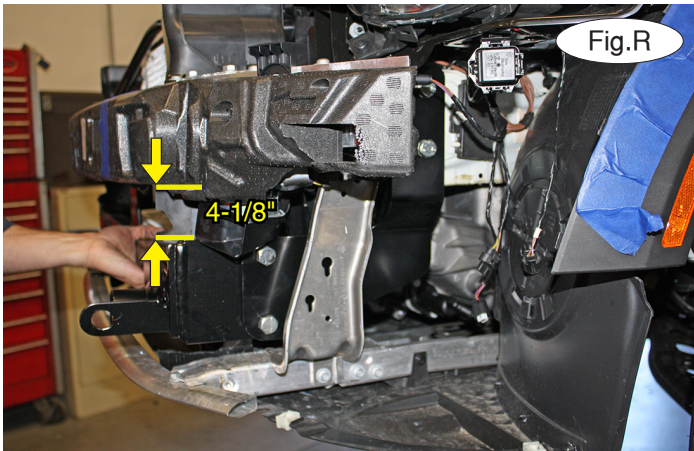




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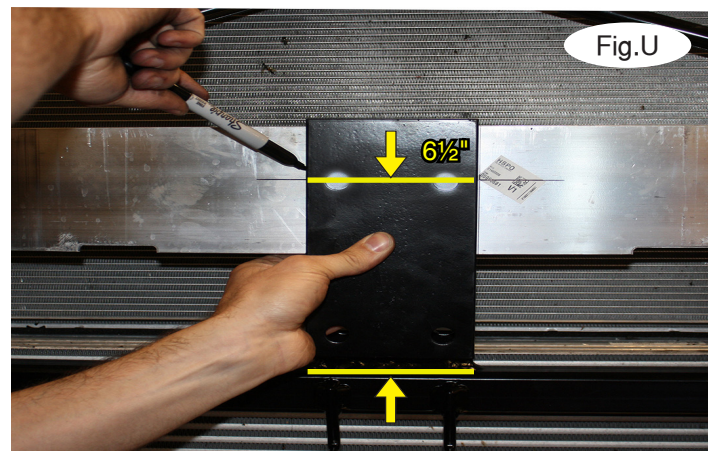
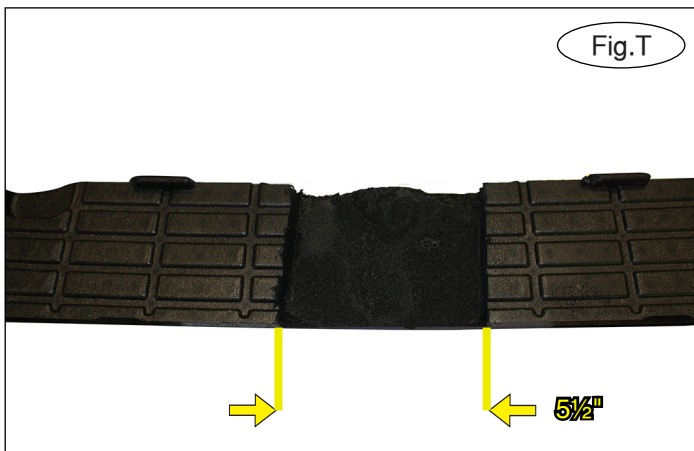
KIT# 521882-5

05/18/15



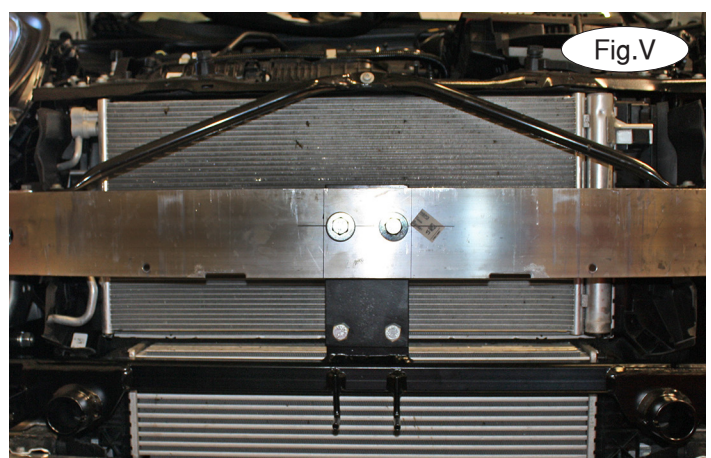
15. Pull forward and up on the main receiver brace until it is level and square (approximately 4-1/8" from the top of the main receiver brace to the bottom of the bumper core) (Fig.R). Now, tighten the rear bolts first, and then the front bolts to the bolt torque requirements found at the end of these instructions. *Note:* use Loctite® Red on all nuts and bolts.

Note: ensure that the horn is not touching any of the bracket components. If it is, bend it back out of the way.



16. Remove the foam shock absorption pad (Fig.S). Then, trim a section approximately 5 1/2" wide and 1/2" deep piece on center to allow clearance for the main receiver brace (Fig.T).

17. On the bumper core, draw a horizontal line 6 1/2" straight up from the top of the crossmember of the main receiver brace to the midpoint of the bumper core. Then, align the support plate with the plate on the crossmember and the horizontal line and then mark the holes for drilling (Fig.U). Drill through the bumper core and then bolt the center mounting plate to the back of the bumper core using the two supplied 1/2" x 1 1/4" bolts on the bottom hole and 1/2" x 2 1/2" bolts on the top holes. Finish all four holes with 1/2" lock washers and nuts (Fig.V). Then, tighten the bolts to the bolt torque requirements found at the end of these instructions. *Note:* use Loctite® Red on all nuts and bolts.

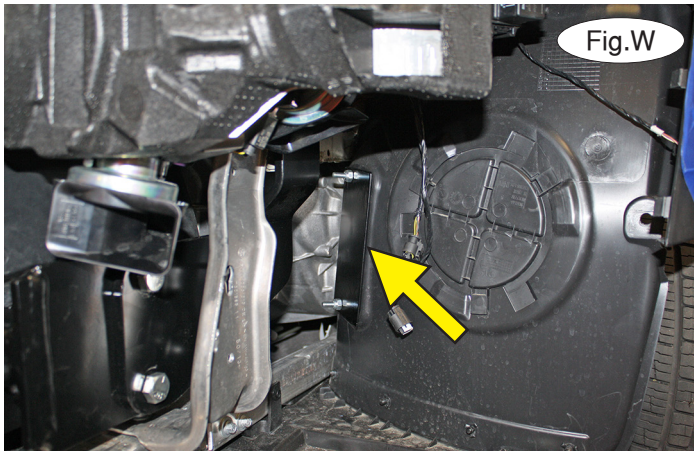




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KIT# 521882-5

05/18/15



18. On each side, place the plug plate over the inside of the fender liner over the hole you exposed in step 9, aligning the holes in the plug plate with the pre-existing holes in the fender liner from step 9. Bolt it in place using the two supplied $\frac{1}{4}$ " x 1" bolts and two $\frac{1}{4}$ " flat washers and finish with two $\frac{1}{4}$ " nylock nuts (Fig.W).

19. Pull the ambient temperature sensor out of the driver's side vent tube (Fig.X) and zip tie it around the fins of the sensor and onto the aluminum crossmember (Fig.Y).



20. Replace the shock absorption pad you trimmed in step 16 and then replace the washer bottle you relocated in step 7.

21. Reinstall the fascia, reversing steps 1 through 6. *Note:* if the gray plastic fasteners did not originally detach with the trim piece (Fig.Z) then you will need to place it in the slotted hole on the trim before reversing step 4. To accomplish this, pop it out of the fender and slide it back into the slot on the inside of the trim.



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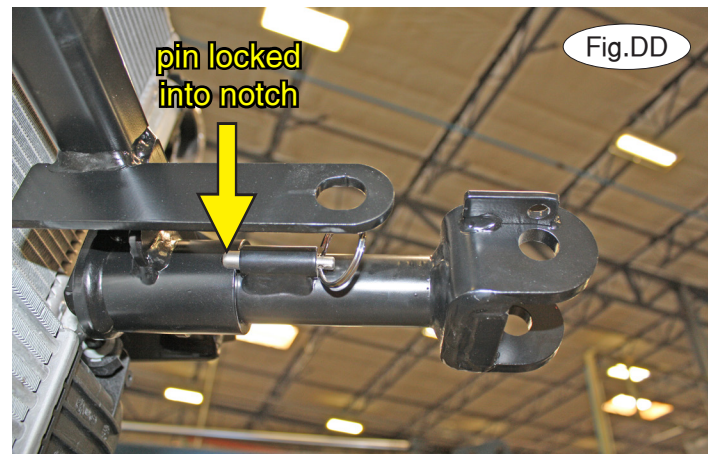
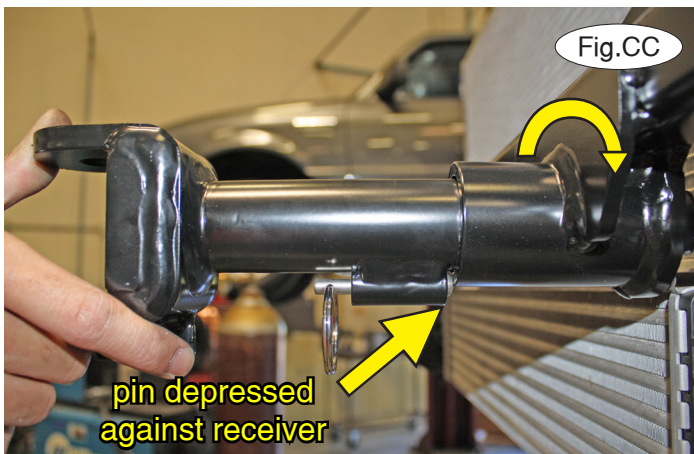
KIT# 521882-5

05/18/15



22. **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).



23. 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.

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



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05/18/15

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.

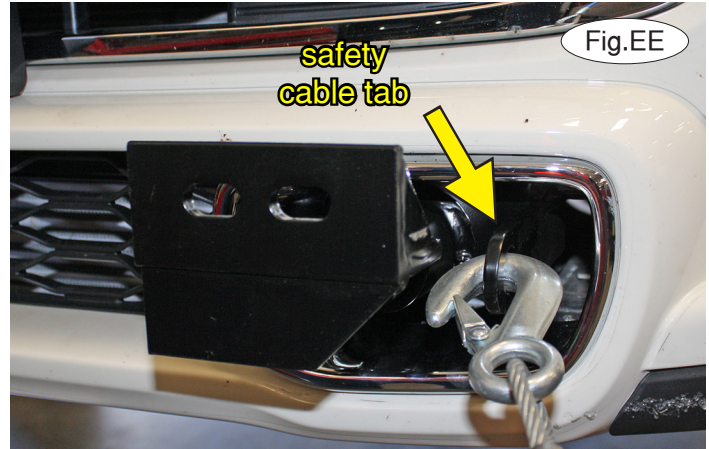


Fig.EE

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.FF). 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.

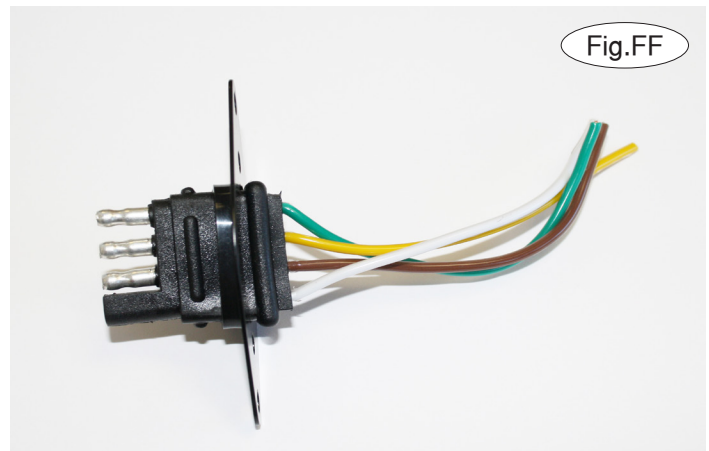


Fig.FF

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.

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