

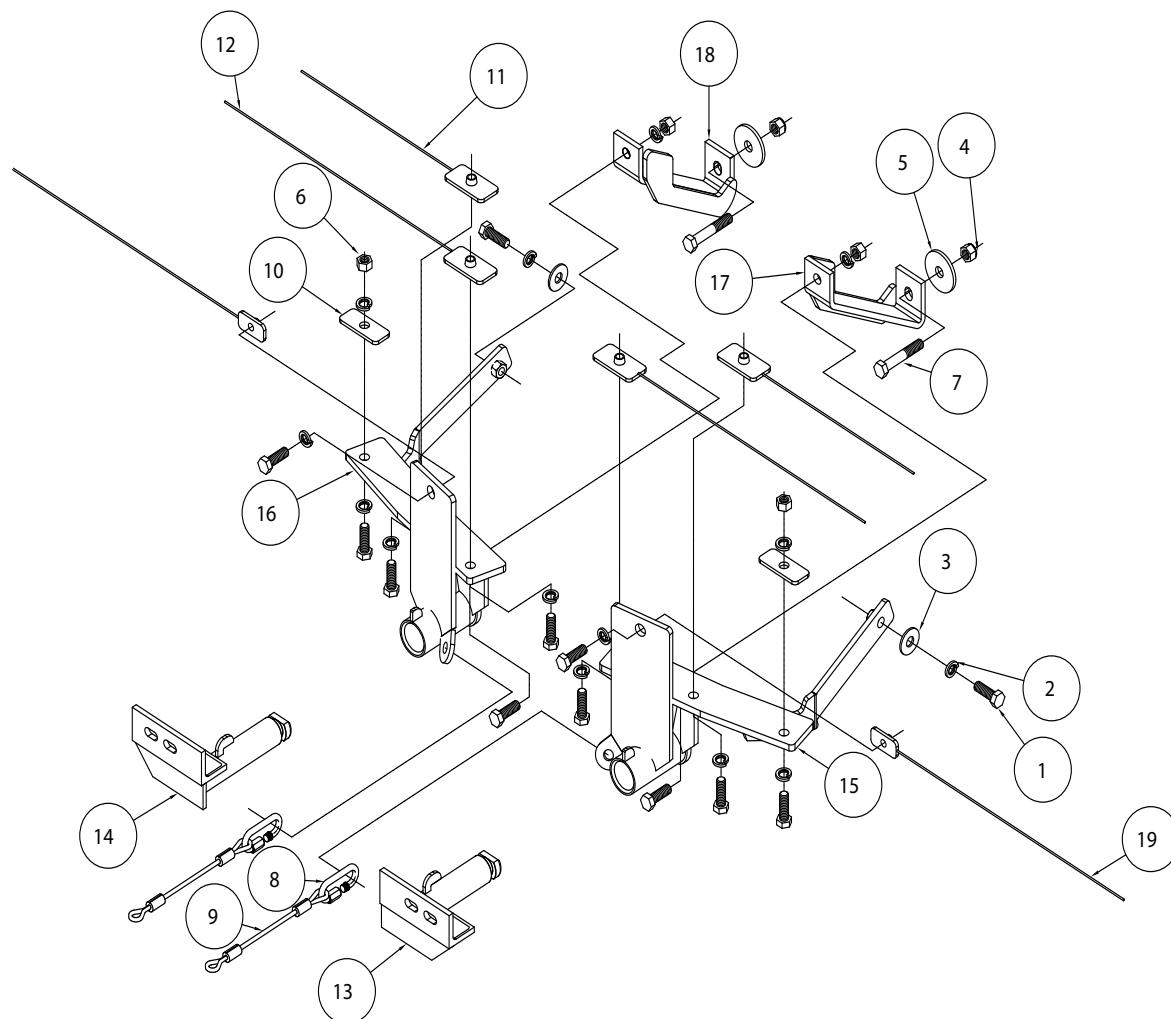


BASEPLATE KIT INSTALLATION INSTRUCTIONS

KIT# 521442-1

 05/02/16
KS

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



ITEM	QTY	NAME	MATERIAL
1.....	12	1/2" x 1 1/2" BOLT	350095-00
2.....	12	1/2" LOCK WASHER	350309-00
3.....	2	1/2" FLAT WASHER	350308-00
4.....	2	1/2" NYLON LOCK NUT	350259-00
5.....	2	1/2" PLATE WASHER	A-003086
6.....	4	1/2" HEX NUT	350258-00
7.....	2	1/2" x 3 1/2" BOLT	350103-00
8.....	2	QUICK LINK	200008-00
9.....	2	.8" SAFETY CABLE	650646-08
10.....	2	3/16" x 1 1/4" x 3" BACKING PLATE	A-000317
11.....	2	3/16" x 1 1/2" x 3" THREADED BACKING PLATE W/ 12" ROD	C-002006
12.....	2	3/16" x 1 1/2" x 3" THREADED BACKING PLATE W/ 18" ROD	C-002315
13.....	1	DRIVER SIDE ARM	C-002231
14.....	1	PASSENGER SIDE ARM	C-002232
15.....	1	DRIVER SIDE RECEIVER	C-002233
16.....	1	PASSENGER SIDE RECEIVER	C-002234
17.....	1	DRIVER SIDE REAR BRACE	C-002238
18.....	1	PASSENGER SIDE REAR BRACE	C-002239
19.....	2	3/16" x 1" x 2" THREADED BACKING PLATE W/ 18" ROD	C-002241
20.....	2	ZIP TIES	300140-8



BASEPLATE KIT INSTALLATION INSTRUCTIONS

KIT# 521442-1

05/02/16
KS

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

This is one of our EZ 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 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 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 non-warranty 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 warranted for the original installation. Installing a used baseplate on another vehicle is not recommended and will void the warranty.



BASEPLATE KIT INSTALLATION INSTRUCTIONS

KIT# 521442-1

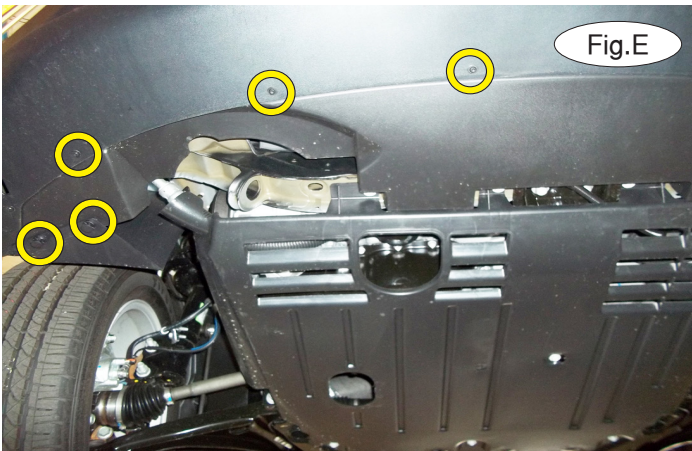
05/02/16
KS

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. Now, begin the installation by removing seven T20 Torx screws attaching the fascia to the core support and two T27 screws attaching the quick-stops to the top of the fascia (Fig.C).

2. On each side, remove one 10mm screw attaching the corner of the fascia to the fender and three 7mm (head) bolts attaching the fender liner to the fascia (Fig.D – passenger side).



3. Remove four plastic fasteners attaching the fender liner to the bottom of the fascia and three 10mm (head) bolts attaching the fascia to the radiator support (Fig.E). *Note:* the two driver's side plastic fasteners are not visible in Figure E.

4. Pull back the fender liners and disconnect the fog lights, if the vehicle is so equipped.

5. Pull out and forward on the corners of the fascia to remove it (Fig.F).

6. **For models without tow hooks:** proceed to the next step. **For models with tow hooks:** remove four 16mm (head) bolts attaching the tow hook to the frame rail (Fig.G).





BASEPLATE KIT INSTALLATION INSTRUCTIONS

KIT# 521442-1

05/02/16
KS

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



Fig.H



Fig.I

7. Working on the driver's side, place the rear support brace into the opening in the frame rail (Fig.H). Align the holes in the rear support brace with the existing holes in the side of the frame and bolt it into place using one of the supplied $\frac{1}{2}$ " x $1\frac{1}{2}$ " bolts, $\frac{1}{2}$ " lock washers and nuts (Fig.I).

8. Clamp the main receiver brace to the bottom of the bumper core (Fig.J).

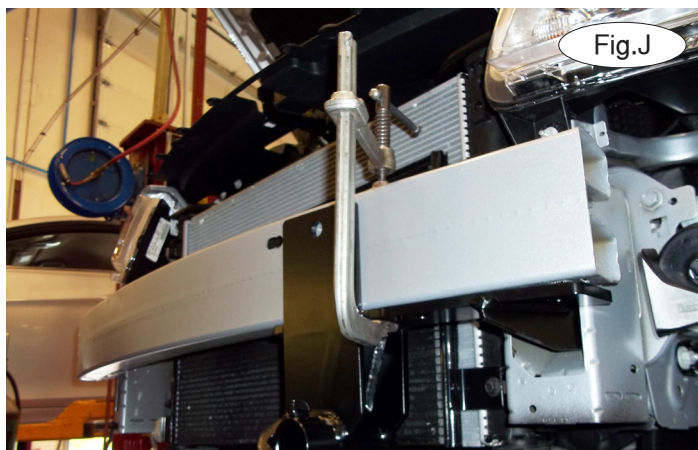


Fig.J



Fig.K

9. Locate and enlarge the two existing holes in the bumper core and using the inside hole in the lower support brace as a template, drill up through the bumper core (Fig.K). *Note:* if you experience difficulty in drilling due to the hard composition of the bumper core, drill a pilot hole first. Make certain you use a sharp drill bit and a piece of metal as a buffer between the drill bit and the engine components.

10. Place one of the supplied $\frac{1}{2}$ " lock washers over one of the $\frac{1}{2}$ " x $1\frac{1}{2}$ " bolts and starting with the inside, place a $\frac{3}{16}$ " x $1\frac{1}{2}$ " x 3" threaded backing plate with wire through the opening in the bumper core (Fig.L) and over the hole. Now, bolt through the main receiver brace, bumper core and into the backing plate. *Note:* use Loctite® Red on all bolts used for mounting this bracket.

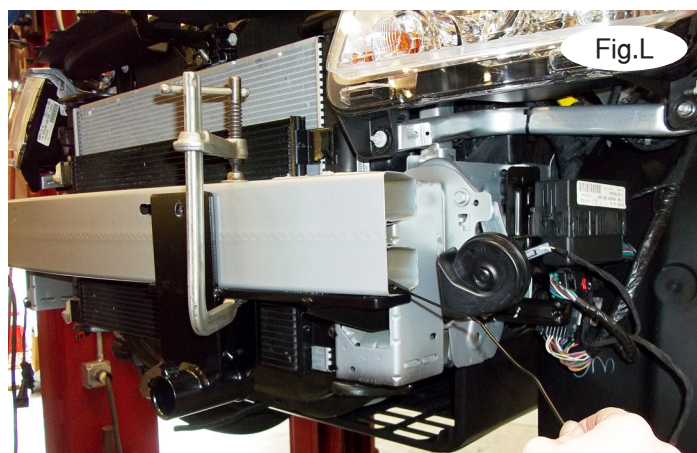


Fig.L



BASEPLATE KIT INSTALLATION INSTRUCTIONS

KIT# 521442-1

05/02/16
KS

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

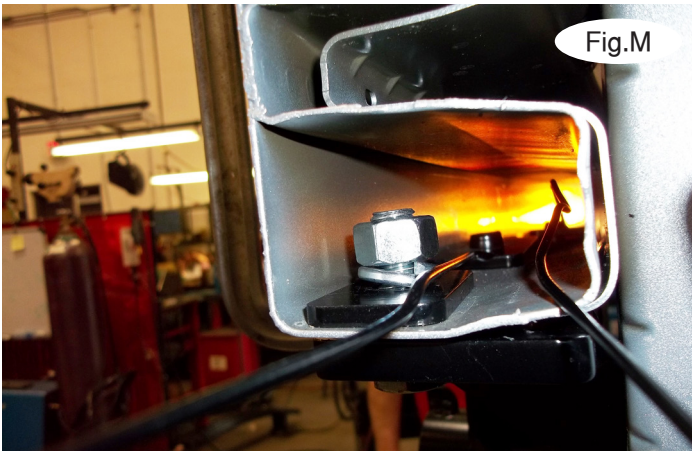


Fig.M

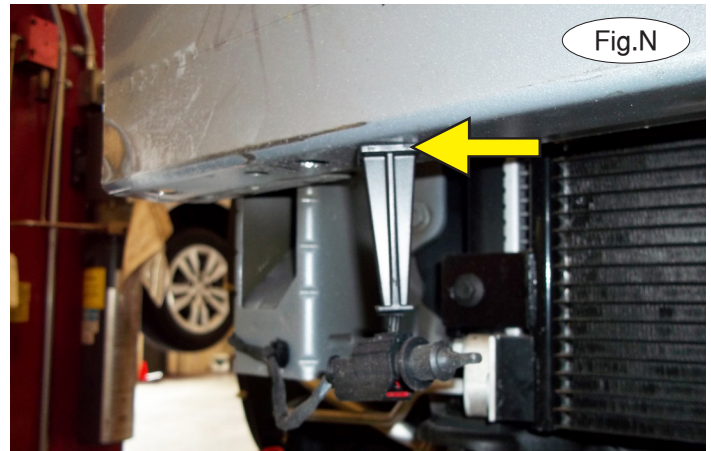


Fig.N

11. Repeat step 10 for the outer hole but use the 3/16" x 1½" x 2½" backing plate instead. Using one of the supplied ½" x 1½" bolts, bolt through the main receiver brace, bumper core, and into the backing plate and finish with a ½" lock washer and nut (Fig.M).

12. Disconnect the ambient temperature sensor from the bumper core (Fig.N) and repeat steps 7 through 11 for the passenger side.



Fig.O



Fig.P

13. Use the drawing on page 1 as a guide to ensure the bracket is centered on the car and that the attachment points for the quick-disconnects are 28½" +/- ½" from center to center. Torque the bolts to the bolt torque requirements found at the end of these instructions.

14. Remove the clamp and use a pair of pliers to break the wires off the backing plates (Fig.O).

15. Working on the driver's side, and using the hole in the upper mounting point as a template for drilling, drill a ½" hole through the front of the bumper core (Fig.P). Place a ½" lock washer over one of the supplied ½" x 1½" bolts. Insert the 3/16" x 1" x 3" threaded backing plate with offset nut into the end of the bumper core and over the hole you just drilled and bolt through the main receiver brace, bumper core and into the backing plate (Fig.Q).

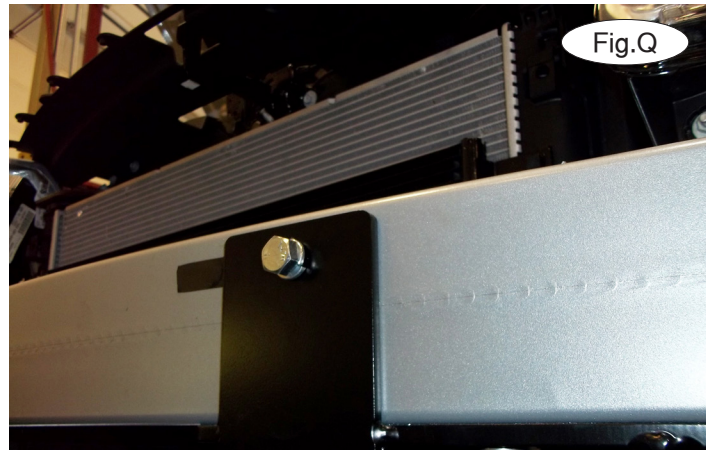


Fig.Q

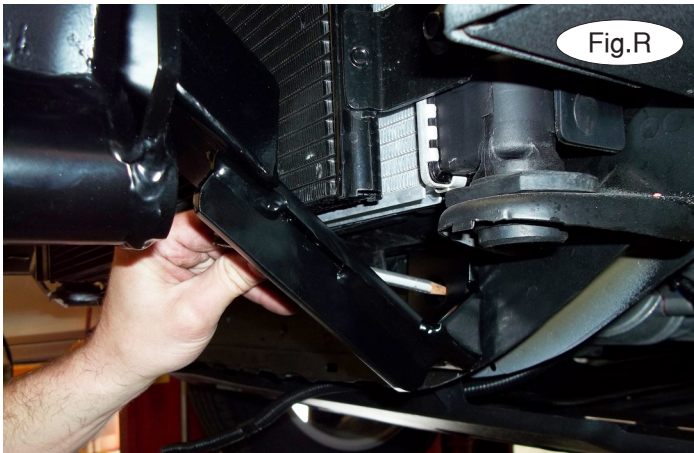


BASEPLATE KIT INSTALLATION INSTRUCTIONS

KIT# 521442-1

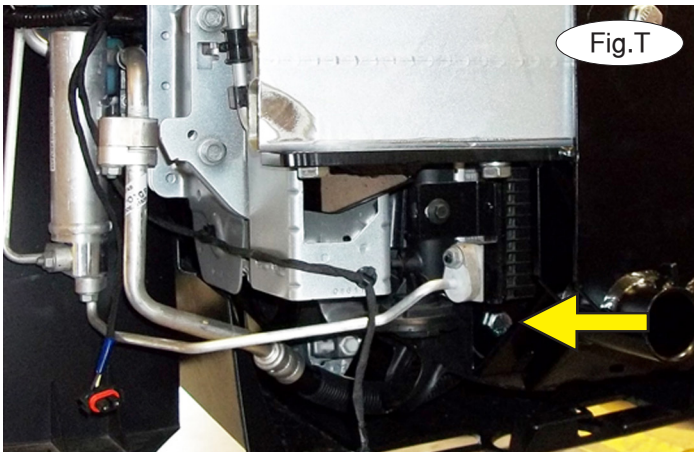
05/02/16
KS

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



16. Temporarily bolt the rear brace to the main receiver brace using the supplied $\frac{1}{2}$ " x $1\frac{1}{4}$ " bolt and $\frac{1}{2}$ " nut. Mark the center of the lower support and core support (Fig.R). Ensure that the gusset running along the side of the rear brace faces to the inside of the vehicle, referring to the illustration on the first page of these instructions.

17. Repeat steps 15 and 16 for the passenger side, then remove the rear brace on each side and using the mark you made in step 16 as a guide, drill a $\frac{1}{2}$ " hole through the core support (Fig.S). *Note:* make certain you use a sharp drill bit and a piece of metal as a buffer between the drill bit and the engine components.



18. On the passenger side, place one of the supplied $\frac{1}{2}$ " x $3\frac{1}{2}$ " bolts through the rear mounting point of the rear brace and bolt through the front and rear of the core support. Finish with a $\frac{1}{2}$ " plate washer and nylock nut (Fig.T).

19. Bolt the rear brace to the main receiver brace using one of the supplied $\frac{1}{2}$ " x $1\frac{1}{2}$ " bolts, lock washers and nuts (Fig.U).

20. Repeat steps 18 and 19 for the driver's side.

21. Tighten all remaining bolts to the bolt torque requirements found at the end of these instructions.

22. Torque all bolts to the bolt torque requirements found at the end of this document, starting with the bumper core mounting points.

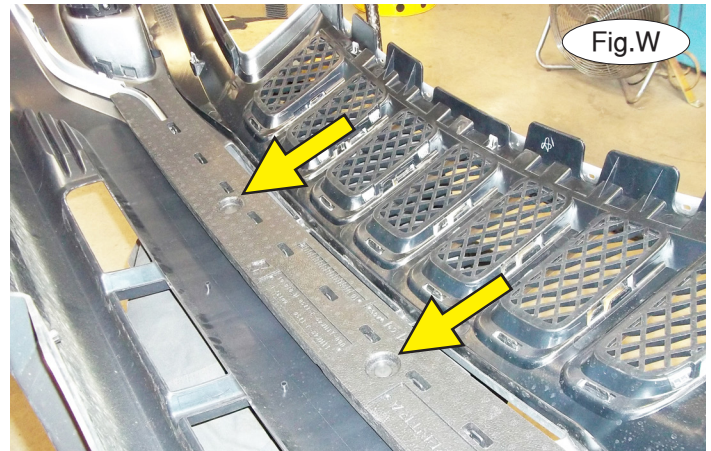


BASEPLATE KIT INSTALLATION INSTRUCTIONS

KIT# 521442-1

05/02/16
KS

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



23. Using the supplied zip ties, remount the ambient temperature sensor to the back of the passenger side rear brace (Fig.V).

24. Remove two plastic fasteners attaching the shock absorption pad to the back of the fascia (Fig.W). The shock absorption pad will not be replaced. *Note:* retain the shock absorption pad and attachment hardware so that it can be replaced if the bracket is ever removed.



25. Reinstall the fascia, reversing steps 1 through 5. **For later models that require trimming:** trim to allow clearance for the main receiver brace (Fig.X).

26. Insert the removable front bracket arms into the front receiver braces, and twist each one 90 degrees to lock.

27. Attach the 8" safety cables with the cable connectors (Q-Links) to the front of the receiver braces (Fig.Y).

28. Attach the ends of the safety cables to the tow vehicle's safety cables.

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

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.