

## BASEPLATE KIT KIT# 522202-5 INSTALLATION INSTRUCTIONS 10/26/18

Special Tools Needed Important Die Grinder or Reciprocating Saw 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. 7 12 6 optional 9 10 11 0.00 6 15 13

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ITEM QTY NAME	MATERIAL
1	
2	350067-10
3 16 3/8" FLAT WASHER	
4 12 3/8" LOCK WASHER	
5 12 3/8" NUT	
6 1 6mm x 1.0 x 35 BOLT	
7 1 6mm LOCK WASHER	
8 1 1/4" FLAT WASHER	
9 1 5/16" FLAT WASHER	
10 1 10mm LOCK WASHER	
11 1 10mm x 1.25 NUT	
12 1 TANK MOUNT BRACKET	B-003638
13 1 DRIVER SIDE ARM	
14 1 PASSENGER SIDE ARM	
15 1 MAIN RECEIVER	C-003365
16 2 LOWER REAR MOUNTING BRACE	C-003366
17 2 UPPER REAR MOUNTING BRACE	C-003367

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This is one of our direct-connect series baseplate kits, 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 kit consists of the main receiver brace, two removable front braces, and a hardware pack. The main receiver brace mounts to the frame rails, 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 nonwarranty 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 warranteed for the original installation. Installing a used baseplate on another vehicle is not recommended and will void the warranty.



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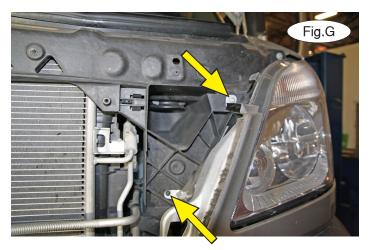
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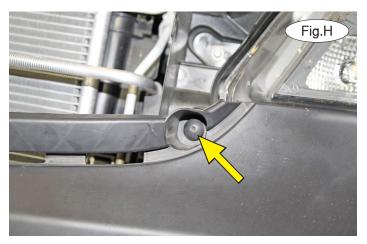


1. *Important:* please use all supplied bolts and parts and read all instructions carefully before beginning this installation. The majority of questions you may have can be answered within the text, and proper installation will ensure safe and secure travel. Now, begin the installation. For '13-'14 models: On each side, remove two T25 Torx screws attaching the center grille to the radiator housing (Fig.C). Then, pull straight out to release the center grille clips (Fig.D). For all other models: On each side, remove two plastic fasteners and one T25 screw attaching the center grille to the radiator housing (Fig.E) and then pull straight out to release the center grille clips (Fig.F).



2. For '13-'14 models only: On each side, remove one T30 and one T20 Torx screw attaching the fascia to the radiator housing (Fig.G). For all other models: On each side, remove one T25 screw attaching the fascia to the radiator housing (Fig.H).







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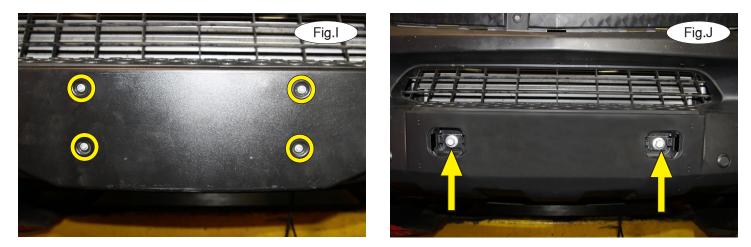
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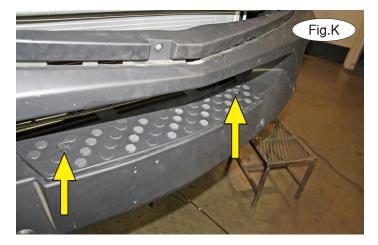
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- 3. Remove the license plate and then four T20 screws attaching the license plate housing to the bumper (Fig.I).
- 4. Remove two 13mm (head) bolts attaching the fascia to the bumper core (Fig.J).



5. Remove two T45 Torx bolts attaching the step to the bumper core (Fig.K).

6. On each side, remove three plastic fasteners attaching the fascia to the fender liner (Fig.L).

7. On each side, remove two plastic fasteners attaching the bottom of the fascia to the fender (Fig.M). Unplug all connectors and then remove the fascia (Fig.N).







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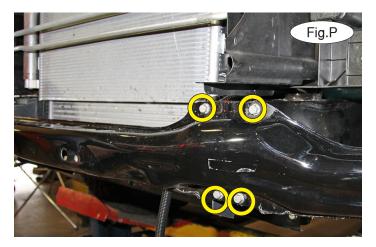
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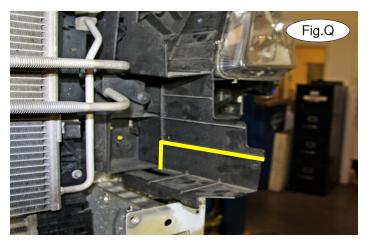
8. For models without a Diesel Emission Fluid tank: Skip to the next step. For models with the tank: On the passenger side only, remove one 13mm (head) bolt attaching the reservoir to the bumper core (Fig.O).

9. On each side, remove four 13mm (head) bolts attaching the bumper core to the frame (Fig.P). *Note:* If the vehicle is equipped with headlight washers, unclip the hose from the back of the bumper core. It will not be replaced. *Note:* Retain the bumper core for replacement in case the baseplate is ever removed from the vehicle.



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10. For '13-'14 models only: Release three clips on the driver's side and two on the passenger side attaching the air dams to the radiator support. Pull straight out to remove them, and then trim as shown in Figure Q (driver's side) and Figure R (passenger side).







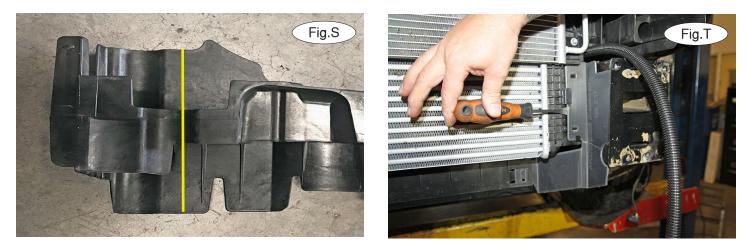
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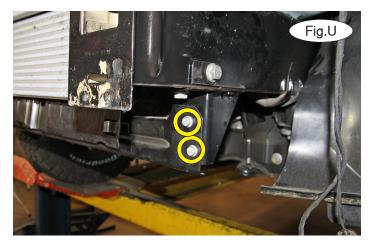
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**For all other models:** Remove and trim the additional air dam in Figure S, using the yellow lines as a reference for trimming. *Note:* Use care to ensure that you do not cut off the mounting tabs. Then, replace it.

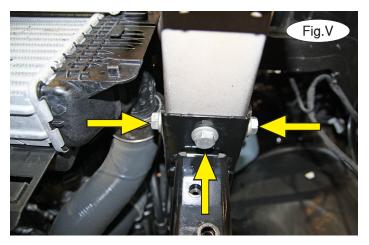
11. On each side, release three air dam clips and slide out the air dam to remove it from the radiator support (Fig.T).

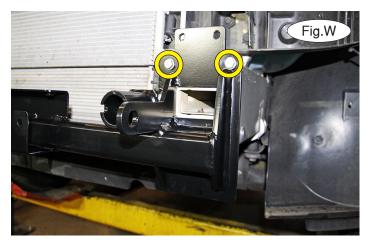
12. On each side, remove two 13mm (head) bolts attaching the air dam guard to the frame (Fig.U). It will not be replaced. *Note:* Retain the air dam guard for replacement in case the baseplate is ever removed from the vehicle.



13. On each side, remove three 18mm (head) bolts attaching the frame guard to the frame (Fig.V). The frame guards will not be replaced. *Note:* retain the frame guards for replacement in case the baseplate is ever removed.

14. Place the main receiver brace against the frame rails. Then, bolt it into place by replacing the two 13mm (head) bolts that you removed in step 9 (Fig.W).







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15. Working on the driver's side only, place the upper rear brace over the frame rail, aligning its holes with the top mounts on the main receiver brace. Loosely bolt the upper rear brace to the main receiver brace using the two supplied  $3/8" \times 114"$  bolts, and then finish with small 3/8" flat washers, 3/8" lock washers and 3/8" nuts (Fig.X).



16. Use a 3/8" bit to drill straight through the side mounts of the upper rear brace and the frame rail. Bolt through the upper rear brace and frame rail using the supplied 3/8" x  $4\frac{1}{2}$ " bolts, and finish with 3/8" lock washers and nuts (Fig.Y). Then, tighten all bolts to the bolt torque requirements found at the end of these instructions. *Note:* use Loctite® Red on all nuts and bolts.

17. Place the bottom brace over the frame guard mounts and replace the three 18mm (head) bolts you removed in step 15. Then, place two of the small 3/8" flat washers between the lower rear brace and the main receiver (Fig.Z), aligning them with the holes in the main receiver brace. Bolt the lower rear brace to the main receiver brace using the two supplied 3/8" x 1¼" bolts and finish with small 3/8" flat washers, 3/8" lock washers and 3/8" nuts (Fig.AA). Then, tighten all bolts to the bolt torque requirements found at the end of these instructions.

18. Repeat steps 15 through 17 for the passenger side of the vehicle.



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19. For models without a Diesel Emission Fluid tank: Skip to step 20. For models with the tank: On the passenger side only, remove one T27 Torx bolt (Fig.BB) and then place a  $\frac{1}{4}$ " x 1" O.D. x .188 wall pipe spacer over the hole, and bolt the supplied L bracket into place using the supplied 6mm x 1.25 x 40mm bolt, 6mm lock washer and  $\frac{1}{4}$ " flat washer. Bolt the bottom mount into place using the 13mm bolt you removed in step 9, a  $\frac{3}{8}$ " flat washer, 12mm lock washer and 12mm nut (Fig.CC).



20. On each side, trim the fascia as needed to allow clearance for the arm and tab (Fig.DD).

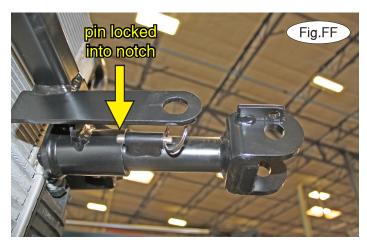
21. Now, reinstall the fascia by reversing steps 1 through 7.

22. 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.EE). 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.FF).

#### 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.

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







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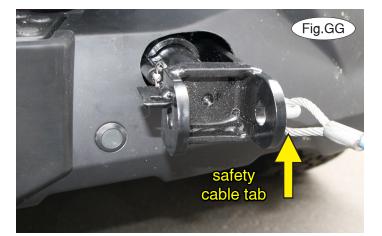
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#### **IMPORTANT!**

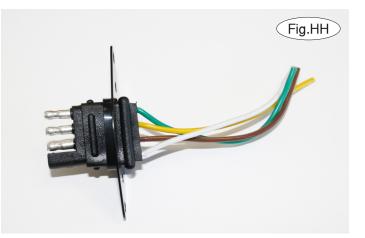
Safety cables are required by law. When towing, connect safety cables to the safety cable tabs illustrated in Figure GG. Make certain there is adequate slack in the cables to allow a full turning radius; otherwise, damage will result. If necessary, longer cables or cable extensions are available.



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

**For four-wire round plugs:** attach to the plug mounting plate and then use the two supplied <sup>3</sup>/<sub>4</sub>" self-tapping screws to attach the mounting plate to the grille.

**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.HH). Use the two supplied <sup>3</sup>/<sub>4</sub>" self-tapping screws to attach the mounting plate to the grille 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**

Torque
64 ft./lb.
60 ft./lb.
55 ft./lb.
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.