



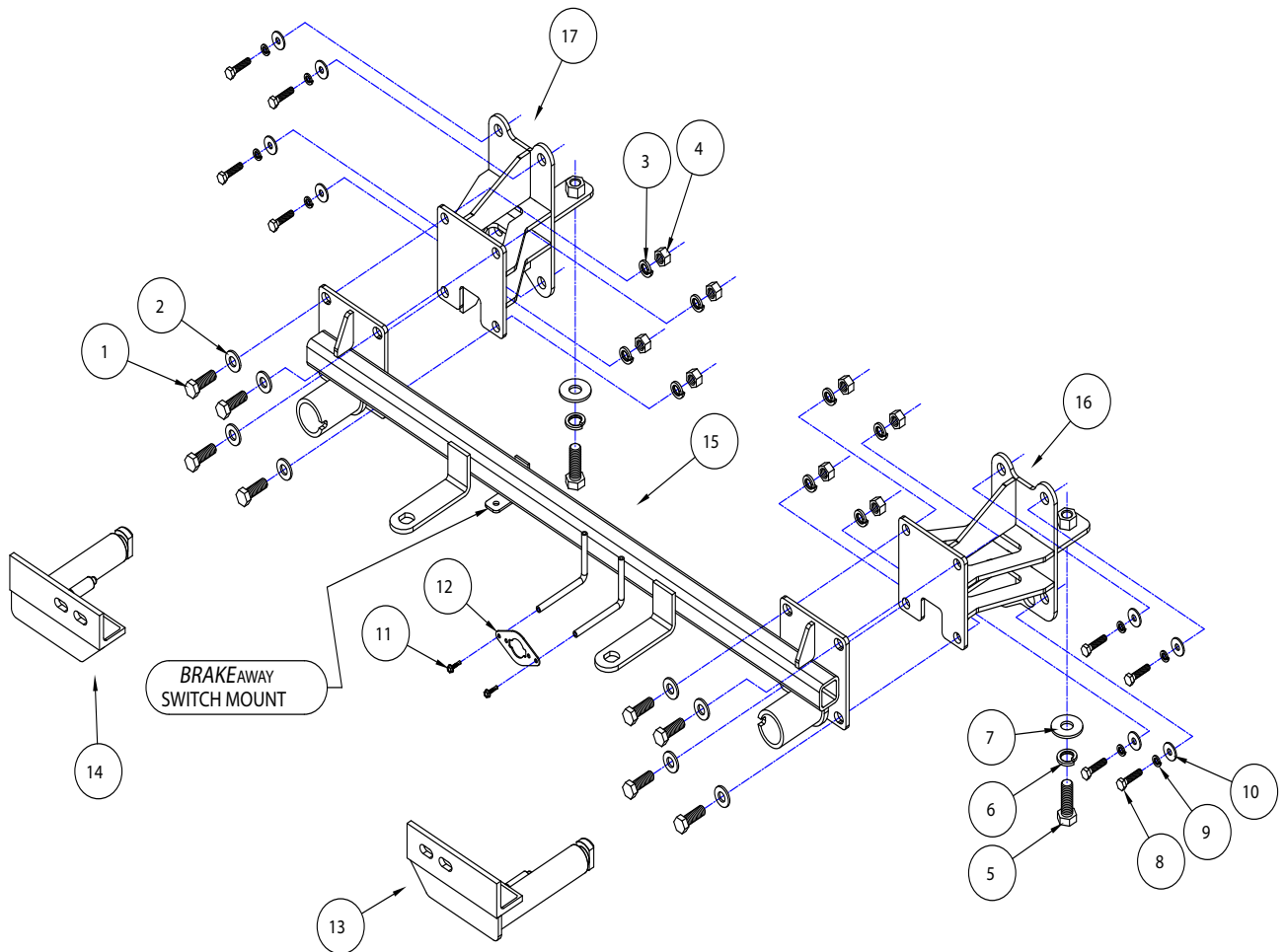
BASEPLATE KIT INSTALLATION INSTRUCTIONS

KIT# 521643-4

10/25/23
KS

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

ROADMASTER, INC.



ITEM	QTY	NAME	MATERIAL
1	8	1/2" x 1 1/2" BOLT	350095-00
2	8	1/2" FLAT WASHER SAE	350308-20
3	8	1/2" LOCK WASHER	350309-00
4	8	1/2" NUT	350258-00
5	2	5/8" x 1 3/4" BOLT	350149-00
6	2	5/8" LOCK WASHER	350734-00
7	2	5/8" FLAT WASHER	350312-00
8	8	M8 x 1.25 x 35mm BOLT	356002-00
9	8	M8 LOCK WASHER	355750-00
10	8	M8 FENDER WASHER	355702-00
11	2	#10 x 3/4" SELF DRILLING SCREW	350247-35
12	1	WIRE PLUG PLATE	A-003801
13	1	DRIVER SIDE ARM	C-003455
14	1	PASSENGER SIDE ARM	C-003456
15	1	RECEIVER BRACE	C-003457
16	1	DRIVER SIDE REAR BRACE	C-003458
17	1	PASSENGER SIDE REAR BRACE	C-003459



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This is one of our crossbar-style series baseplate kits, which allows the visible front portion to be easily removed from the front of the vehicle (Fig.A and Fig.B). The kit consists of a main receiver brace, two rear braces, two removable front braces, and a hardware pack.

The rear braces mount to the bumper core mounts. The main receiver brace attaches to the rear braces, and 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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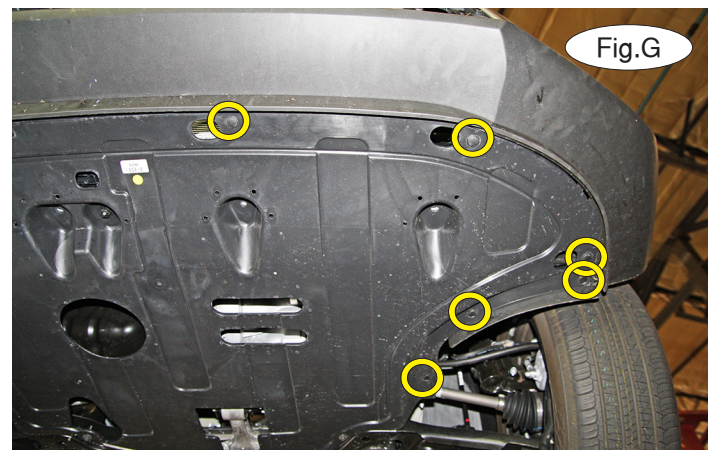
1. **Important:** please use all supplied bolts and parts and read all instructions carefully before beginning this installation. The majority of questions you may have can be answered within the text, and proper installation will ensure safe and secure travel. Now, begin the installation by opening the plastic hatch to the left of the hood release (Fig.C) and removing one 10mm head bolt attaching the center of the fascia to the radiator support (Fig.D).

2. On each side, remove three plastic fasteners attaching the fender liner to the fascia (Fig.E). *Note:* there is also a 10mm (head) screw attaching the top corner of the fascia to the fender (Fig.E – inset).



3. Remove four 10mm head bolts attaching the splash shield to the subframe (Fig.F).

4. On each side, remove six plastic fasteners attaching the splash shield to the fender liner and fascia (Fig.G).





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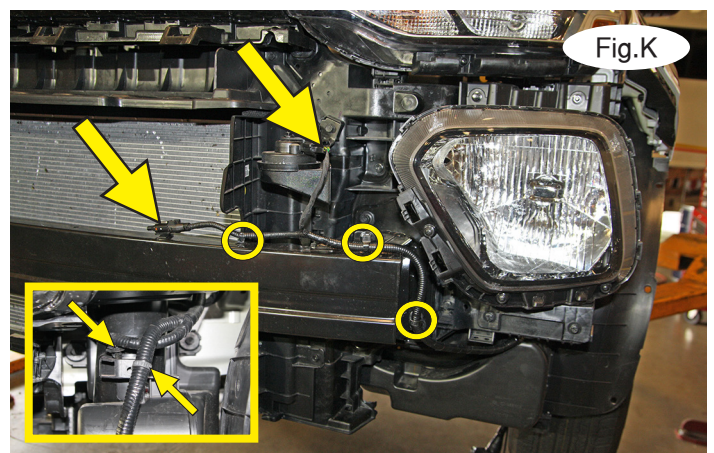
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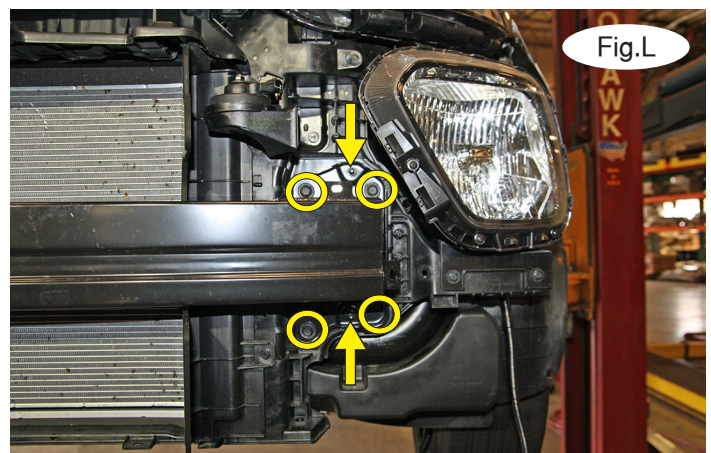
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5. Remove three 10mm (head) bolts attaching the rear of the splash shield to the subframe (Fig.H).
6. Support the splash shield and unscrew the plastic nut until the panel drops (Fig.I). Set the splash shield aside for now.
7. On each side, starting on the corner of the fascia, pull out to release the fascia from the clips, and then pull it forward (Fig.J).



8. Starting at the ambient temperature sensor and horn, unclip the wiring harness back to (and including) the air intake (Fig.K and Fig.K – inset).
9. On each side, remove four 12mm (head) bolts and two 10mm nuts attaching the bumper core to the frame (Fig.L). Remove the bumper core. It will not be replaced. *Note:* Retain the bumper core and its hardware for replacement in case the baseplate is ever removed.



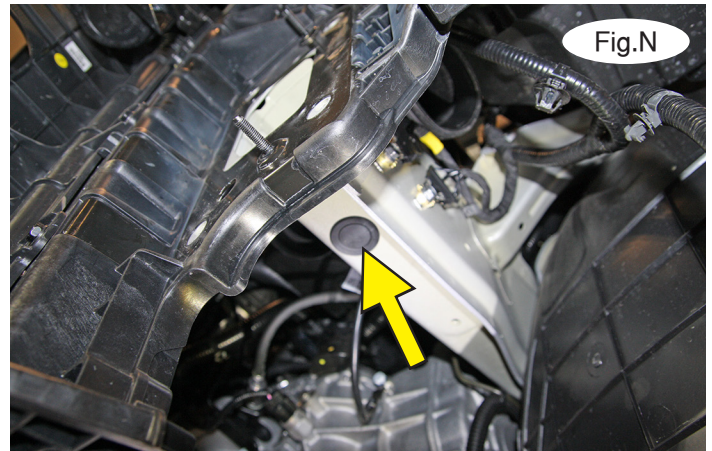
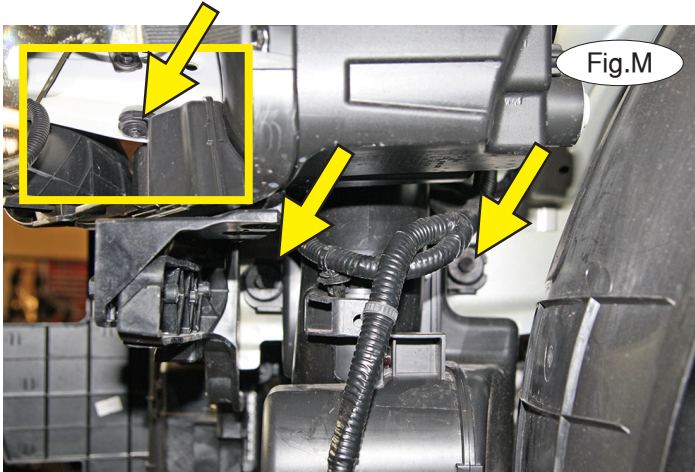


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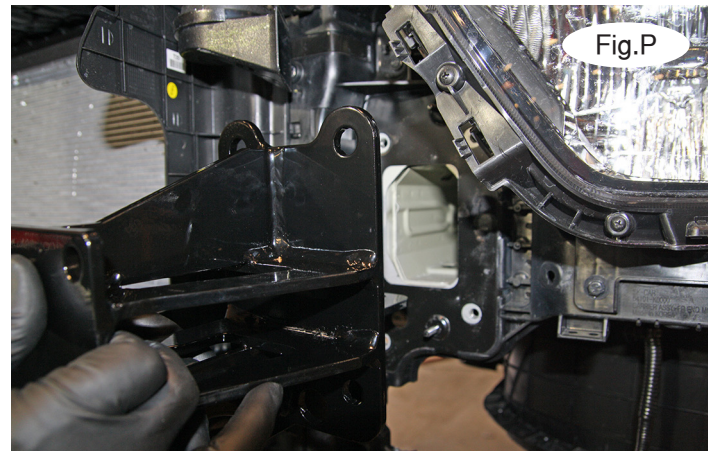
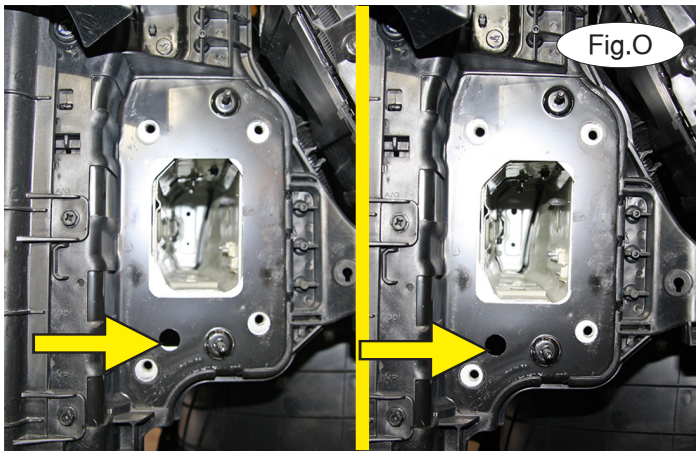
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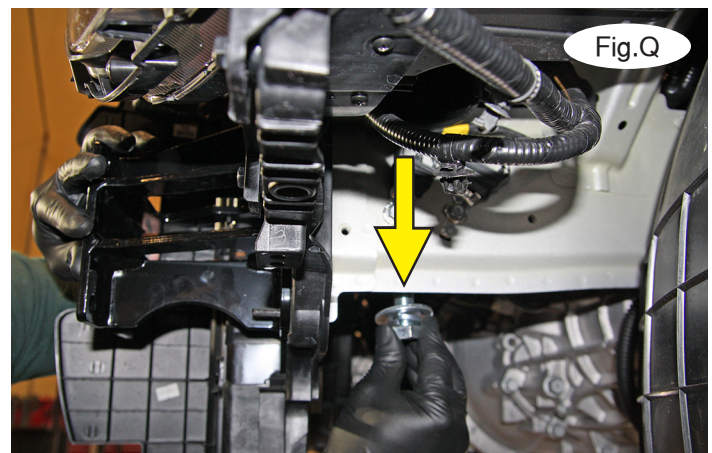
10. On the driver's side only, remove three 10mm (head) bolts attaching the lower air intake to the frame rail (Fig.M and Fig.M – inset). Pull straight down to remove it.

11. On each side, remove a rubber cover from the underside of the frame rail (Fig.N). *Note:* it could also be a sticker.



12. In order to proceed with the installation, it is imperative that the radiator support plate is level with the opening of the frame rail on each side. Use a jack stand to support it. The left side of Figure O shows before leveling and the right side shows it level.

13. Working on one side at a time, place a 5/8" lock washer and flat washer over a 5/8" x 1³/₄" bolt. Then, use the drawing on page 1 to locate the side-specific rear brace. Insert the rear nitted tab into the frame rail (Fig.P), aligning it over the hole you exposed in step 11 and bolt up into it using the 5/8" bolt (Fig.Q). Finger tighten the bolts for now.



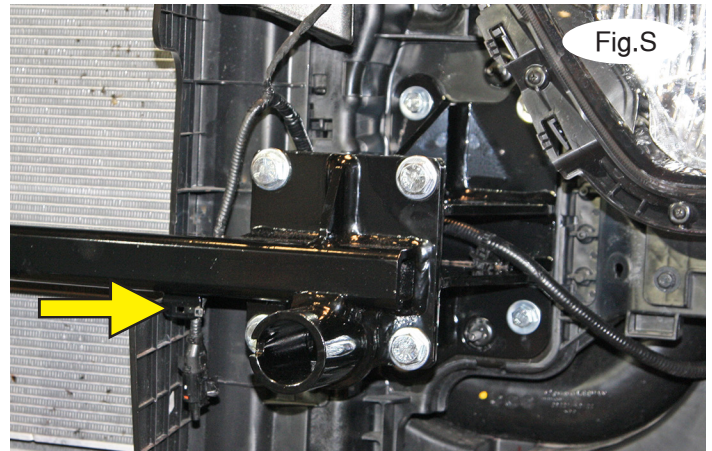
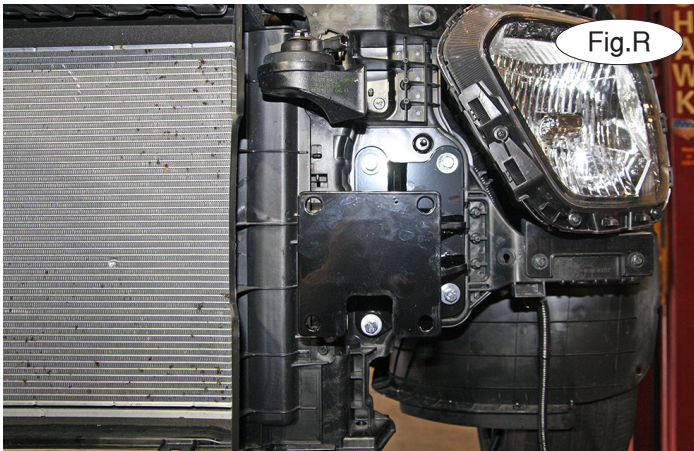


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14. On each side, using the four supplied M8 x 1.25 x 35mm bolts, M8 lock washers and M8 fender washers, bolt into each of the bumper mounts (Fig.R). Ensuring the braces are level and square, tighten the M8 bolts first and then the 5/8" bolts installed in the previous step.

15. Place the crossbar plates over the rear braces, aligning the holes, and bolt it into place on each side using small 1/2" flat washers over four 1/2" x 1 1/2" bolts. Finish with four 1/2" lock washers and nuts (Fig.S). Ensure that the crossbar is square and level and tighten all bolts to the bolt torque requirements found at the end of these instructions.



16. Reinstall the air intake by reversing step 10.

17. Zip tie the wiring harness to the mount provided (Fig.S – arrow).

18. Remove the foam shock absorption pad from the back of the fascia by releasing a clip on each end (Fig.T).

19. Trim the fascia on each side using photo for reference. it may be helpful to hold it in place and mark from underneath. Use a hole saw or die grinder to mark a pilot hole, and then enlarge it until the receiver is accessible from the front (Fig.U).

20. On each side, insert the removable front arm into the front receiver 90 degrees from its final towing position, depressing the spring-loaded pin against the receiver. 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. **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.**

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



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IMPORTANT!

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

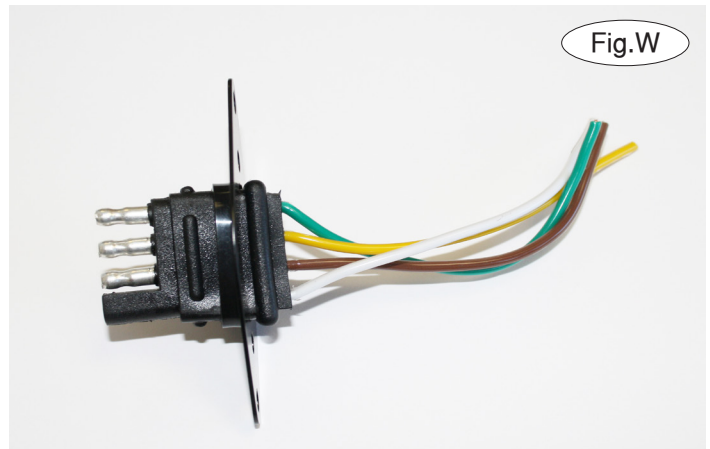


Three options for attaching the wiring plug to the main receiver brace

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.....	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.