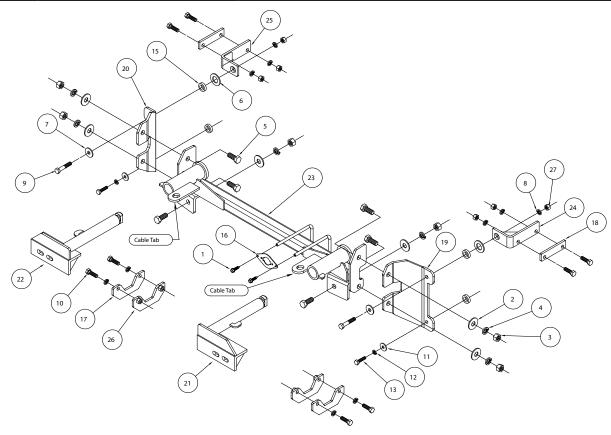
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BASEPLATE KIT KIT# 523174-1 INSTALLATION INSTRUCTIONS 11/2/16 KS

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ITEM QTY NAME	PART #
12 #10 x 3/4" SELF DRILLING SCREW	350247-35
261/2" FLAT WASHER	350308-00
361/2" HEX NUT	350258-00
461/2" LOCK WASHER	
561/2" x 1 1/4" BOLT	350094-00
623/4" FLAT WASHER	
723/8" FLAT WASHER	
8103/8" LOCK WASHER	
923/8" x 2" BOLT	
1083/8" x 1 1/4" BOLT	
112 5/16" FLAT WASHER	
122 8mm LOCK WASHER	355705-00
132 8mm x 1.25 x 30mm BOLT	
1421/2" SPLIT LOOM 4"	300089-00
154 1" O.D. x 0.188 WALL x 1/4" TUBE SPACER	A-001022
161WIRE PLUG PLATE	A-003801
172LOWER BUMPER SUPPORT BRACE PLATE	A-005086
182 REAR BUMPER SUPPORT BRACE PLATE	A-005087
191DRIVER SIDE MOUNTING PLATE	B-002209
201 PASSENGER SIDE MOUNTING PLATE	B-002210
211DRIVER SIDE ARM	C-002473
221	C-002474
231 MAIN RECEIVER	C-002475
241DRIVER SIDE REAR BUMPER SUPPORT BRACE	
251 PASSENGER SIDE REAR BUMPER SUPPORT BRACE	
262LOWER BUMPER SUPPORT BRACE	
2763/8" HEX NUT	350254-00



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his is one of our EZ2 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 support plates, two removable front braces, and a hardware pack.

The support plates mount to the frame rails; main receiver brace mounts to the support plates and frame rails; 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.



KIT# 523174-1

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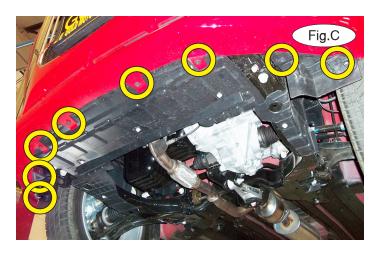
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- 1. *Important:* please use all supplied bolts and parts and read all instructions carefully before beginning this installation. The majority of questions you may have can be answered within the text, and proper installation will ensure safe and secure travel. Now, begin the installation. Remove eight Philips screws attaching the bottom of the fascia to the splash shielding and fender liners (Fig.C).
- 2. On each side, remove two plasic fasteners attaching the fender liner to the fascia (Fig.D).





- 3. On each side, pull back the fender liner and remove one T20 Torx bolt attaching the fascia to the fender (Fig.E).
- 4. Remove six plastic fasteners attaching the top of the fascia to the core support (Fig.F). *Note:* one of the fasteners is located beneath the air ducting and is denoted with an arrow in Figure F.
- 5. Pull out and forward on the corners of the fascia to remove it (Fig.G). Disconnect the fog lights, if the vehicle is so equipped.





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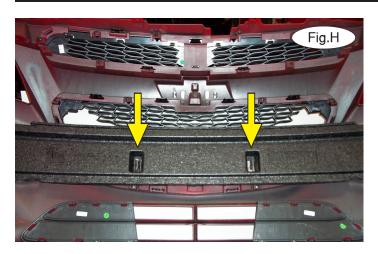
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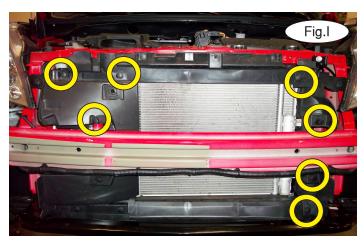
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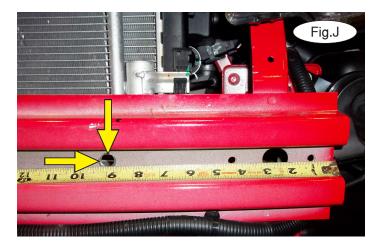
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- 6. Release two clips attaching the foam shock absorption pad to the back of the fascia (Fig.H). It will not be replaced. *Note:* retain the foam shock absorption pad and clips for replacement in case the bracket is ever removed.
- 7. Remove three plastic fasteners attaching the passenger side air deflector to the core support and four plastic fasteners attaching the driver's side air deflector to the core support (Fig.I). Now, disconnect the ambient temperature sensor from the passenger side air deflector.





- 8. On each side, measure 9" in from the outside of the bumper core and drill a $\frac{1}{2}$ " hole on center through the bumper core (Fig.J driver's side).
- 9. Using the two supplied split looms, cover the condenser cooling line on the passenger side to protect it from damage (Fig.K).
- 10. Break off the upper bumper core tab on the driver's side only (Fig.L).





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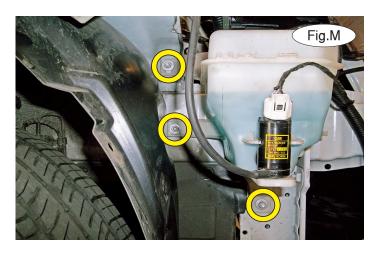
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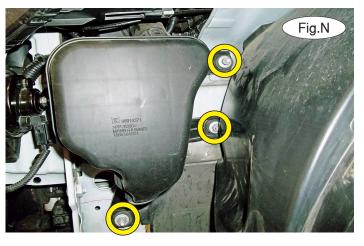
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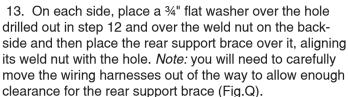
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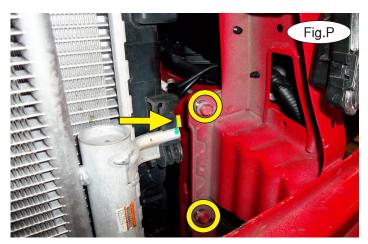


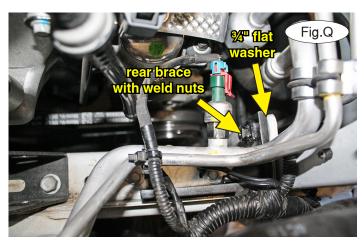


- 11. On the passenger side, remove three 10mm (head) nuts attaching the washer bottle to the vehicle (Fig.M). Drain it, or secure it away from the frame for now. On the driver's side, remove three 10mm (head) nuts attaching the air box to the frame (Fig.N). On the passenger side only, locate the 10mm (head) bolt attaching the ground wire to the frame and LOOSEN IT ONLY and then rotate it approximately 180 degrees and re-tighten it (Fig.O).
- 12. Grind off the plastic tab on the driver's side frame rail, ensuring it is flush with the edge of the aluminum tab, referencing the yellow line in Figure P. On each side, Now, remove two 12mm (head) bolts and drill out the uppermost weld nut using a long 3/8" drill bit (Fig.P).











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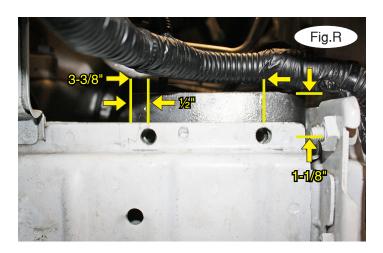
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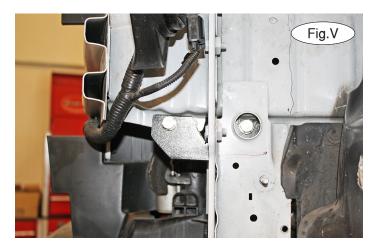




- 14. On each side, measure over $\frac{1}{2}$ " and 3-3/8" from the back side edge of the rear brace, and then down 1-1/8" from the top of the rear brace. Mark both spots for drilling and drill out both spots using a 3/8" drill (Fig.R passenger side).
- 15. On each side, place the spacer plate over the holes you drilled. Using the two supplied 3/8" x 1¼" bolts and 3/8" lock washers, bolt through the spacer plate, pinch weld and the rear brace (Fig.S passenger side). Finish with a 3/8" nut.



- drill 8/3" hola in center of the access hola
- 16. On each side, locate the pre-existing hole through the pinch weld on the bottom of the bumper core and use a 3/8" drill to enlarge it (Fig.T driver's side). *Note:* ensure that the hole is drilled approximately center on the pinch weld.
- 17. On each side, use the lower support brace without weld nuts to align over the hole you drilled in the previous step so that the rear hole of the support plate is approximately center of the pre-existing access hole in the frame and mark it for drilling (Fig.U). Then, place the lower support brace with weld nuts to the inside of the pinch weld and the one without weld nuts on the outside and then bolt them together using the supplied 3/8" x 11/4" bolts and 3/8" lock washers (Fig.V).





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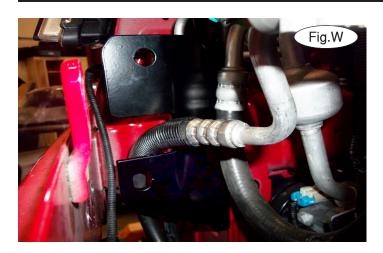
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- 18. On each side, place the support plate over the bumper mounts you just exposed in the previous step, fitting the plate around the condenser cooling line on the passenger side (Fig.W).
- 19. On each side, place two ¼" x 1" O.D. x .188 wall pipe spacers between the support plate and the frame mount (Fig.X). On each side, use one of the supplied 3/8" x 2" bolts and a 3/8" flat washer to bolt through the uppermost mount and out the rear brace. Finish with a 3/8" lock washer and nut. On the lower mount, bolt the support plate to the frame mount using one the supplied 8mm x 1.25 x 30mm bolts, a 8mm lock washer and ¼" flat washer (Fig.Y). *Note:* ensure proper alignment, as the bolts will receive Loctite® Red and will be torqued at the end of these instructions.



- Fig.Z
- 20. Place the main receiver brace behind the bumper core and between the support plates, aligning the lower holes of the main receiver brace with the holes you drilled in step 8. *Note:* you will need to fit the main receiver brace around the condenser cooling line. Make sure the line doesn't contact the brace. If it does, bend it slightly out of the way (Fig.Z).
- 21. On each side, bolt through the front of the bumper core and through the main receiver brace using the supplied $\frac{1}{2}$ " x 1 $\frac{1}{4}$ " bolt and finish with a $\frac{1}{2}$ " flat washer, lock washer and nut (Fig.AA).





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- 22. On each side, bolt the support plate to the main receiver brace using two of the supplied $\frac{1}{2}$ " x $\frac{1}{4}$ " bolts, $\frac{1}{2}$ " flat washers, $\frac{1}{2}$ " lock washers and nuts (Fig.BB).
- 23. Tighten all bolts to the bolt torque requirements found at the end of these instructions. *Note:* use Loctite® Red on all nuts and bolts.





- 24. Trim the air deflectors as shown in Figure CC and reinstall them (Fig.DD and Fig.EE). *Note:* only the bottom part of the driver's side air deflector will be reinstalled. Reconnect the ambient temperature sensor at this time.
- 25. Reinstall the fascia, reversing steps 1 through 4.
- 26. On both sides, trim the fascia as shown in Figure FF to allow clearance for the main receiver brace.
- 27. Insert the removable front bracket arms into the front receiver braces, and twist each one 90 degrees to lock.
- 28. 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 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.

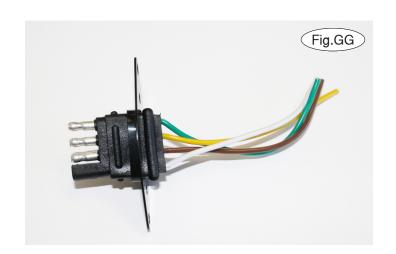
Note: if the bracket is so equipped, the holes in the alignment tabs which are welded to the arms and main receiver braces are for padlocks only. Under no circumstances should you bolt the alignment tabs together. Bolting the alignment tabs together may result in non-warranty damage to the bracket.

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 34" 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.GG). 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	Plated / Unplated	Thread Size	Grade	Plated / Unplated
5/16	5	13 ft./lb.	8mm-1.0	8.8	20 ft./lb. 18 ft./lb.	12mm-1.25	8.8	70 ft./lb. 65 ft./lb.
3/8	5	23 ft./lb.	8mm-1.25	8.8	19 ft./lb. 18 ft./lb.	12mm-1.5	8.8	66 ft./lb. 61 ft./lb.
7/16	5	37 ft./lb.	10mm-1.25	8.8	38 ft./lb. 36 ft./lb.	12mm-1.75	8.8	65 ft./lb. 60 ft./lb.
1/2	5	56 ft./lb.	10mm-1.5	8.8	37 ft./lb. 35 ft./lb.	14mm-2.0	8.8	104 ft./lb. 97 ft./lb.
5/8	5	150 ft./lb.						