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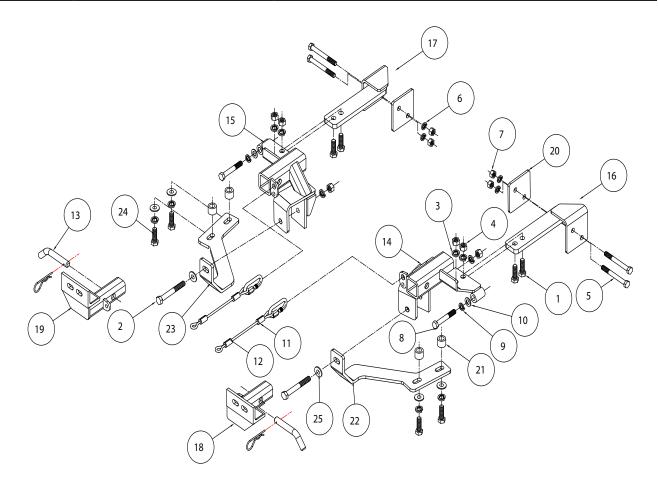
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## BASEPLATE KIT INSTALLATION INSTRUCTIONS

KIT# 344-1B 11/14/14 KS

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



ITEM QTY NAME	PART #
14 1/2" x 1 3/4" BOLT	
22 1/2" x 4 1/2" BOLT	
36 1/2" LOCK WASHER	
46 1/2" HEX NUT	
54 7/16" x 4" BOLT	
647/16" LOCK WASHER	
747/16" HEX NUT	
8 12mm x 1.25 x 80 mm BOLT	
96 12mm LOCK WASHER	
106 12mm FLAT WASHER	
112QUICK LINK	
122 8000# SAFETY CABLE 8"	650648-08
132 DRAW PINS, SPRING PINS	357035-00
141 DRIVER SIDE RECEIVER	
15 1 PASSENGER SIDE RECEIVER	
16 1 DRIVER SIDE BRACE	
17 1 PASSENGER SIDE BRACE	
18 1 DRIVER SIDE ARM	
19 1 PASSENGER SIDE ARM	
202 1/4" x 3 1/2" x 3 1/2" BACKING PLATI	EA-001872
214 1" O.D. x 0.188 WALL x 3/4" SPACEF	
221 DRIVER SIDE LOWER BRACE	B-001670
231 PASSENGER SIDE LOWER BRACE.	B-001671
244 12mm x 1.25 x 60 mm BOLT	
252 1/2" FLAT WASHER	350308-00



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his is one of our XL series brackets, which allows the visible front portion of the brackets to be easily removed from the front of the vehicle (Fig.A and Fig.B). The bracket consists of a main receiver brace, two rear braces and a hardware pack.

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.



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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#### **Nissan Frontier Instructions**

This bracket kit fits the Nissan Frontier, the Suzuki Equator, the Nissan Pathfinder, and the Nissan Xterra. Follow the instructions below for the Nissan Frontier.







- 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 six plastic fasteners across the top of the grille (Fig.C).
- 2. There are four retainer clips (two on each side of the grille, Fig.D) which attach the grille to the core support. Rotate each clip a quarter turn to the right to release it. Note: for SV models, skip to the next step.
- 3. There are four plastic tabs at the bottom of the grille (Fig.E) which connect the grille to the fascia. Lift up on each tab to release it. Then, remove the grille (Fig.F). Note: SV models have plastic tabs.







Note: for Nissan Frontier XE, S, SV and Pro-4X models, see the attached supplemental instructions that replace step 4 through 8.

- 4. On each side, remove two 12mm (head) bolts connecting the bumper core to the frame rail (Fig.G).
- 5. Remove six 10mm (head) bolts, located across the bottom of the fascia (Fig.H). Then, remove the lower section of the fascia.



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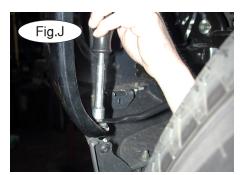
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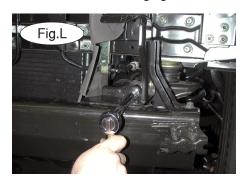
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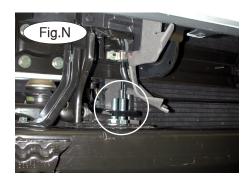




- 6. Remove four 10mm bolts attaching the fascia to the rock guard (Fig.I), as well as two 12mm bolts attaching the bumper core to the frame rail (one on each side).
  - 7. On each side, remove one 10mm bolt holding the bumper brace to the bumper (Fig.J).
  - 8. Disconnect the fog lights, if the vehicle is so equipped, then remove the bumper (Fig.K).



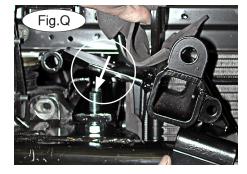




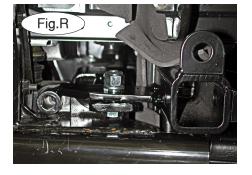
- 9. Remove the upper 17mm head bolts (one on each side) holding the bumper core to the frame rail (Fig.L).
- 10. Position both of the rear braces between the radiator and the body support, on the top of the frame rail (Fig.M). Fit two ½" x 1½" bolts into place at the front of each brace (Fig.N) before lowering it into position. These two bolts will be used to attach one of the main braces.







- 11. The rear braces are attached to the frame rail. On each side, slide two 7/16" x 4" bolts through the rear brace, the two existing holes in the frame rail, and one of the 3½" x 3½" backing plates (Fig.O). Then, secure each bolt in place with a 7/16" lock washer and nut. Finger tighten only at this time. Figure P shows one of the braces with both rear mounting bolts, lock washers, nuts and the backing plate in place.
- 12. Fit one of the main braces over one of the rear braces, and over the top of the two ½" x 1½" bolts you positioned in step 10 (Fig.Q). Thread two ½" lock washers and nuts over the bolts to secure them (Fig.R). Finger tighten only at this time. Repeat for the other side.





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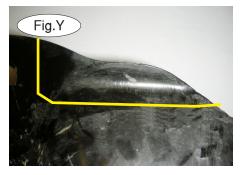








- 13. Thread a  $12mm \times 1.25 \times 80mm$  bolt, with a 12mm lock washer and 12mm flat washer, through each main brace and into the existing weld nut in the frame rail (Fig.S).
- 14. Tighten all bolts to the torque specifications at the bottom of these instructions.
- 15. On the passenger side, remove the two 17mm (head) bolts attaching the tow hook to the bottom of the frame rail (Fig.T). They will not be replaced. *Note:* retain the tow hook and mounting hardware for replacement in case the bracket is ever removed.
- 16. Place a 12mm lock washer and flat washer over one of the supplied 12mm x 1.25 x 60mm bolts and then bolt through the rear hole in the lower brace. Place one of the supplied 1" O.D. x .188 wall x 34" pipe spacers over the bolt and then bolt through the rear tow hook mounting point (Fig.U). *Note:* if you're having difficulty fitting the lower brace, loosen the two bumper bolts on each side to ease installation, and then re-tighten them.
- 17. Place one of the supplied 1" O.D. x .188 wall x ¾" pipe spacers over the front mounting point of the lower brace and using one of the supplied 12mm x 1.25 x 60mm bolts, a 12mm lock washer and a 12mm flat washer, bolt through the lower brace, pipe spacer and into the frame rail (Fig.V).
- 18. Repeat steps 15 through 17 for the driver's side, and torque all bolts to the bolt torque requirements found at the end of this document.
- 19. Using the hole in the main brace as a template, drill a ½" hole through the bumper core (Fig.W). Bolt through the hole with a ½" x 4½" bolt, lock washer and nut (Fig.X). Repeat for the other side. Tighten the two bolts to the torque specifications at the bottom of these instructions.
- 20. If vehicle is equipped with a skid plate, the outer corners will need to be trimmed to allow clearance for the main receiver brace (Fig.Y).
- 21. Remount the bumper and both sections of the fascia, reversing steps 1 through 8.
- 22. Fit the front bracket arms into the front receiver braces, and secure them in place with the supplied 5/8" draw pins and spring pins and attach the 8" safety cables with the cable connectors (Q-Links) to the front of the receiver braces (Fig.Z).
- 23. Install the tow bar to the mounting bracket according to the manufacturer's instructions.









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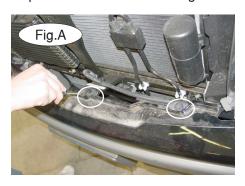
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# Nissan Frontier XE, S, SV and Pro-4X Models Supplemental Instructions

These supplemental instructions will replace steps 4 through 8. After you have finished these steps, proceed back to step 9 and follow the remaining instructions for proper installation.



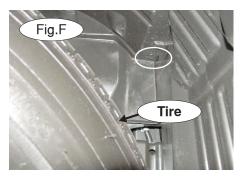




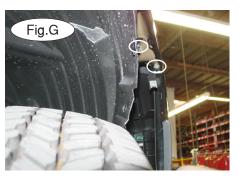
- 1. Start by removing three plastic fasteners located behind the grille, attaching the top of the fascia to the bumper core (Fig.A).
- 2. Next, remove six 10mm (head) screws attaching the lower center panel to the fascia (Fig.B). Remove the panel.
- 3. Remove four 10mm (head) screws attaching the lower fascia to the rock guard (Fig.C).

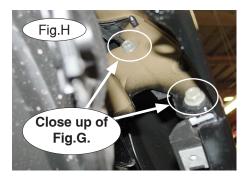






- 4. On both sides, remove two Phillips head screws attaching the fender liner to the bottom of the fascia (Fig.D).
- 5. On both sides, remove three Phillips head screws attaching the fender liner to the outer edge of the fascia (Fig.E). *Note:* SV models only have two.
- 6. On both sides, remove one plastic fastener attaching the fender liner to the inner fender well (Fig.F).
- 7. On both sides, pull back the fender liner and remove two 10mm screws attaching the bumper cover to the fender (Fig.G, H).
- 8. Disconnect the fog lights, if the vehicle is so equipped.









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- 9. Remove three plastic fasteners located along the upper edge of the lower grille opening (Fig.I).
- 10. Next, pull down slightly on the outer corners of the fascia and pull forward to remove it.
- 11. Now, proceed back to step 9 in the original instructions for the Nissan Frontier to finish the installation.







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### Suzuki Equator **Supplemental Instructions**

These supplemental instructions will replace steps 1 through 8 in the Nissan Frontier installation instructions. After you have finished these steps, proceed back to step 9 in the Nissan Frontier instructions and follow the remaining instructions for proper installation.







- 1. Remove six plastic fasteners attaching the grille to the core support (Fig.A).
- 2. There are eight plastic tabs connecting the bottom of the grille to the fascia (Fig.B passenger side only). Lift up on each tab to release it, and then remove the grille.
- 3. Remove three plastic fasteners attaching the top of the fascia to the fascia support (Fig.C). Remove three plastic fasteners attaching the fascia to the bottom of the fascia support (Fig.D).

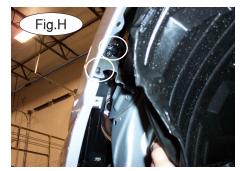






- 4. On each side, remove two Phillips head screws attaching the fender liner to the bottom of the fascia (Fig.E).
- 5. On each side, remove three 10mm screws and two Phillips screws attaching the bottom of the fascia to the core support and fender liners (Fig.F – passenger side).
  - 6. On each side, remove four 10mm (head) bolts attaching the bottom of the fascia to the splash shield (Fig.G).
- 7. On each side, pull back the fender liner and remove two 10mm screws attaching the corner of the fascia to the fender (Fig.H).
- 8. Pull down and forward on the corners of the fascia to remove it.









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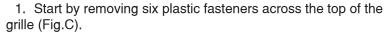
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#### **Nissan Pathfinder Instructions**

This bracket kit fits the Nissan Pathfinder, the Nissan Frontier, the Suzuki Equator, and the Nissan Xterra. Follow the instructions below for the Nissan Pathfinder.

his is one of our XL series brackets, which allows the visible front portion of the brackets to be easily removed from the front of the vehicle (Fig.A and Fig.B). The bracket consists of a main receiver brace, two rear braces and a hardware pack. 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.



- 2. There are four retainer clips (two on each side of the grille, Fig.D) which attach the grille to the core support. Rotate each clip a guarter turn to the right to release it.
- 3. There are four plastic tabs at the bottom of the grille (Fig.E) which connect the grille to the fascia. Lift up on each tab to release it. Then, remove the grille (Fig.F).





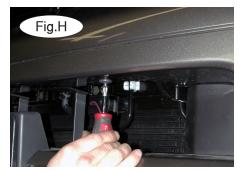












4. Remove six plastic fasteners holding the fascia to the bumper core – three behind the grille opening (Fig.G) and three at the top of the grille opening (Fig.H).





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- 5. Pull down on the lower center section of the fascia, then remove four 10mm (head) bolts holding this section of the fascia to the rock guard (Fig.I).
- 6. On each side, remove one plastic fastener (Fig.J, Fig.K), as well as five Phillips head screws (three along the edge of the fender well and two at the bottom Fig.K), holding the fender liner to the fascia.







- 7. Pull back the fender liner on each side to gain access to the inner fender well. Then, remove two 10mm (head) bolts (Fig.L).
- 8. Disconnect the fog lights, if the vehicle is so equipped. Then, pull forward on each side of the fascia to remove it (Fig.M).
  - 9. Remove the upper 17mm head bolts (one on each side) holding the bumper core to the frame rail (Fig.N).







- 10. Position both of the rear braces between the radiator and the body support, on the top of the frame rail (Fig.O). Fit two ½" x 1½" bolts into place at the front of each brace (Fig.P) before lowering it into position. These two bolts will be used to attach one of the main braces.
- 11. The rear braces are attached to the frame rail. On each side, slide two 7/16" x 4" bolts through the rear brace, the two existing holes in the frame rail, and one of the  $3\frac{1}{2}$ " x  $3\frac{1}{2}$ " backing plates (Fig.Q). Then, secure each bolt in place with a 7/16" lock washer and nut. Finger-tighten only at this time. Figure R shows one of the braces with both rear mounting bolts, lock washers, nuts and the backing plate in place.



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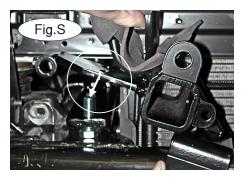
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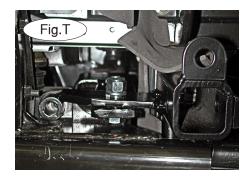
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12. Fit one of the main braces over one of the rear braces, and over the top of the two  $\frac{1}{2}$ " x  $\frac{1}{2}$ " bolts you positioned in step 10 (Fig.S). Thread two  $\frac{1}{2}$ " lock washers and nuts over the bolts to secure them (Fig.T). Finger-tighten only at this time. Repeat for the other side.







- 13. Thread a 12mm x 1.25 x 80mm bolt, with a 12mm lock washer and flat washer, through each main brace and into the existing weld nut in the frame rail (Fig.U).
- 14. On the passenger side, remove the two 17mm (head) bolts attaching the tow hook to the bottom of the frame rail (Fig.V). They will not be replaced. *Note:* retain the tow hook and mounting hardware for replace-







- 15. Place a 12mm lock washer and flat washer over one of the supplied 12mm x 1.25 x 60mm bolts and then bolt through the rear hole in the lower brace. Place one of the supplied 1" O.D. x .188 wall x  $\frac{3}{4}$ " pipe spacers over the bolt and then bolt through the rear tow hook mounting point (Fig.W).
- 16. Place one of the supplied 1" O.D. x .188 wall x  $\frac{3}{4}$ " pipe spacers over the front mounting point of the lower brace and using one of the supplied 12mm x 1.25 x 60mm bolts, a 12mm lock washer and a 12mm flat washer, bolt through the lower brace, pipe spacer and into the frame rail (Fig.X).
- 17. Repeat steps 14 through 16 for the driver's side, and torque all bolts to the bolt torque requirements found at the end of this document.
- 18. Using the hole in the main brace as a template, drill a  $\frac{1}{2}$ " hole through the bumper core (Fig.Y). Bolt through the hole with a  $\frac{1}{2}$ " x  $4\frac{1}{2}$ " bolt, lock washer and nut. Repeat for the other side. Tighten the two bolts to the torque specifications at the bottom of these instructions.





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- 19. Tighten all bolts to the torque specifications at the bottom of these instructions.
- 20. Remount the fascia, reversing steps 1 through 8.
- 21. Fit the front bracket arms into the front receiver braces, and secure them in place with the supplied 5/8" draw pins and spring pins. Attach the 8" safety cables with the cable connectors (Q-Links) to the front of the receiver braces.
- 22. Attach the ends of the safety cables to the tow vehicle's safety cables and tow bar.
- 23. Install the tow bar to the mounting bracket according to the manufacturer's instructions.



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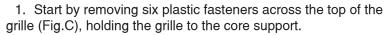
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#### **Nissan Xterra Instructions**

This bracket kit fits the Nissan Xterra, the Nissan Frontier, the Suzuki Equator, and the Nissan Pathfinder. Follow the instructions below for the Nissan Xterra.

his is one of our XL series brackets, which allows the visible front portion of the brackets to be easily removed from the front of the vehicle (Fig.A and Fig.B). The bracket consists of a main receiver brace, two rear braces and a hardware pack. 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.

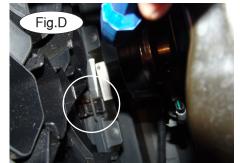


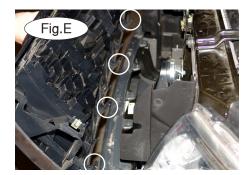
- 2. Reaching behind the grille, lift up and release four plastic tabs (Fig.D). Then, pull out on the grille to remove it (Fig.E). Figure E shows the location of the four plastic tabs.
- 3. Remove five plastic fasteners holding the fascia to the bumper core (Fig.F).

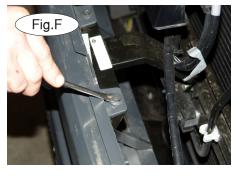
















- 4. On each side, remove four Phillips head screws holding the fender liner to the fascia (Fig.G). Two are located on the fender well, and two are on the bottom of the fascia.
- 5. On each side, pull back on the fender liner to expose one 10mm (head) screw holding the fascia to the fender. Remove the 10mm (head) screw (Fig.H).



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- 6. Remove four 10mm (head) screws holding the fascia to the splash shield (Fig.I). Two are located in the center; two are at the outside edges of the fascia.
  - 7. Disconnect the fog lights (Fig.J), if the vehicle is so equipped.
  - 8. Pull forward on each side of the fascia to release it from the track. Then, pull forward to remove the fascia (Fig.K).







- 9. Remove the upper 17mm head bolts (one on each side) holding the bumper core to the frame rail (Fig.L).
- 10. Position both of the rear braces between the radiator and the body support, on the top of the frame rail (Fig.M). Fit two ½" x 1½" bolts into place at the front of each brace (Fig.N) before lowering it into position. These two bolts will be used to attach one of the main braces.







- 11. The rear braces are attached to the frame rail. On each side, slide two 7/16" x 4" bolts through the rear brace, the two existing holes in the frame rail, and one of the 3½" x 3½" backing plates (Fig.O). Then, secure each bolt in place with a 7/16" lock washer and nut. Finger-tighten only at this time. Figure P shows one of the braces with both rear mounting bolts, lock washers, nuts and the backing plate in place.
- 12. Fit one of the main braces over one of the rear braces, and over the top of the two ½" x 1½" bolts you positioned in step 10 (Fig.Q).



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13. Now, thread two  $\frac{1}{2}$ " lock washers and nuts over the bolts to secure them (Fig.R). Finger-tighten only at this time. Repeat for the other side.







- 14. Thread a 12mm x 1.25 x 80mm bolt, with a 12mm lock washer and flat washer, through each main brace and into the existing weld nut in the frame rail (Fig.S).
- 15. On the passenger side, remove the two 17mm (head) bolts attaching the tow hook to the bottom of the frame rail (Fig.T). They will not be replaced. *Note:* retain the tow hook and mounting hardware for replacement in case the bracket is ever removed.
- 16. Place a 12mm lock washer and flat washer over one of the supplied 12mm x 1.25 x 60mm bolts and then bolt through the rear hole in the lower brace. Place one of the supplied 1" O.D. x .188 wall x 34" pipe spacers over the bolt and then bolt through the rear tow hook mounting point (Fig.U).



- 17. Place one of the supplied 1" O.D. x .188 wall x ¾" pipe spacers over the front mounting point of the lower brace and using one of the supplied 12mm x 1.25 x 60mm bolts, a 12mm lock washer and a 12mm flat washer, bolt through the lower brace, pipe spacer and into the frame rail (Fig.V).
- 18. Repeat steps 15 through 17 for the driver's side, and torque all bolts to the bolt torque requirements found at the end of this document.
- 19. Using the hole in the main brace as a template, drill a ½" hole through the bumper core (Fig.W). Bolt through the hole with a ½" x 4½" bolt, lock washer and nut. Repeat for the other side. Tighten the two bolts to the torque specifications at the bottom of these instructions.
- 20. Tighten all bolts to the torque specifications at the bottom of these instructions.
- 21. Before reassembling the fascia, trim a small portion of the lower opening at each side of the grille, on the lower edge, to accommodate the removable bracket arms. Trim down one inch, and six inches across use Figure X as a reference.





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- 22. Reassemble the fascia, reversing steps 1 through 8.
- 23. Fit the front bracket arms into the front receiver braces, and secure them in place with the supplied 5/8" draw pins and spring pins.
- 24. Attach the 8" safety cables with the cable connectors (Q-Links) to the front of the receiver braces.
- 25. Attach the ends of the safety cables to the tow vehicle's safety cables and tow bar.
- 26. 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			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.						