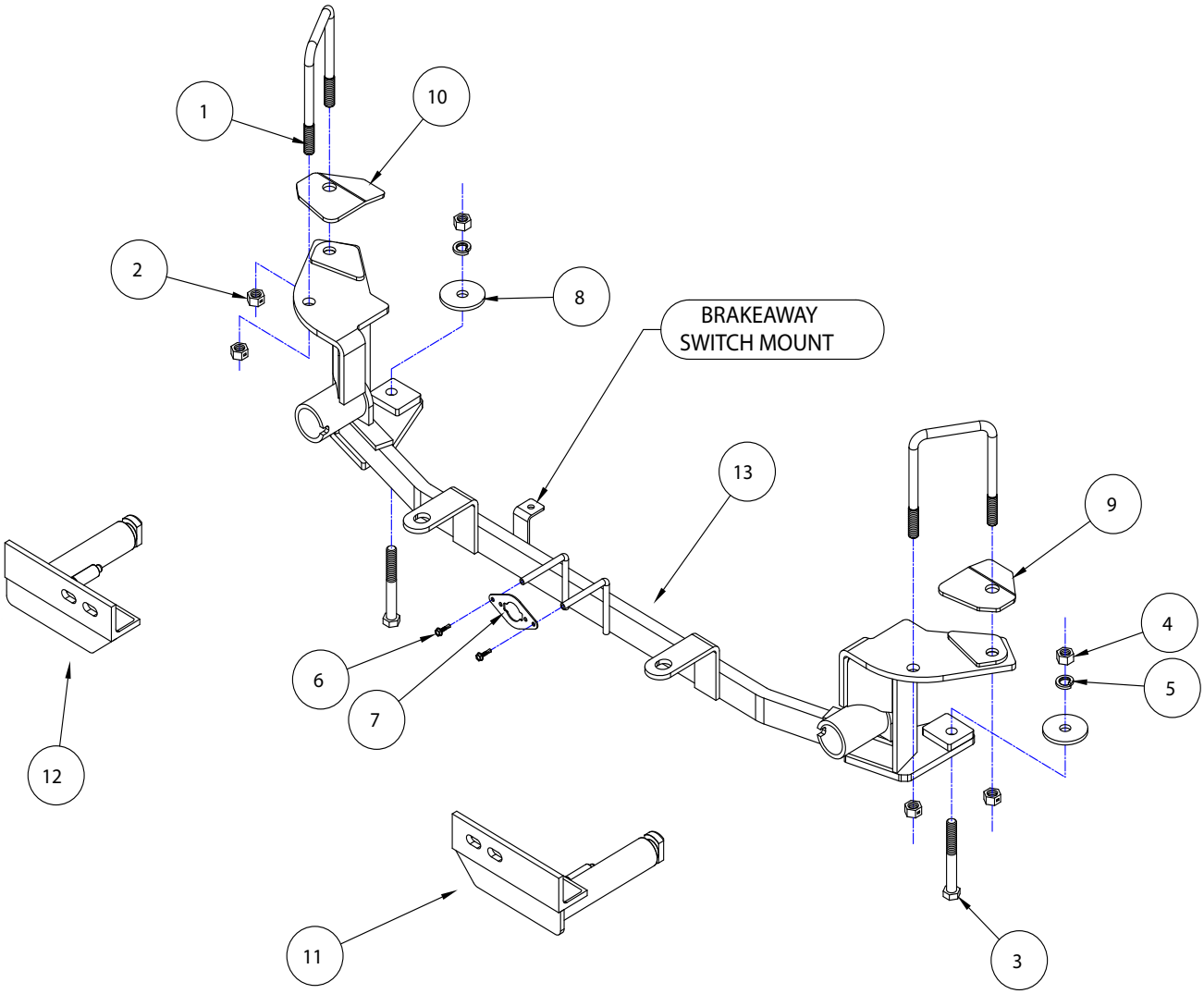
ROADMASTER, INC.

BASEPLATE KIT INSTALLATION INSTRUCTIONS

KIT# 524454-4



ITEM	QTY	NAME	PART #
1	2	1/2” x 3.5” x 5.5” U-BOLT	357021-50
2	4	1/2” TWO WAY LOCK NUT	350258-20
3	2	1/2” x 4” BOLT	350105-00
4	2	1/2” NUT	350258-00
5	2	1/2” LOCK WASHER	350309-00
6	2	#10 x 3/4” SELF DRILLING SCREW	350247-35
7	1	WIRE PLUG PLATE	A-003801
8	2	1/2” PLATE WASHER	A-003086
9	1	DRIVER SIDE SHIM PLATE	B-002900
10	1	PASSENGER SIDE SHIM PLATE	B-002901
11	1	DRIVER SIDE ARM	C-003164
12	1	PASSENGER SIDE ARM	C-003165
13	1	MAIN RECEIVER BRACE	C-003166

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This is one of our EZ4 Twistlock 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 bumper core and subframe. 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 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 warranteed for the original installation.** Installing a used baseplate on another vehicle is not recommended and will void the warranty.

BASEPLATE KIT
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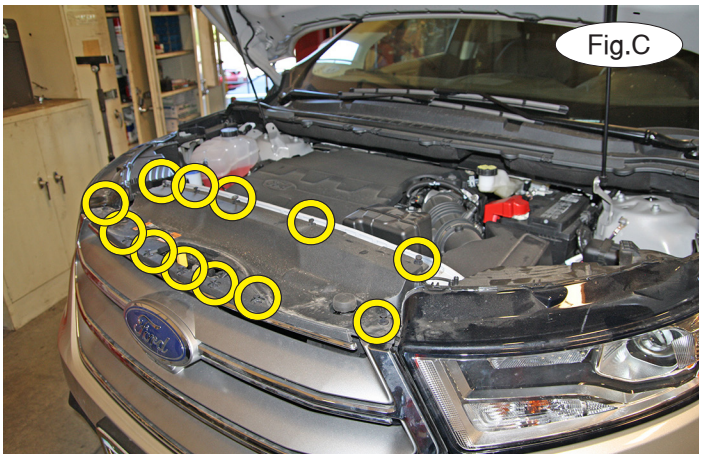
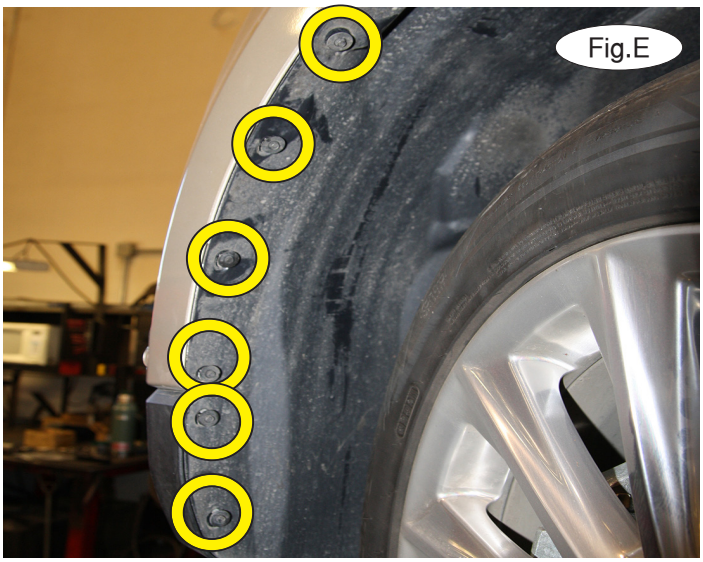


1. ***Important:*** **please use all supplied bolts and parts and read all instructions carefully before beginning this installation. The majority of questions you may have can be answered within the text, and proper installation will ensure safe and secure travel.** Now, begin the installation by removing 12 plastic fasteners attaching the top of the radiator cover to the core support (Fig.C).

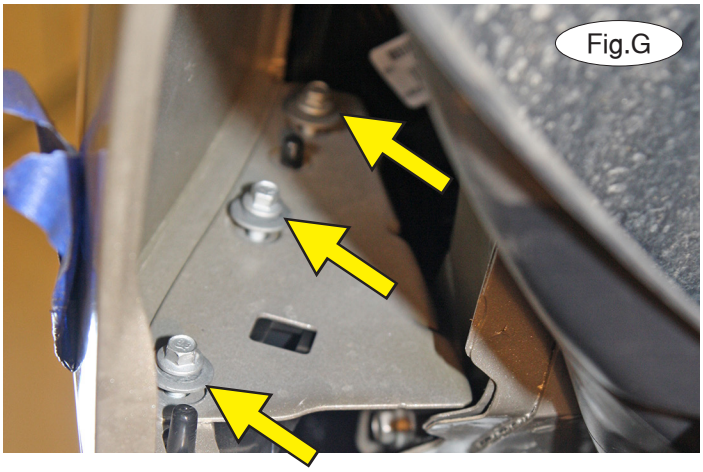
2. Remove six 10mm (head) bolts attaching the upper fascia to the core support (Fig.D).



3. On each side, remove six 5.5mm screws attaching the fender liner to the fascia (Fig.E).

4. On each side, remove seven 5.5mm screws, two T30 screws and one plastic fastener attaching the lower splash shield to the fascia and the core support (Fig.F – driver's side).

5. On each side, pull back the fender liner and remove three 8mm (head) bolts attaching the fascia to the fender (Fig.G).



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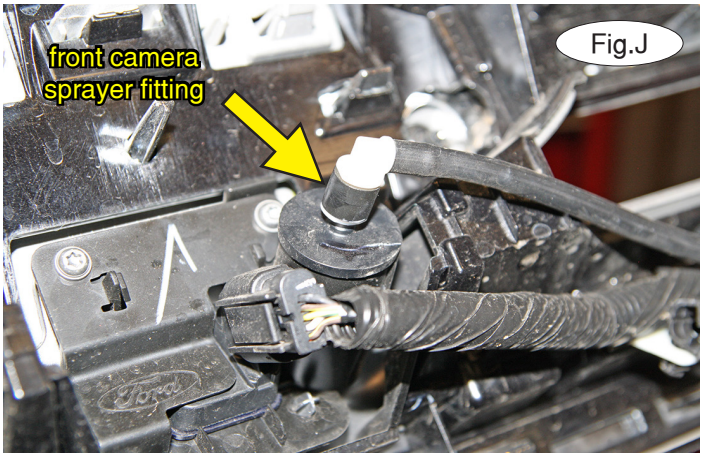
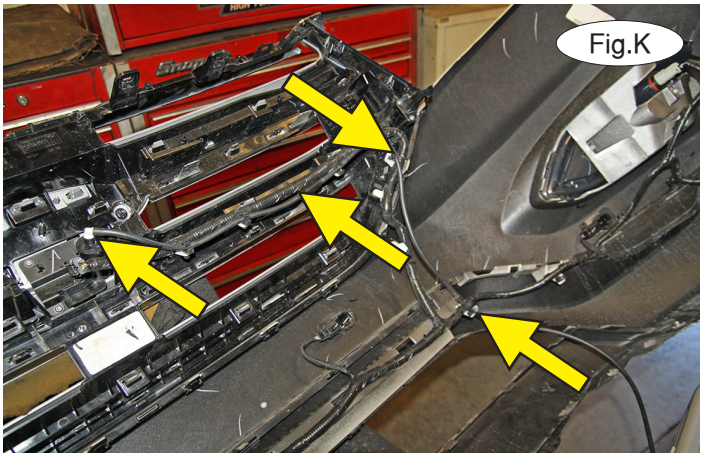
6. Disconnect the electrical connectors attaching the fascia to the vehicle (Fig.H).

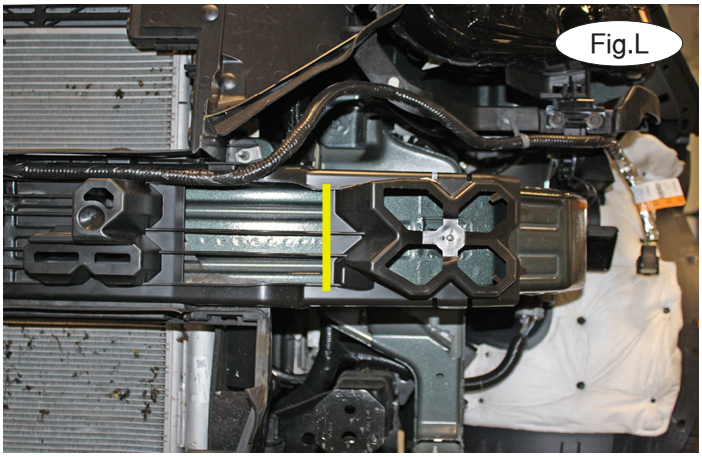
7. On each side, pull back on the top of the fascia to release the clip in the bottom lower corner of the headlight and then pull down on the fascia, perpendicular to the seam, sliding out the two aligning pins (Fig.I).





8. **For models without a front camera sprayer:** proceed to the next step. **For models equipped with a front camera sprayer:** disconnect the sprayer hose from the sprayer fitting (Fig.J) and then release all of the clips attaching the sprayer hose to the fascia (Fig.K). Secure the hose above the reservoir for now. *Note:* it may be necessary to use either a second person to hold the fascia during this process or prop the fascia after removal.

9. On each side, trim the shock absorption pad as shown in Figure L.



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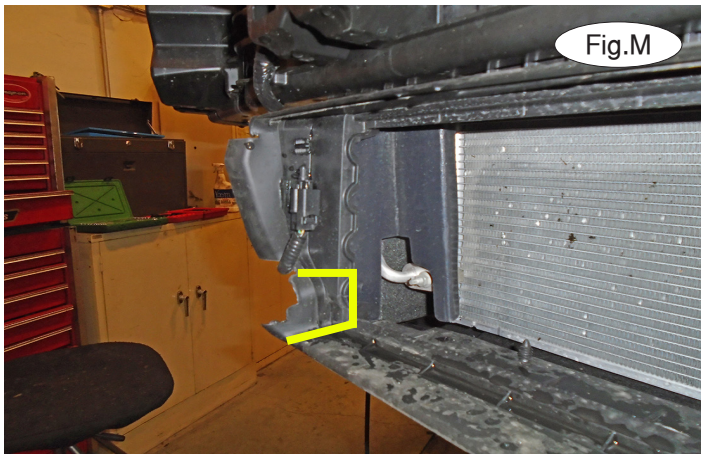
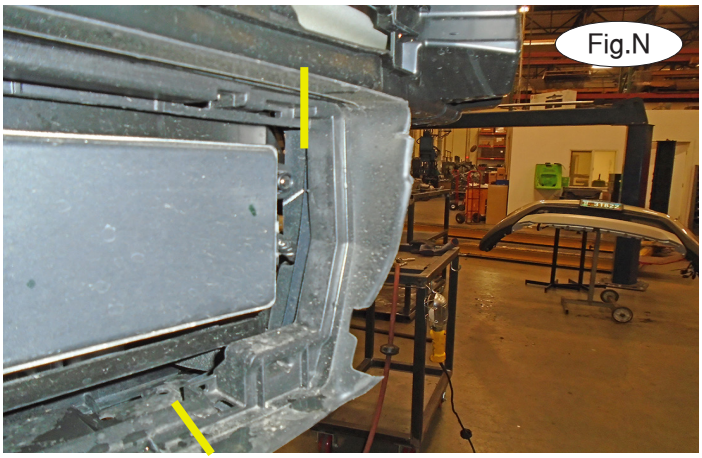
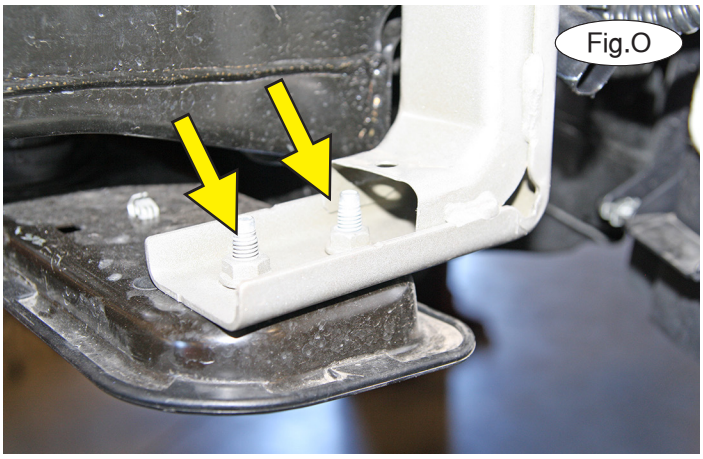
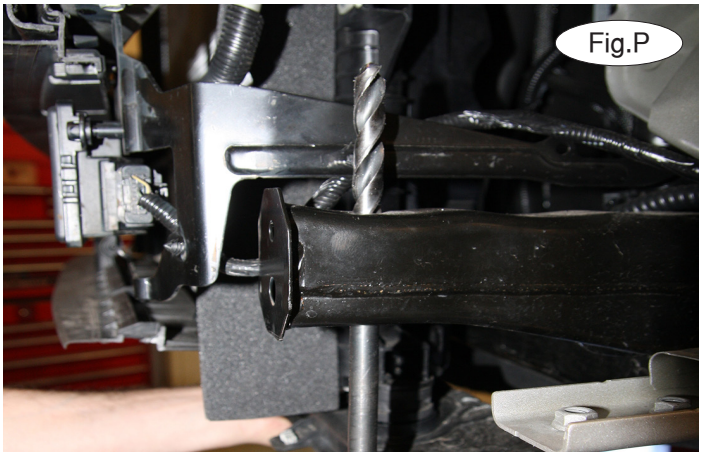




10. On each side, if the vehicle is so equipped, carefully remove the two bottom louvers and then trim the louver housing to allow clearance for the main receiver brace (Fig.M – passenger side) (Fig.N – driver's side). *Note:* when trimming the driver's side, you will be trimming off the side of the louver housing.

11. On each side, remove two 10mm (head) bolts attaching the radiator support to the frame (Fig.O – driver's side). Carefully let it hang down for now, or clamp it on a couple of inches back from where it was originally. *Note:* due to manufacturing variances, the head sizes of these bolts may vary.





12. On each side, push the radiator support out of the way and drill a ½" hole up through the pre-existing hole in the bottom and the top of the subframe (Fig.P).

13. On each side, place the supplied shim plate on top of the bumper core so that the center bend is facing up and so it fits into the bumper profile and place the U bolt over the bumper core and through the shim plate (Fig.Q).

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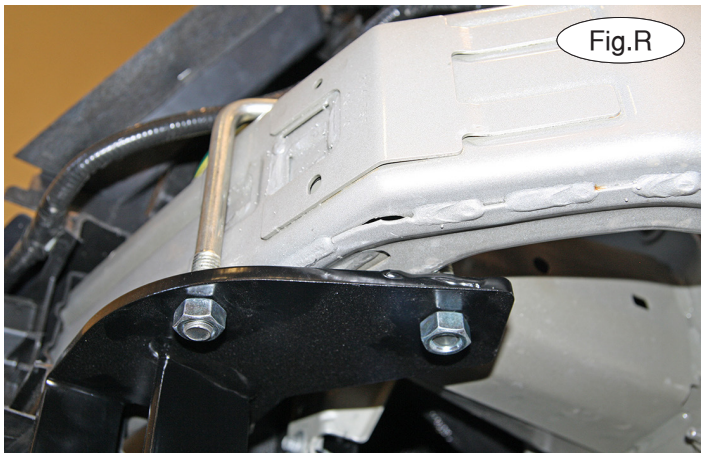
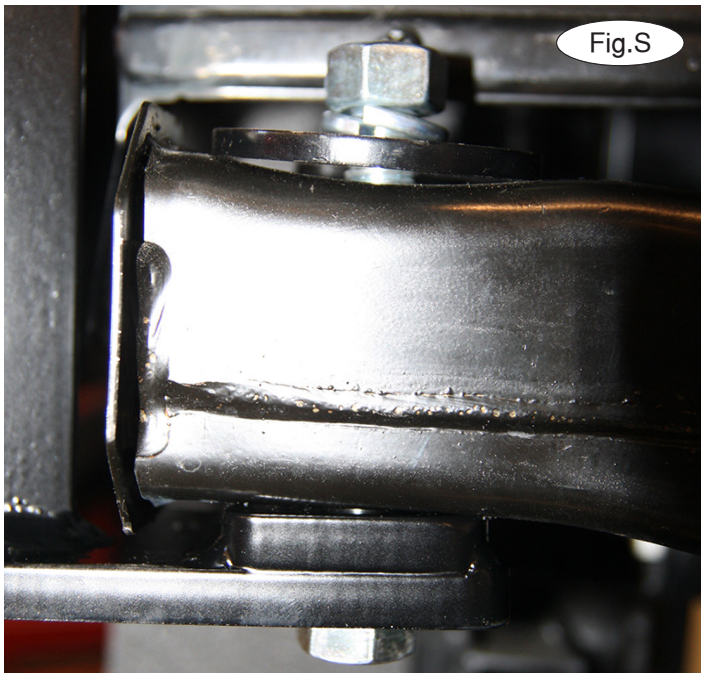
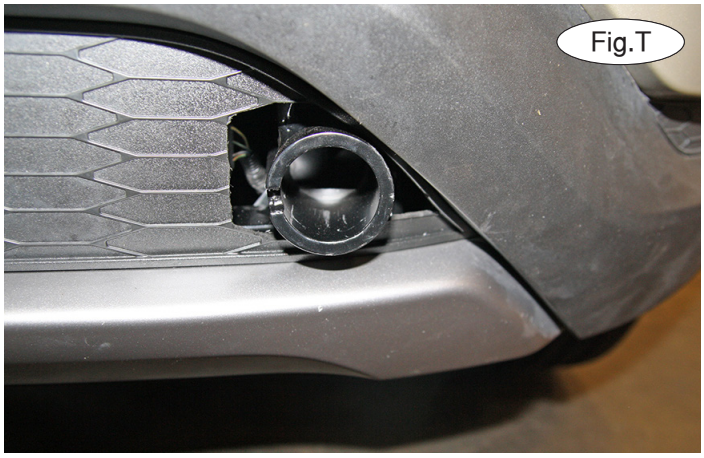


14. On each side, place the main receiver brace under the bumper core and over the U bolts and then thread on the ½" two-way locknuts (Fig.R). *Note:* the two-way locknuts have a dimple on the side and are self-locking. *Note:* ensure that wiring looms are not being pinched between the bracket and frame.





15. On each side, place a ½" plate washer over a ½" x 4" bolt and bolt down through the subframe and main receiver brace. Finish with a ½" lock washer and nut (Fig.S). *Note:* due to manufacturing variances, some applications may require bolting up through the main receiver brace and subframe instead.

16. Trim the fascia to allow clearance for the main receiver brace, using the pattern in Figure T as a guide. **Note: Make certain to trim as little as necessary to allow clearance for the main receiver brace. The Adaptive Cruise Control unit must remain completely covered by the plastic grille. Otherwise, malfunction of the Adaptive Cruise Control system may result.**

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

18. Reinstall the fascia, reversing steps 1 through 7.

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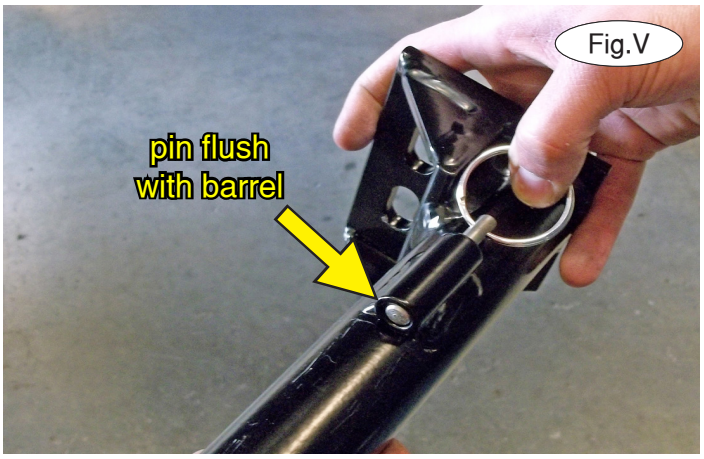
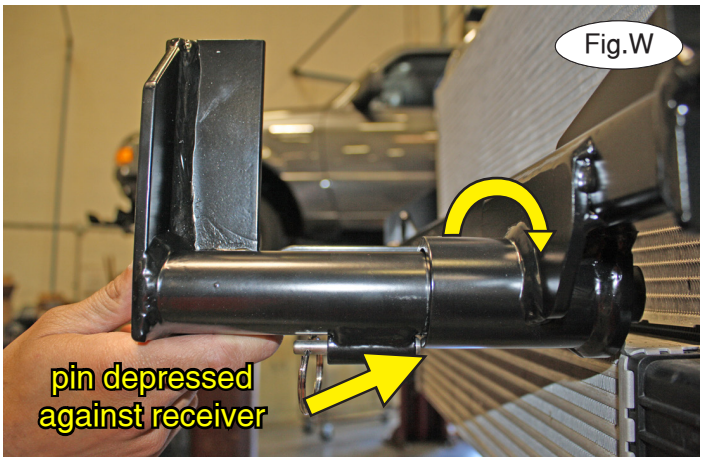
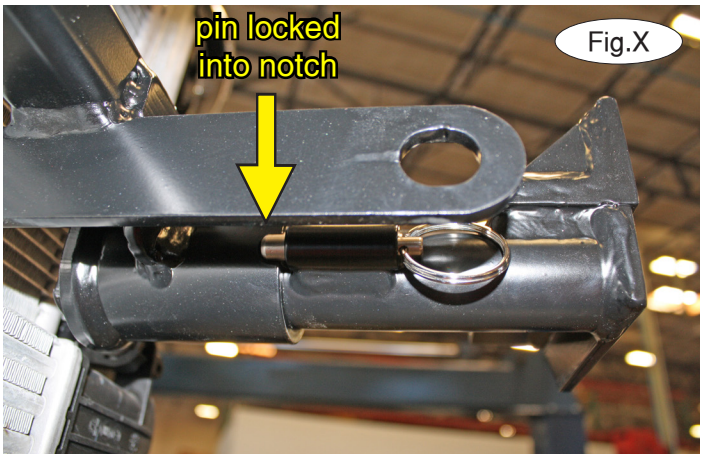


19. ***Note: the following four images are for illustration purposes only, as your specific application may be slightly different.***

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.U and Fig.V).





20. 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.W). 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.X).

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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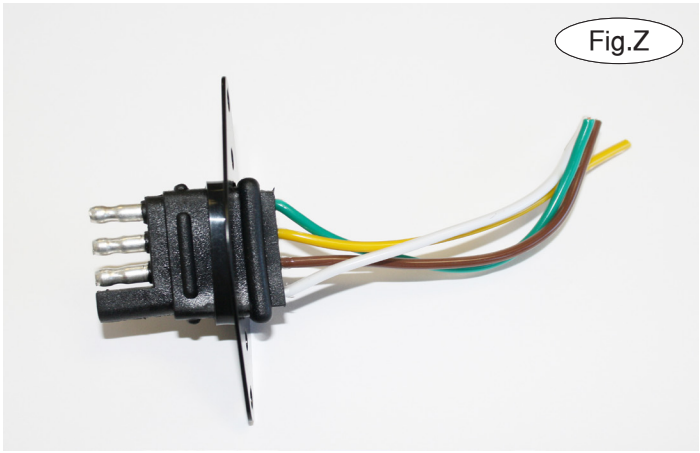

IMPORTANT!

Safety cables are required by law. When towing, connect safety cables to the safety cable tabs illustrated on the first page and in Figure Y. 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 ¾" 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 ¾" 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.Z). Use the two supplied ¾" 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.