

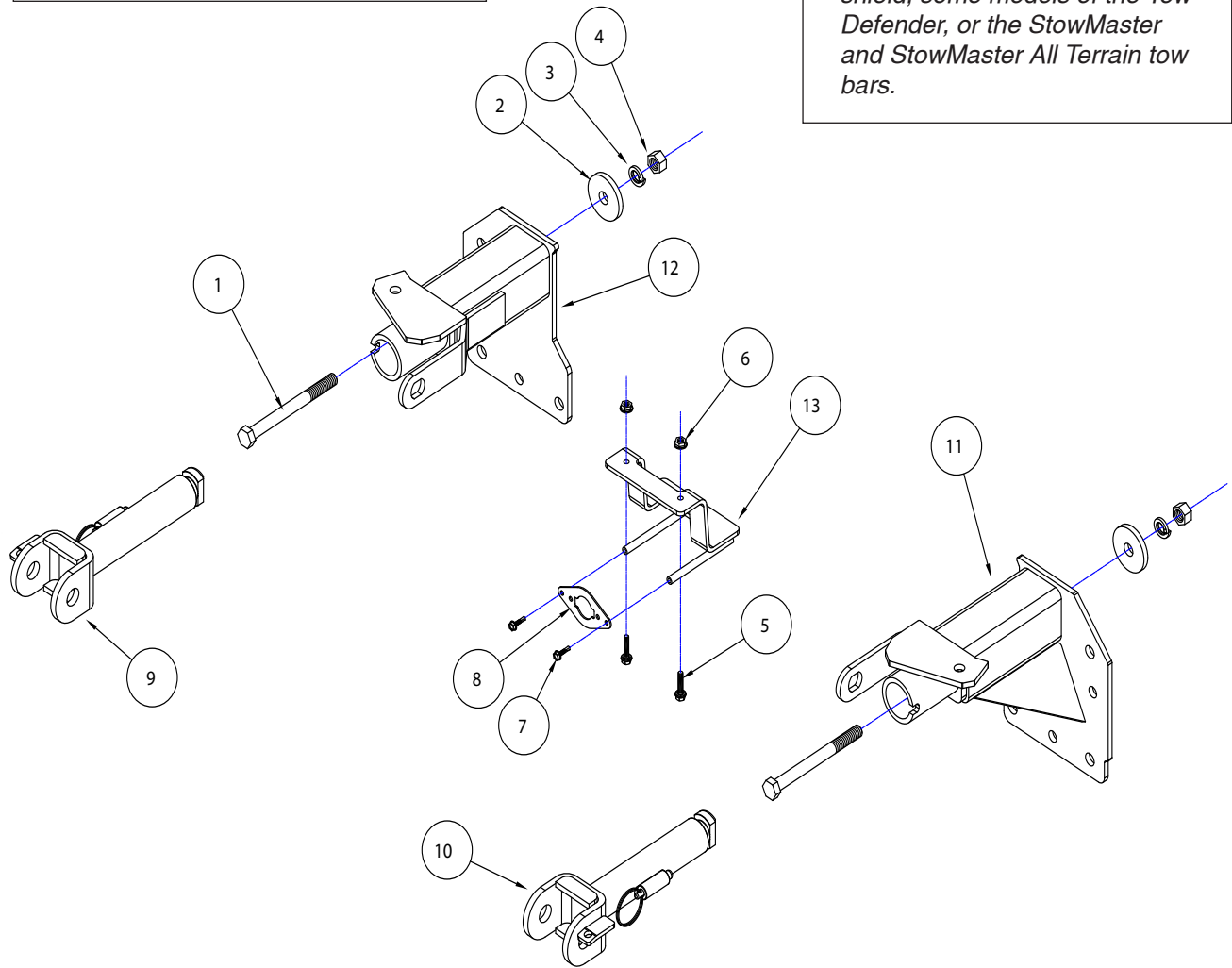


BASEPLATE KIT INSTALLATION INSTRUCTIONS

KIT# 521451-5

Special tools needed:
plastic pop rivet gun

Important
Note: this bracket will not accommodate the Guardian rock shield, some models of the Tow Defender, or the StowMaster and StowMaster All Terrain tow bars.



ITEM	QTY	NAME	PART #
1.....2	2	1/2" x 5 1/2" BOLT.....	350108-00
2.....2	2	1/2" x 2" O.D. x 1/4" PLATE WASHER	350354-00
3.....2	2	1/2" LOCK WASHER	350309-00
4.....2	2	1/2" NUT	350258-00
5.....2	2	1/4"-20 x 1" WHIZ BOLT	350400-20
6.....2	2	1/4"-20 WHIZ NUT	350251-20
7.....2	2	#10-16 x 3/4" SELF DRILLING SCREW.....	350247-35
8.....1	1	WIRE PLUG PLATE	A-003801
9.....1	1	PASSENGER SIDE ARM	C-002383
10.....1	1	DRIVER SIDE ARM.....	C-002384
11.....1	1	DRIVER SIDE RECEIVER	C-003303
12.....1	1	PASSENGER SIDE RECEIVER.....	C-003304
13.....1	1	WIRE PLUG BRACKET.....	C-003305
14.....6	6	PLASTIC RIVETS.....	350431-00



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This is one of our direct-connect baseplates, 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 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.



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
- Use lock washers on all fasteners

WARNING

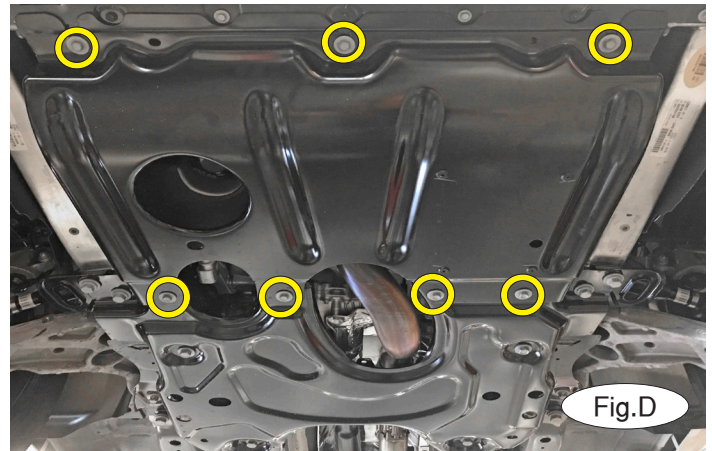
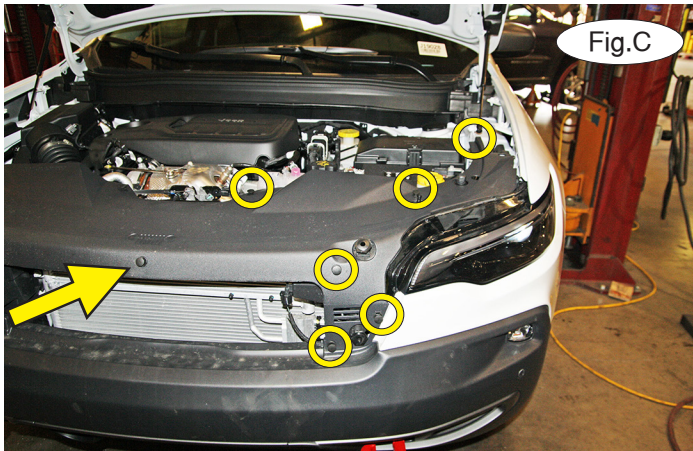
Failure to follow these instructions can result in property damage, personal injury or even death.

- **Installation of most baseplates 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 mounting points 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 kit 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 baseplate is securely fastened to the vehicle and fitted with the correct hardware to account for these changes. Failure to securely fasten the baseplate 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 baseplate. **Do not install the baseplate 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 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, 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 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 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 kit is designed for use with ROADMASTER tow bars and ROADMASTER adaptors only. **Using this kit 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 any attempt to copy this baseplate design, could result in loss of the towed vehicle.
- Upon final installation, **the installer must inspect the baseplate to ensure adequate clearance, particularly around hoses, air conditioner lines, radiators, etc.,** or non-warranty damage to the towed vehicle will result.
- **This baseplate is only warranted for the original installation.** Installing a used baseplate on another vehicle is not recommended and will void the warranty.



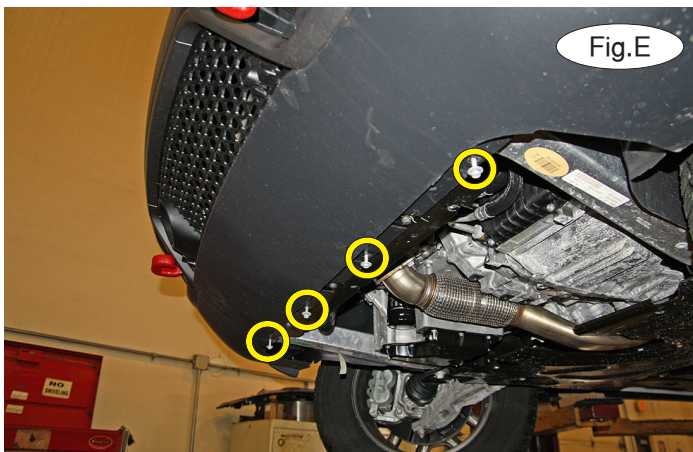
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1. **Important:** please use all supplied bolts and parts and read all instructions carefully before beginning this installation. The majority of questions you may have can be answered within the text, and proper installation will ensure safe and secure travel. Now, on each side, remove six plastic fasteners attaching the radiator cover to the core support (Fig.C – circles). There is also one fastener in the middle (Fig.C – arrow).

2. Remove seven 13mm (head) bolts attaching the skid plate to the subframe (Fig.D).



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

4. On each side, remove three 8mm (head) screws attaching the fender liner to the fascia (Fig.F). Then, pull back the fender liner and remove one 10mm bolt (Fig.F – inset). **Note:** You will also need to use a 1/4" drill bit to remove the plastic pop rivet attaching the bottom of the fascia to the fender liner. **Note:** Due to manufacturing variances, there may be four screws and three rivets instead.

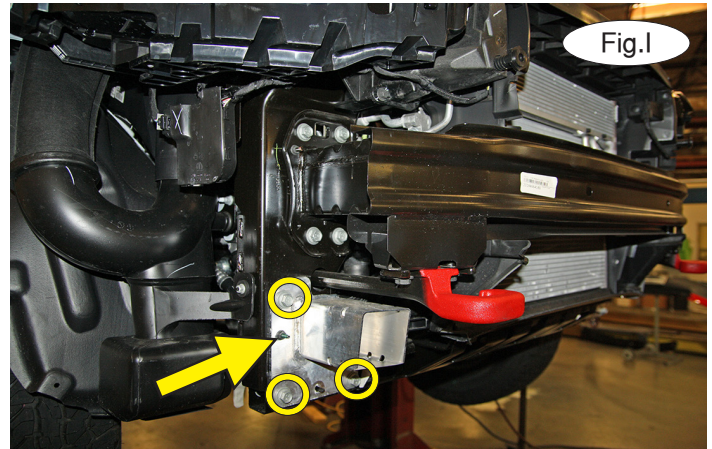
5. On the driver's side only, disconnect the electrical connectors (Fig.G). **Note: make certain that the vehicle is not turned on while this connector is unplugged or it may trigger the 'Check Engine' light to illuminate.**





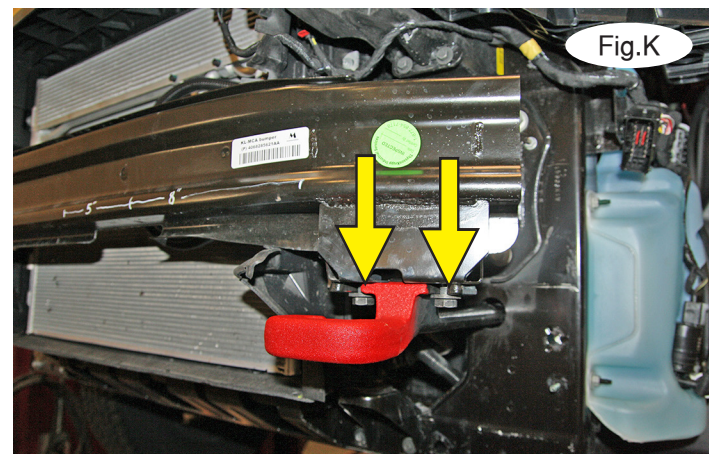
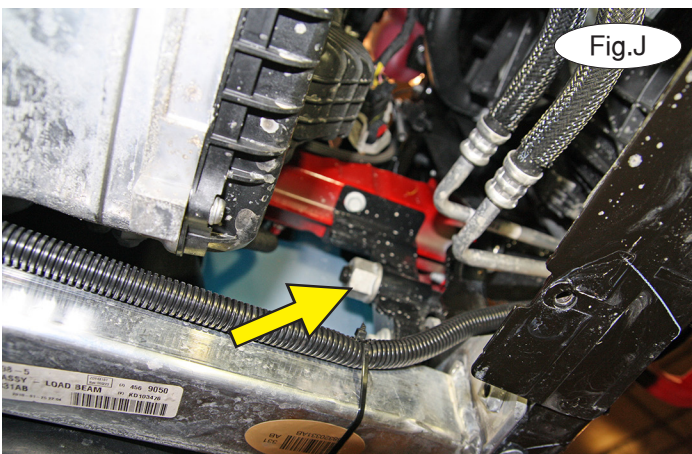
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6. On each side, pull out to release the fascia clips (Fig.H) and set the fascia aside for now. *Note:* Due to manufacturing variances, the fender trim may be one piece instead of two. If that is the case, pull out to release the clips before removing the fascia (Fig.H – inset).

7. On each side, remove three bolts using a 15mm socket (Fig.I – circles) and a 10mm nut (Fig.I – arrow) attaching the bumper horn to the frame rail. The bumper horns will not be replaced. *Note:* Retain the bumper horns and their replacement hardware in case the main receiver brace is ever removed from the vehicle.



8. On each side, remove a 30mm nut attaching the tow hook to the back of the frame rail (Fig.J) and two 16mm (head) bolts attaching the tow hook to the frame (Fig.K). The tow hooks will not be replaced. *Note:* Retain the tow hooks and their replacement hardware in case the main receiver brace is ever removed from the vehicle.

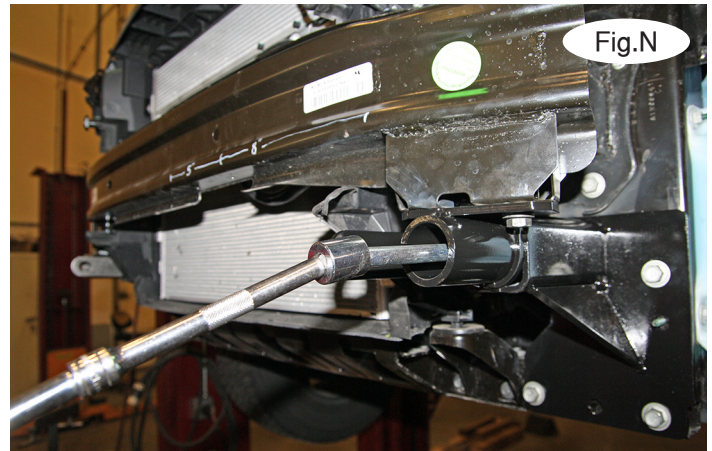
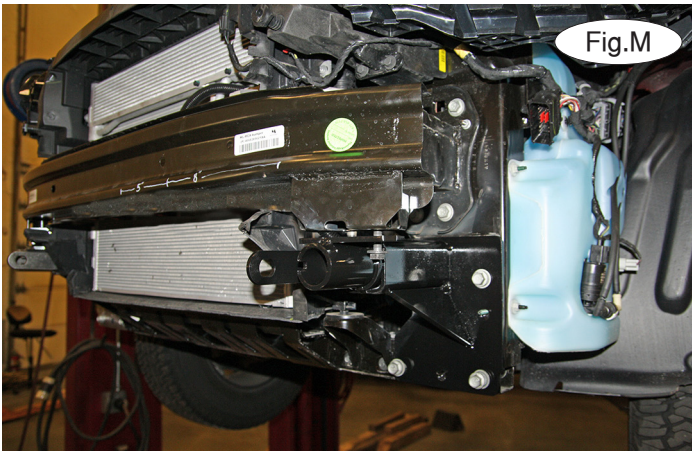
9. Using the drawing on page 1 as a reference, and working on the driver's side only, locate the side-specific brace and place it over the stud and locating tab of the bumper horn mount that you exposed in step 7 (Fig.L). Replace the bumper horn hardware and use one of the tow hook mount bolts for the fourth bolt (Fig.M).





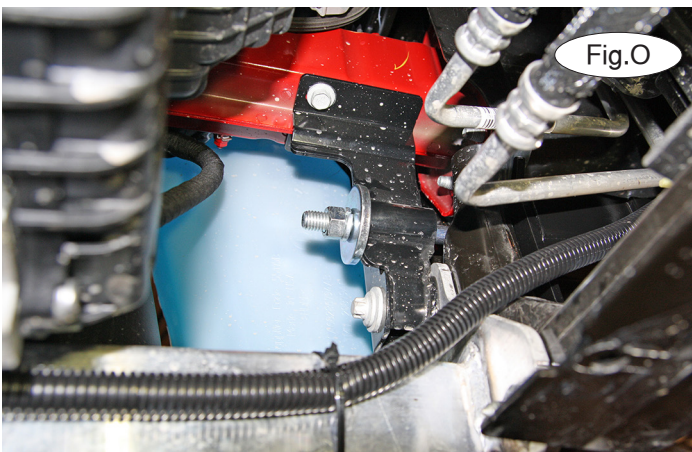
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10. Push the brace up and back to align it. Then, hand-tighten the bolts.

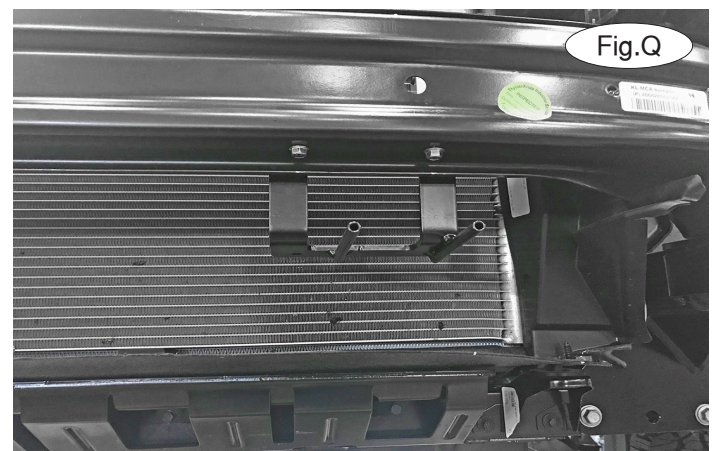
11. Use an extension and socket to place a $\frac{1}{2}$ " x $5\frac{1}{2}$ " bolt through the receiver arm and into the frame (Fig.N). Finish with a $\frac{1}{2}$ " plate washer, $\frac{1}{2}$ " lock washer and $\frac{1}{2}$ " nut (Fig.O).



12. Tighten all bolts to the bolt torque requirements found at the end of these instructions. *Note:* use Loctite® Red on all nuts and bolts.

13. Repeat steps 9 through 12 on the passenger side.

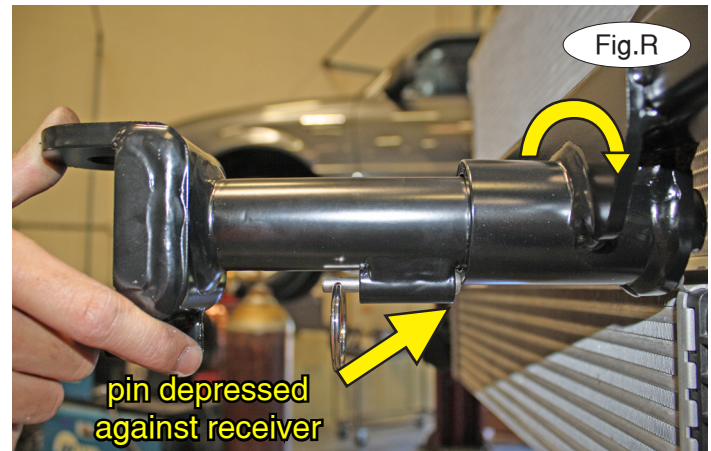
14. If you will be using the wiring plug plate that we provide, measure over $8\frac{3}{4}$ " from the edge of the driver's side tow hook mount and drill a $\frac{1}{4}$ " hole (Fig.P). Then, measure over another $3\frac{1}{2}$ " and drill another hole. Mount the wiring plug plate to the bottom of the bumper core using the supplied two $\frac{1}{4}$ -20 x 1" bolts and whiz nuts (Fig.Q).



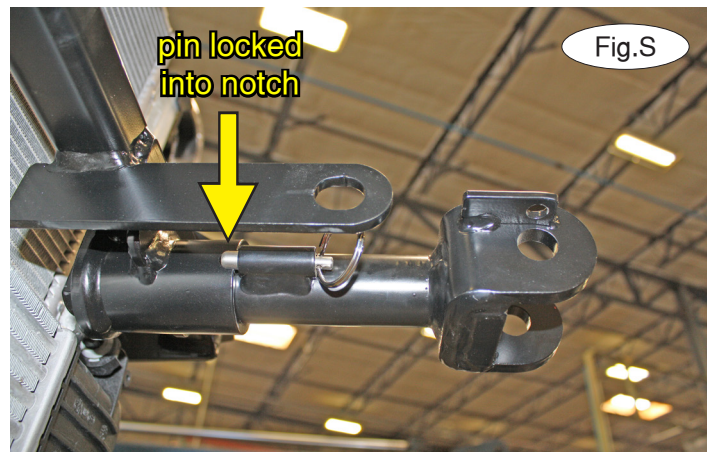


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15. Trim the fascia as shown in Figure R.
16. Reinstall the fascia, reversing steps 1 through 6.
17. **Note: the two images above are for illustration purposes only, as your specific application may be slightly different.** On each side, insert the removable front bracket arm into the front receiver 90 degrees from its final towing position, depressing the spring-loaded pin against the receiver (Fig.S). 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.T).



- 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.**
18. 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 tabs shown in the drawing on page 1. 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.



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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.U). 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.

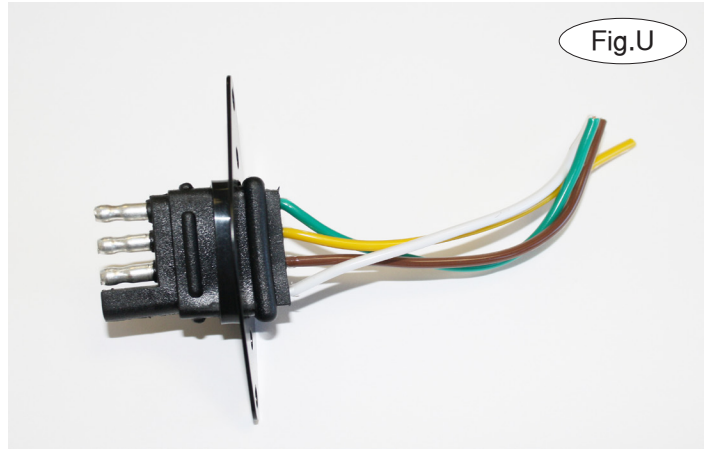


Fig.U

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.