⋖

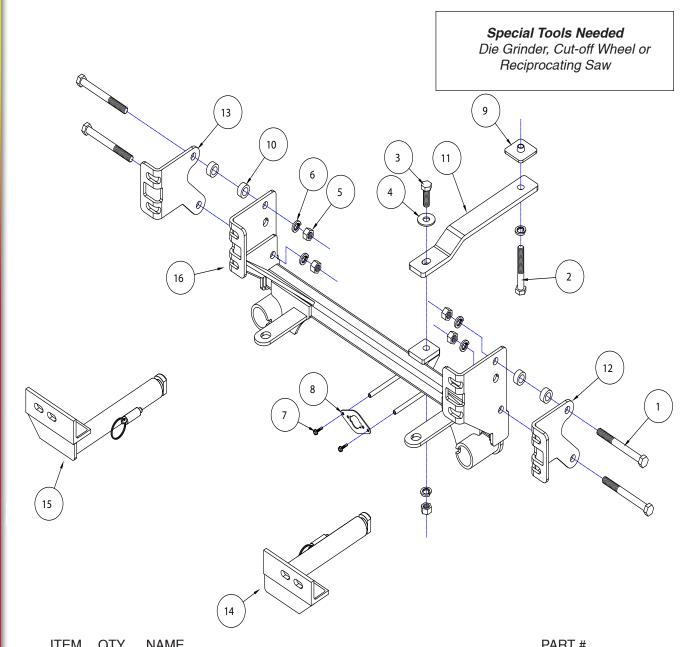
M

BASEPLATE KIT INSTALLATION INSTRUCTIONS

KIT# 521450-4

06/08/18 KS

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



HEM QIY NAME	PART#
14 1/2" x 5" BOLT	
21	
311/2" x 1 1/2" BOLT	350095-00
41/2" FLAT WASHER	
55 1/2" NUT	350258-00
66 1/2" LOCK WASHER	
72 #10 x 3/4" SELF DRILLING SCREW	
81 WIRE PLUG PLATE	A-003801
91 3/16" x 2" x 2" THREADED BACKING PLATE	A-003080
104 1" O.D. x 0.188 WALL TUBE SPACER x 7/16"	
111	
121DRIVER SIDE SIDE MOUNTING PLATE	B-003524
131PASSENGER SIDE SIDE MOUNTING PLATE	B-003525
141DRIVER SIDE ARM	
151PASSENGER SIDE ARM	
161MAIN RECEIVER	



KIT# 521450-4 06/08/18

ROADMASTER, Inc.

6110 NE 127th Ave.

Vancouver, WA 98682

360-896-0407

fax 360-735-9300

www.roadmasterinc.com

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

The main receiver brace mounts to the frame, the rear braces and the crossmember. 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

ROADMASTER Limited Warranty, including One-Year Conditional Warranty Text and Product Registration Card, in Carton.



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 ROAD-MASTER 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.



KIT# 521450-4 06/08/18

ROADMASTER, Inc.

6110 NE 127th Ave.

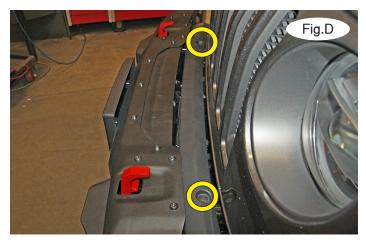
Vancouver, WA 98682

360-896-0407

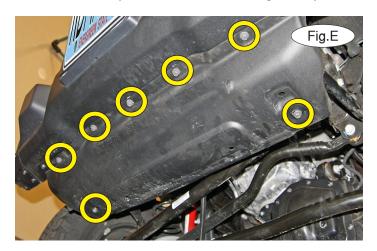
fax 360-735-9300

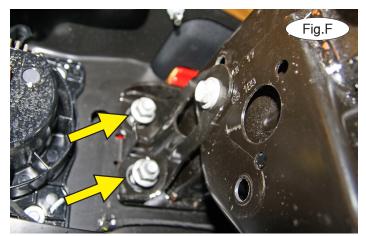
www.roadmasterinc.com



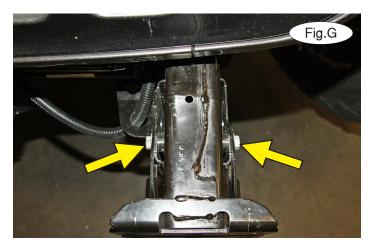


- 1. *Important:* please use all supplied bolts and parts and read all instructions carefully before beginning this installation. The majority of questions you may have can be answered within the text, and proper installation will ensure safe and secure travel. Begin the installation by disconnecting the fog lights on the passenger side, if the vehicle is so equipped (Fig.C). For Sahara, Sport and Sport S models only: Proceed now to the fascia removal supplement at the end of these instructions. For Rubicon models only: Proceed to step 2.
- 2. Remove two plastic fasteners attaching the drip rail to the frame (Fig.D) and set it aside for now.





- 3. Remove seven 13mm (head) bolts attaching the rock guard to the bumper and frame (Fig.E).
- 4. On each side, remove four 18mm (head) nuts attaching the bumper to the frame (Fig.F only two nuts shown). Pull out firmly to remove the bumper and set it aside for now.
- 5. On each side, remove two 16mm (head) bolts attaching the frame stiffeners to the frame (Fig.G). The stiffeners will not be replaced. *Note:* retain the frame stiffeners for replacement in case the baseplate is ever removed.





KIT# 521450-4 06/08/18

ROADMASTER, Inc.

6110 NE 127th Ave.

Vancouver, WA 98682

360-896-0407

fax 360-735-9300

www.roadmasterinc.com



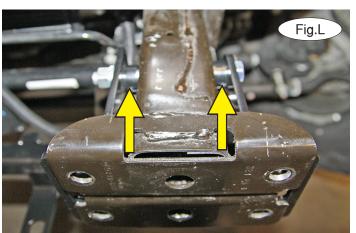


- 6. On each side, locate two holes above and below the bolts you removed in the previous step. Then, use a $\frac{1}{2}$ " drill bit to enlarge the holes. Drill through both the outside and inside of the frame (Fig.H).
- 7. Slide the main receiver brace up and to the inside of the frame rails (Fig.I) and use a jack stand to hold it in place (Fig.J).





- 8. Using the drawing on page 1 as a reference, locate the side-specific rear braces. On each side, install them by aligning the holes in the main receiver brace with the holes you enlarged in step 6 and then bolt through the bottom hole using the supplied $\frac{1}{2}$ " x 5" bolts. Finish with a $\frac{1}{2}$ " lock washer and nut (Fig.K).
- 9. On each side, place two 7/16" pipe spacers between the brace and the frame rail (Fig.L arrows). Then, bolt through the rear brace, pipe spacer, frame rail, pipe spacer, and the main receiver brace using the supplied $\frac{1}{2}$ " x 5" bolt. Finish with a $\frac{1}{2}$ " lock washer and nut (Fig.L). I eave all of the bolts loose for now.





KIT# 521450-4 06/08/18

ROADMASTER, Inc.

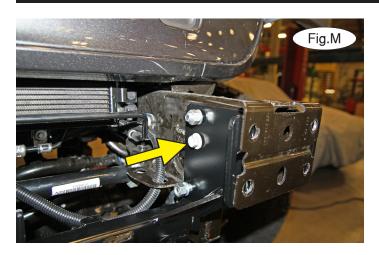
6110 NE 127th Ave.

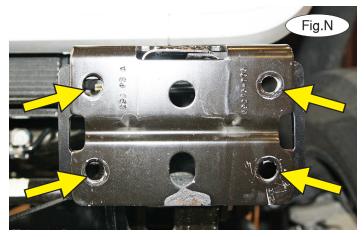
Vancouver, WA 98682

360-896-0407

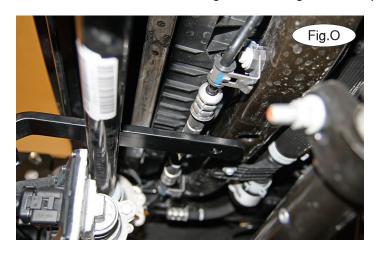
fax 360-735-9300

www.roadmasterinc.com



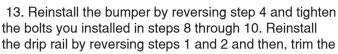


- 10. On each side, replace the frame stiffener bolts from step 5. Bolt from the inside of the frame to the outside (Fig.M).
- 11. Ensure that the front mounting holes are aligned before proceeding to the next step (Fig.N).





12. Locate the crossmember support brace and place it over the main receiver brace and (Fig.O) and over the swaybar. Then, bolt down the crossmember and into the main receiver mount using the supplied $\frac{1}{2}$ " x $\frac{1}{2}$ " bolt and $\frac{1}{2}$ " washer and finish with a $\frac{1}{2}$ " lock washer and nut (Fig.P). On the rear mount of the crossmember, place a $\frac{3}{16}$ " x $\frac{2}{12}$ " x $\frac{2}{12}$ " nutted backing plate on top and then bolt up through the mount, the crossmember, and into the nutted backing plate using the supplied $\frac{1}{2}$ " x $\frac{3}{2}$ " bolt and $\frac{1}{2}$ " lock washer (Fig.Q). Tighten these bolts to the bolt torque specifications found at the end of these instructions. *Note:* use Loctite® Red on all nuts and bolts.





metal rock guard as shown in Figure R to allow clearance for the main receiver brace. Plastic rock guards can be trimmed as shown in Figures S, T (passenger side) and U (driver's side) to allow just enough room for the receivers, safety cable tabs and wiring plug rods. Then, reinstall the rock guard.



KIT# 521450-4 06/08/18

ROADMASTER, Inc.

6110 NE 127th Ave.

Vancouver, WA 98682

360-896-0407

fax 360-735-9300

www.roadmasterinc.com





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.





14. Note: the images in this step 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.V). 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.W).

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.







KIT# 521450-4 06/08/18

ROADMASTER, Inc.

6110 NE 127th Ave.

Vancouver, WA 98682

360-896-0407

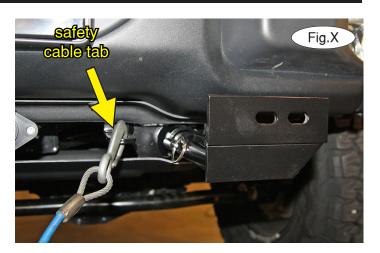
fax 360-735-9300

www.roadmasterinc.com

15. 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 tab shown in Figure X. 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.

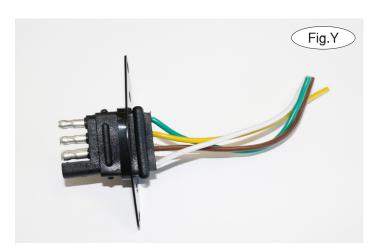


Three options for attaching the wiring plug to the main receiver brace

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 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.Y). 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	METRIC BOLTS	METRIC BOLTS
Thread Size Grade Torque	Thread Size Grade Torque	Thread Size Grade Torque
5/16-185 13 ft./lb.	6mm-1.08.86 ft./lb.	12mm-1.258.8 64 ft./lb.
3/8-16523 ft./lb.	8mm-1.08.818 ft./lb.	12mm-1.58.8 60 ft./lb.
7/16-14537 ft./lb.	8mm-1.258.816 ft./lb.	12mm-1.758.855 ft./lb.
1/2-13557 ft./lb.	10mm-1.258.8 36 ft./lb.	14mm-2.08.8 88 ft./lb.
5/8-115 112 ft./lb.	10mm-1.58.8 31 ft./lb.	



KIT# 521450-4 06/08/18

ROADMASTER, Inc.

6110 NE 127th Ave.

Vancouver, WA 98682

360-896-0407

fax 360-735-9300

www.roadmasterinc.com

Supplement for Sahara, Sport and Sport S models

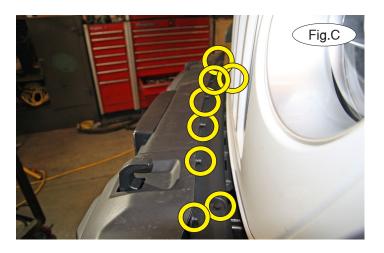
his is one of our crossbar-style series, which allows the visible front portion of the baseplate to be easily removed from the front of the vehicle (Fig.A and Fig.B – Sahara model pictured). This kit consists of a main receiver brace, two rear braces, a crossmember brace, two removable front braces,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

The main receiver brace mounts to the frame, the rear braces and the crossmember. 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.







- 1. Remove eight plastic fasteners attaching the drip rail to the bumper (Fig.C). Push back and up to remove the drip rail.
- 2. Remove two 8mm (head) screws attaching the rock guard to the subframe (Fig.D).
- 3. On each side, remove four plastic fasteners attaching the rock guard to the lower bumper (Fig.E).







KIT# 521450-4 06/08/18

ROADMASTER, Inc.

6110 NE 127th Ave.

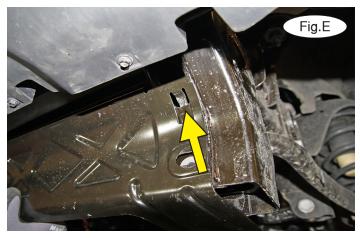
Vancouver, WA 98682

360-896-0407

fax 360-735-9300

www.roadmasterinc.com





- 4. Remove two 16mm (head) bolts attaching the frame guard to the frame (Fig.D). Push up to release the frame guard retaining clips (Fig.E).
- 5. Trim the frame guard as shown (Fig.F) and then reinstall each remaining piece by replacing the 16mm (head)





- 4. Remove two 16mm (head) bolts attaching the frame guard to the frame (Fig.D). Push up to release the frame guard retaining clips (Fig.E).
- 5. Trim the frame guard as shown (Fig.F) and then reinstall each remaining piece by replacing the 16mm (head) bolts you removed in the previous step (Fig.G).
- 6. Turn the bumper over and place it on a secure surface. Measure over 5" from the indent in the metal indicated in Figure H (arrow). Then, use a die grinder or a reciprocating saw to trim a $1\frac{1}{2}$ " x $1\frac{1}{2}$ " hole to allow clearance for the main receiver brace.

