

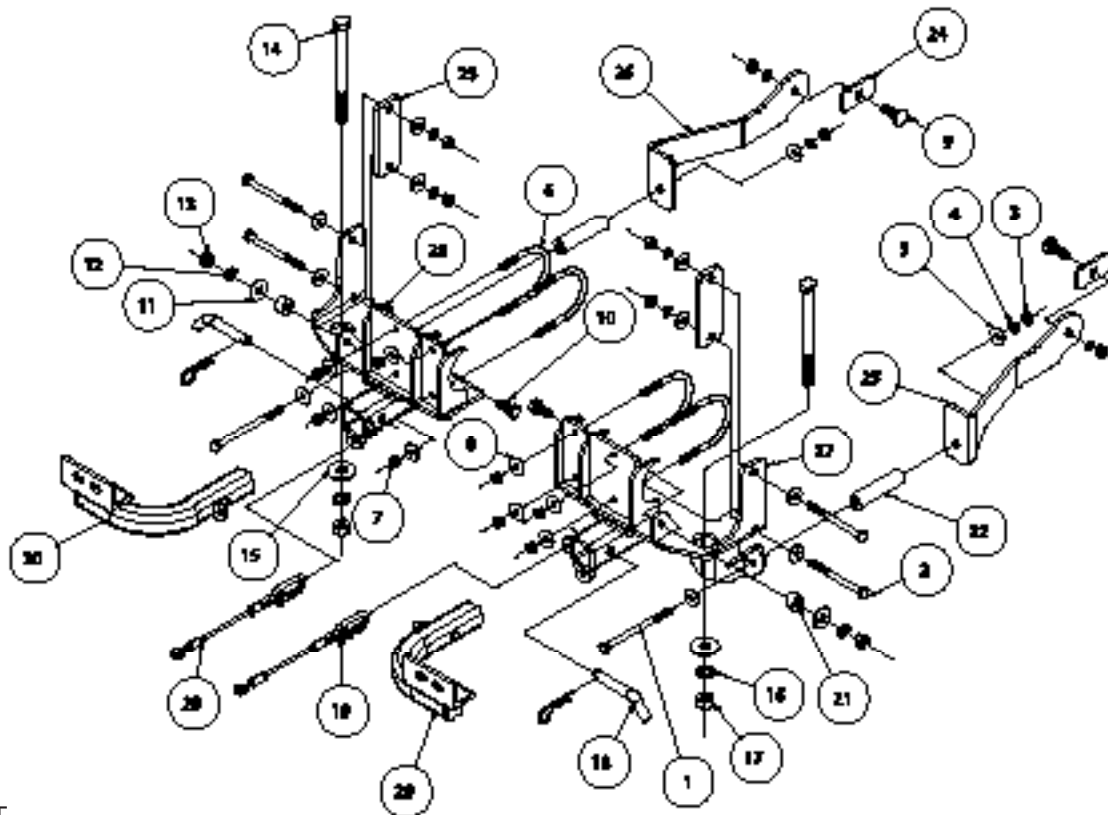


BASEPLATE KIT INSTALLATION INSTRUCTIONS

KIT# 3155-1

03/12/08
KS

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



| ITEM | QTY | NAME | PART NUMBER |
|------|-----|---|-------------|
| 1 | 2 | 10MM x 1.5 x 150MM BOLT | 356125-00 |
| 2 | 4 | 10MM x 1.5 x 120MM BOLT | 356121-00 |
| 3 | 6 | 10MM x 1.5 NUT | 356230-00 |
| 4 | 6 | 10MM LOCK WASHER | 355715-00 |
| 5 | 12 | 10MM FLAT WASHER | 355710-00 |
| 6 | 4 | 3/8" U-BOLT | 357024-00 |
| 7 | 8 | 3/8" NYLON LOCK NUT | 350255-00 |
| 8 | 8 | 3/8" FLAT WASHER | 350304-00 |
| 9 | 2 | 1/2" x 1 3/4" CARRIAGE BOLT | 350363-00 |
| 10 | 2 | 1/2" x 1 3/4" BOLT | 350396-00 |
| 11 | 2 | 1/2" FLAT WASHER | 350308-00 |
| 12 | 4 | 1/2" LOCK WASHER | 350309-00 |
| 13 | 4 | 1/2" NUT | 350258-00 |
| 14 | 2 | 5/8" X 7 1/2" BOLT | 350148-00 |
| 15 | 2 | 5/8" FLAT WASHER | 350312-00 |
| 16 | 2 | 5/8" LOCK WASHER | 350313-00 |
| 17 | 2 | 5/8" NUT | 350262-00 |
| 18 | 2 | DRAW PIN/SPRING PIN | 357035-00 |
| 19 | 2 | QUICK LINK | 200008-00 |
| 20 | 2 | SAFETY CABLES 8" | 650646-08 |
| 21 | 2 | 1" O.D. x 0.188 WALL x 5/8" PIPE SPACER | A-000156 |
| 22 | 2 | 1" O.D. x 0.188 WALL x 4" PIPE SPACER | A-000374 |
| 23 | 2 | 3/8" x 2" x 5" 2 HOLE BACKING PLATE | A-000375 |
| 24 | 2 | 1/4" x 1 1/2" x 3" SQ. HOLE BACKING PLATE | A-000479 |
| 25 | 1 | DRIVER SIDE BRACE | B-001150 |
| 26 | 1 | PASSENGER SIDE BRACE | B-001151 |
| 27 | 1 | DRIVER SIDE RECEIVER | C-001663 |
| 28 | 1 | PASSENGER SIDE RECEIVER | C-001664 |
| 29 | 1 | DRIVER SIDE ARM | C-001665 |
| 30 | 1 | PASSENGER SIDE ARM | C-001666 |



BASEPLATE KIT INSTALLATION INSTRUCTIONS

KIT# 3155-1

03/12/08
KS

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

This bracket kit is one of our XL series, which allows the visible front portion of the brackets to be easily removed (Fig.A and Fig.B). The kit consists of the main receiver braces, removable front braces, backing plate weldments and a hardware pack. The main receiver brace mounts to the frame and subframe on each side. The removable front braces insert into the receivers on each side and are secured with draw pins.

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 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# 3155-1

03/12/08
KS

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

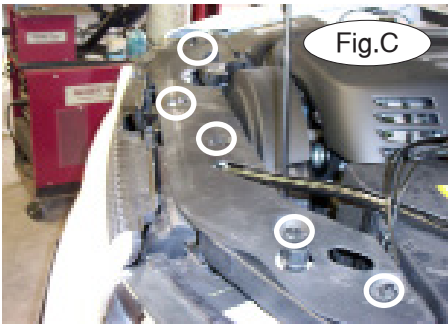


Fig.C



Fig.D

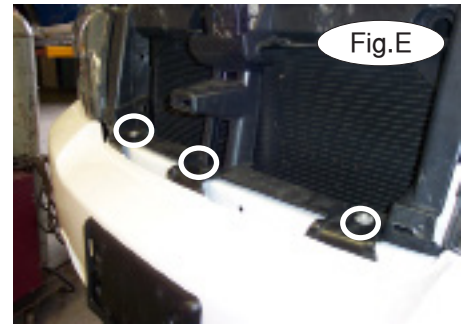


Fig.E

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 two 7mm (head) bolts and three plastic fasteners attaching the radiator cover to the core support (Fig.C).

2. Pull forward on the top and sides of the grille to remove 11 spring clips (Fig.D). *Note:* there are four on the top, four on the bottom, two on the edges and one in the middle.

3. Remove one plastic fastener and two 10mm (head) bolts behind the grille that attach the top of the fascia to the core support (Fig.E).

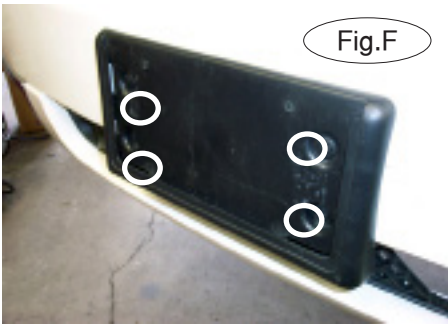


Fig.F



Fig.G

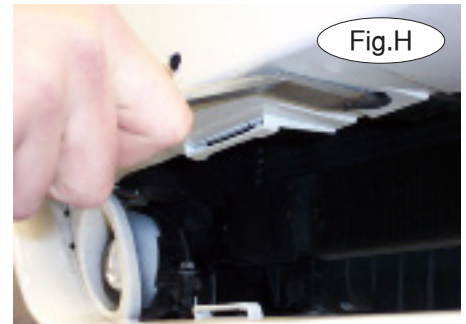


Fig.H

4. Remove four plastic fasteners attaching the license plate holder to the fascia (Fig.F).

5. Remove the lower grille by pulling forward (Fig.G). Remove four plastic fasteners attaching it to the fascia (Fig.H).



Fig.I

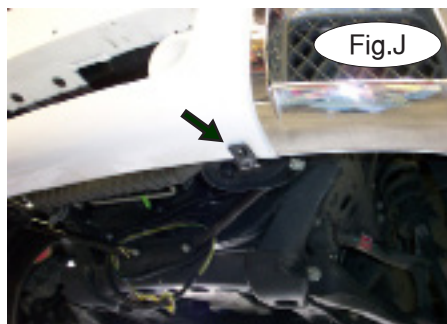


Fig.J



Fig.K

6. On each side, remove one plastic fastener attaching the lower fascia to the fascia support (Fig.I – driver's side).

7. On each side, remove one 7mm (head) bolt attaching the bottom of the fascia to the lower fascia supports (Fig.J – driver's side).

8. On each side, remove one plastic fastener attaching the inner fender liner to the bumper core (Fig.K)

9. Disconnect the fog lights, if the vehicle so equipped.

10. Pull forward on the fascia to remove it (Fig.L).



Fig.L

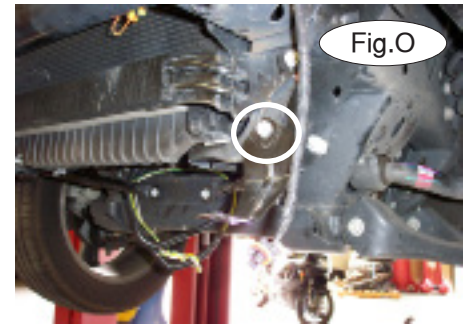


BASEPLATE KIT INSTALLATION INSTRUCTIONS

KIT# 3155-1

03/12/08
KS

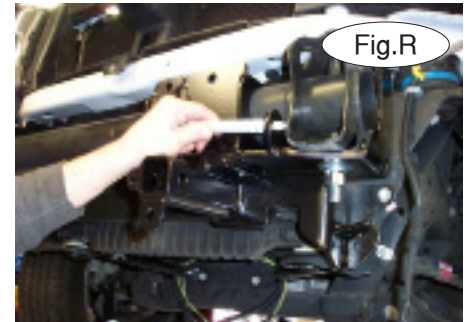
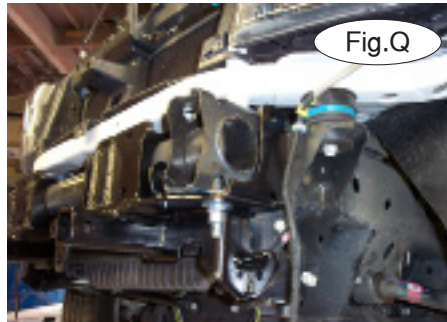
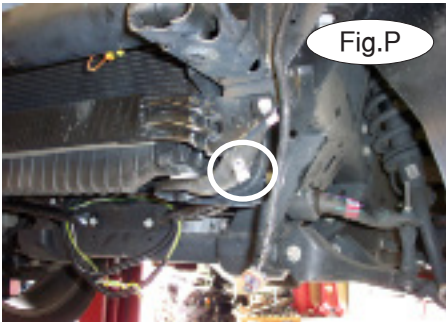
ROADMASTER, Inc. 6110 NE 127th Ave. Vancouver, WA 98682 360-896-0407 fax 360-735-9300 www.roadmasterinc.com



11. Working on the driver's side, remove two 21mm (head) bolts attaching the bumper core to the inside frame rail (Fig.M).

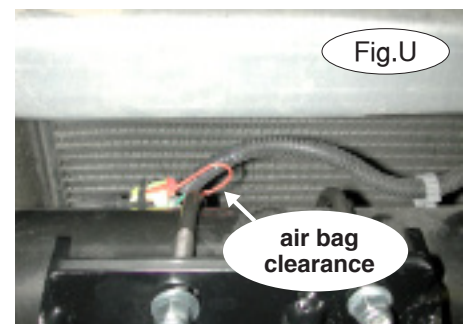
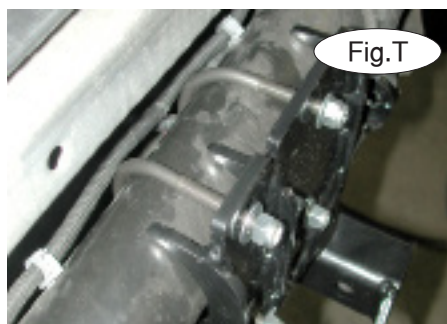
12. Pull forward to remove the bumper core (Fig.N).

13. On each side, remove one 13mm (head) bolts attaching the core support to the radiator support (Fig.O) and remove the slipnut (Fig.P).



14. Working on the driver's side, temporarily install the main receiver brace – set it against the frame cross brace and drop one of the supplied 5/8" x 7 1/2" bolts through the large bumper mount on the end of the frame and through the driver's side brace (Fig.Q). Thread a 5/8" nut, lock washer and flat washer onto the bolt. Finger tighten only at this time.

15. Mark the inside frame wall for drilling, using the pre-existing holes in the brace as a template (Fig.R). Remove the brace temporarily and drill a 1/2" hole through the side of the frame (Fig.S), then replace the brace.



16. Position two 3/8" U bolts against the front frame cross brace (with the air bag sensor wiring harness behind the U bolts) and through the receiver brace, securing it with 3/8" flat washers and Nylock nuts (Fig.T). Finger tighten only at this time. *Note:* the outside U bolt (on each side) will be close to the air bag sensor, but will allow sufficient clearance on both sides. Figure U shows the air bag clearance.



BASEPLATE KIT INSTALLATION INSTRUCTIONS

KIT# 3155-1

03/12/08
KS

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

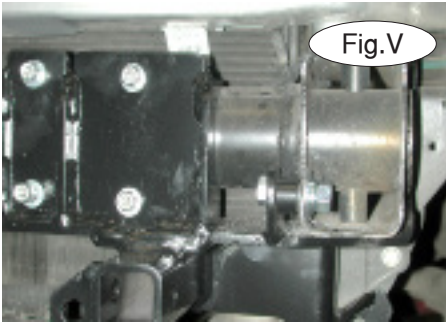


Fig.V

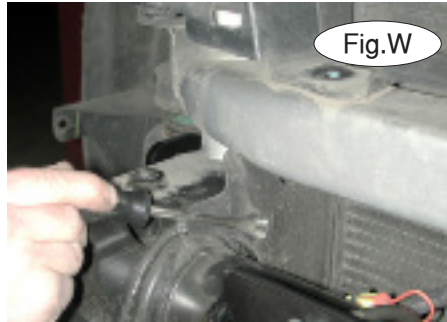


Fig.W

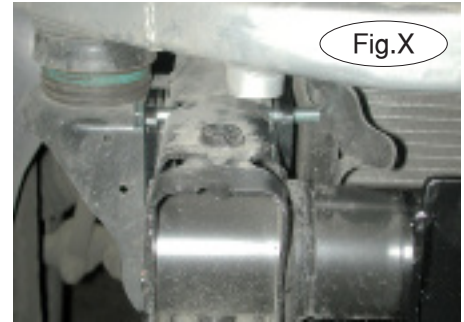


Fig.X

17. Bolt through the side of the frame rail and front frame cross brace with a $\frac{1}{2}$ " x $1\frac{3}{4}$ " bolt, 1" x $\frac{5}{8}$ " pipe spacer, flat washer, lock washer and nut. *Note:* place the pipe spacer between the brace and the side of the frame (Fig.V).

18. Remove the plastic pen holding the air deflector to the frame rail (Fig.W) to gain access to the pre-drilled holes in the frame rail. Install two 10mm x 1.5 x 120mm bolts through one of the $\frac{3}{8}$ " x 2" x $5\frac{1}{2}$ " backing plates, the frame and the side of the receiver brace (Fig.X). Use 10mm nuts, lock washers and fender washers to hold the backing plate in place. Figure Y shows both bolts in place.

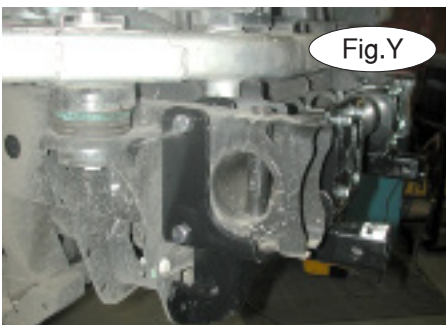


Fig.Y

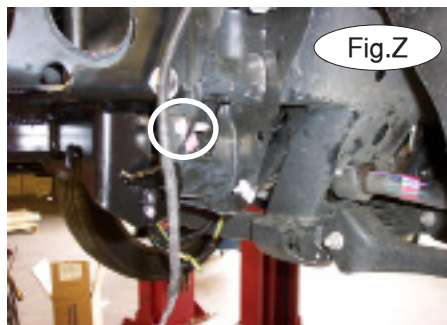


Fig.Z

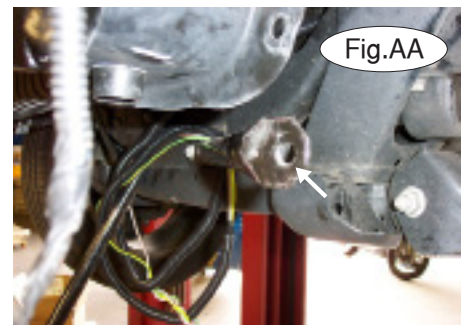


Fig.AA

19. Remove a 13mm (head) bolt attaching the radiator support brace to the radiator support (Fig.Z). Using a drill or die grinder, enlarge the pre-existing hole in the support brace to $\frac{7}{16}$ " (Fig.AA).



Fig.BB

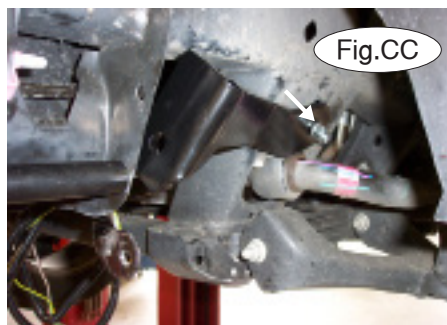


Fig.CC

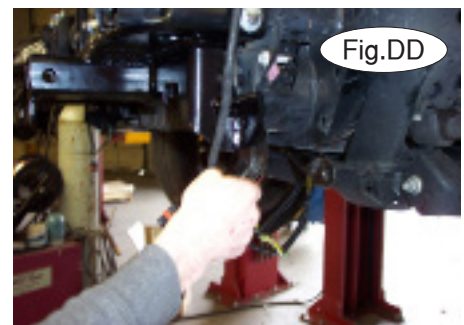


Fig.DD

20. Fishwire a $\frac{1}{2}$ " x $1\frac{3}{4}$ " carriage bolt and $1\frac{1}{2}$ " x 3" backing plate into the large opening in the frame directly above the sway bar (Fig.BB).

21. Place the rear support brace over the carriage bolt and bolt it into place using a $\frac{1}{2}$ " lock washer and nut (Fig.CC).

22. Place the fascia support between the main receiver brace and the radiator support (Fig.DD).

Place a 1" x 4" pipe spacer between the openings in the radiator support. Using the supplied 10mm x 1.5 x 150mm bolt, bolt through the main receiver brace, fascia support brace, pipe spacer and radiator support and into the rear support brace, placing a flat washer on the outside. Place the factory radiator support brace over the end of the 10mm (head) bolt and bolt it into place using a 10mm lock washer and nut (Fig.EE).



BASEPLATE KIT INSTALLATION INSTRUCTIONS

KIT# 3155-1

03/12/08
KS

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

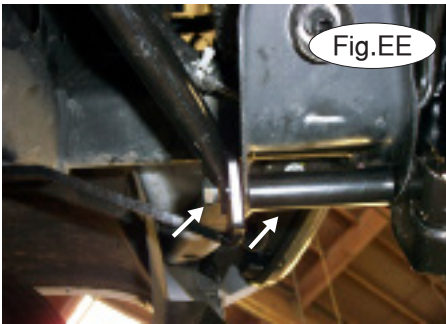


Fig.EE

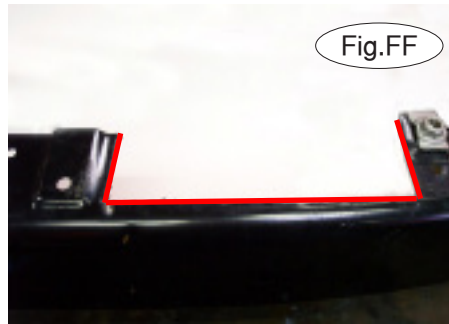


Fig.FF

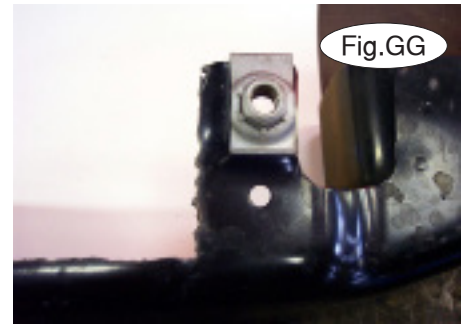


Fig.GG

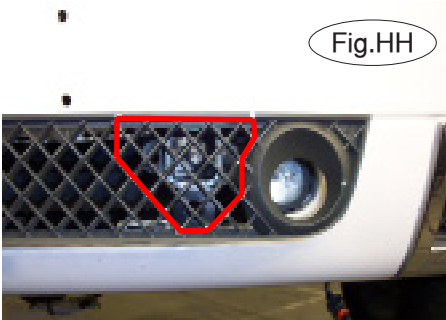


Fig.HH

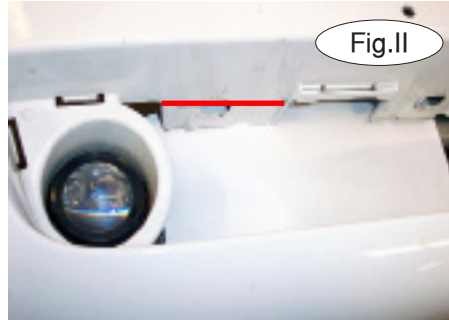


Fig.II

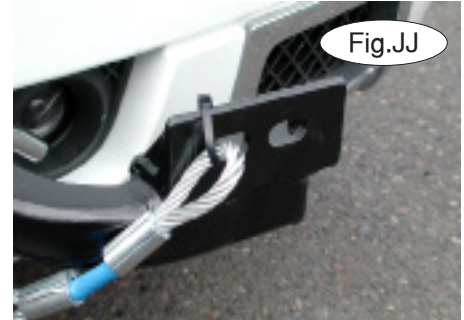


Fig.JJ

23. Repeat steps 14 through 22 for the passenger side.
24. Tighten the bolts to the bolt torque requirements found at the end of this document.
25. On each side, trim the bumper core using the red lines in Figure FF as a guide. Remove two factory slip nuts from the bumper core (Fig.GG). Place the bumper core over the end of the frame rails and bolt it into place using a 5/8" x 7 1/2" bolt, flat washer, lock washer and nut. *Note:* the plastic air deflector will not be replaced. Retain the air deflector and any attachment hardware in case the bracket is ever removed.
Tighten the bolts to the bolt torque requirements found at the end of this document.
26. On each side, trim the grille using the red lines in Figure HH as a guide.
27. On each side, trim the fascia using the red line in Figure II as a guide. Reinstall the fascia, reversing steps 1 through 10.
28. Insert the removable front bracket arms into the front receiver braces, and secure them in place with the supplied 5/8" draw pins and spring pins.
29. Attach the 8" safety cables with the cable connectors (Q-Links) to the front of the receiver braces (Fig.JJ).
30. Attach the ends of the safety cables to the tow vehicle's safety cables.

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. |

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.