BASEPLATE KIT
INSTALLATION INSTRUCTIONS

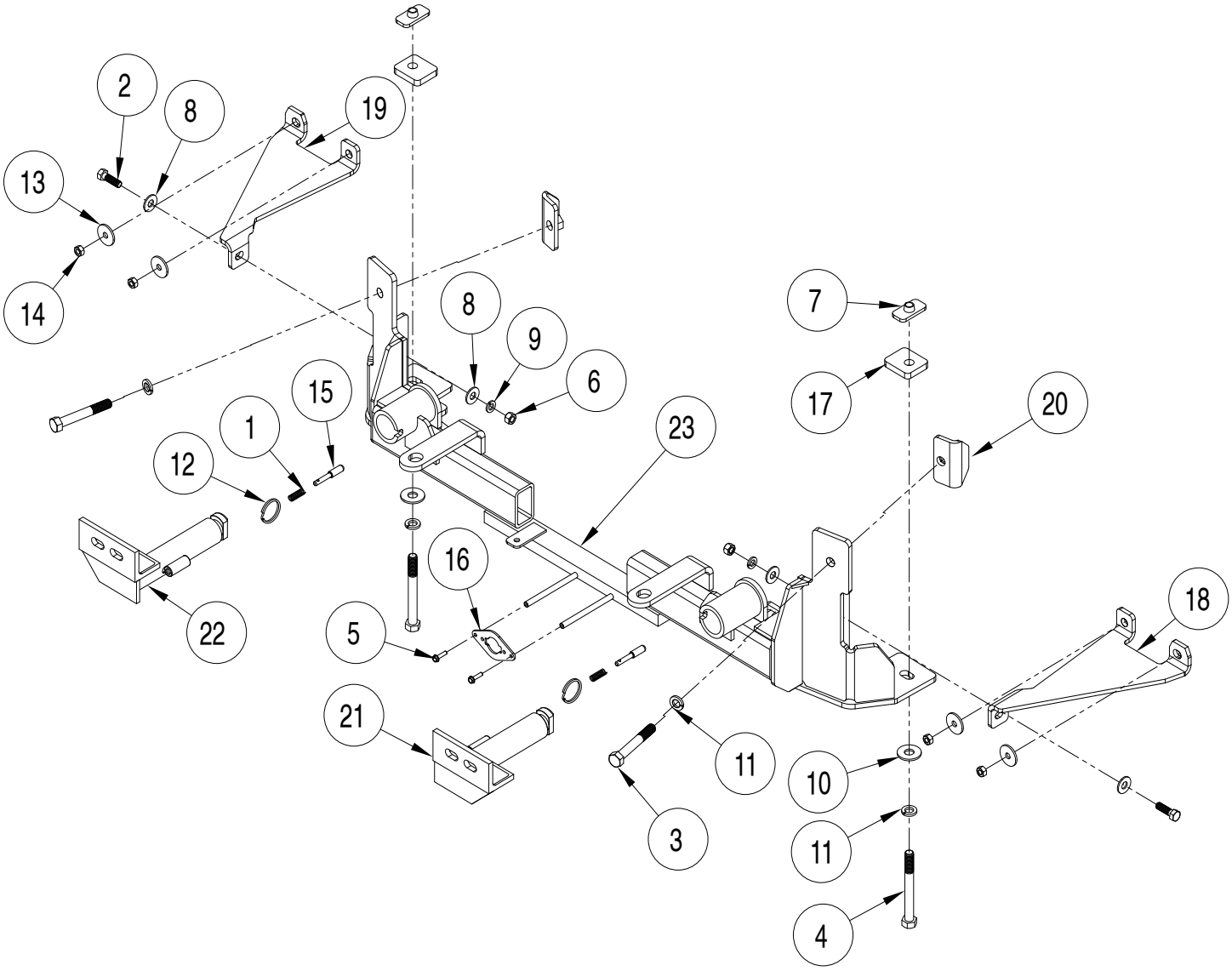
KIT# 524468-4

04/25/23
KS

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

What You'll Need

- Second person to assist
- T30 Torx driver
- 3/8" and 3/4" sockets
- 7, 8, 10, 13mm sockets
- Ratchets
- 17/32" bit and drill
- Adjustable wrench
- Permanent marker
- Panel tool
- Tape measure
- Reciprocating saw
- Torque wrench
- Loctite© Red or Blue



hardware list on next page

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

HARDWARE LIST

ITEM	QTY	DESCRIPTION	PART NUMBER
1	2	SPRING	200146-00
2	2	3/8” x 1 1/4” BOLT	350056-00
3	2	1/2” x 3 1/2” BOLT	350103-00
4	2	1/2” x 4” BOLT	350105-00
5	2	#10 x 3/4” SELF DRILLING SCREW	350247-35
6	2	3/8” HEX NUT	350254-00
7	2	1” x 2” THREADED BACKING PLATE	A003074
8	4	3/8” FLAT WASHER	350304-00
9	2	3/8” LOCK WASHER	350305-00
10	2	1/2” FLAT WASHER	350308-00
11	4	1/2” LOCK WASHER	350309-00
12	2	RING	350520-00
13	4	M8 FENDER WASHER	355702-00
14	4	M8 x 1.25 HEX NUT	356208-00
15	2	LOCK PIN	A000008
16	1	WIRE PLUG PLATE	A003801
17	2	SPACER	A000765
18	1	DRIVER SIDE BRACE	B004039
19	1	PASSENGER SIDE BRACE	B004040
20	2	THREADED BACKING PLATE	C003517
21	1	DRIVER SIDE ARM	C003645
22	1	PASSENGER SIDE ARM	C003646
23	1	MAIN RECEIVER	C003647
24	1	ZIP TIE	300140-8

BASEPLATE KIT INSTALLATION INSTRUCTIONS

KIT# 524468-4

04/25/23
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 crossbar-style baseplates, which allows the visible front portion of the baseplate to be easily removed from the front of the vehicle (Fig.A and Fig.B).

The kit mounts to the frame of the vehicle, and consists of a main receiver brace, two removable front 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.

Fig.A

Fig.B

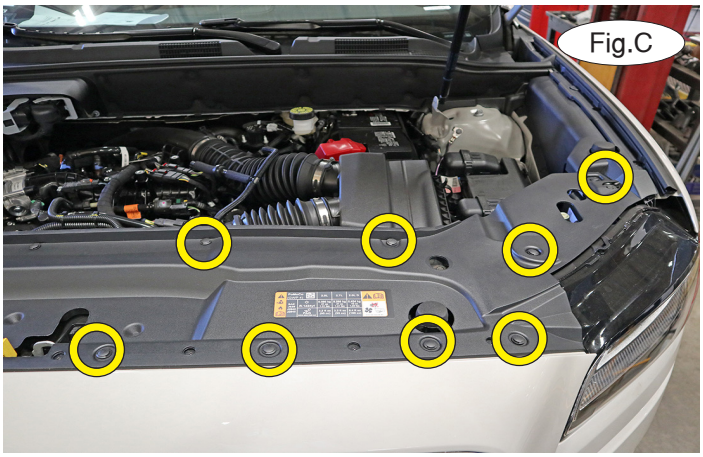
IMPORTANT: All baseplates ***must*** be assembled with all the bolts left loose for final adjustment and positioning (before tightening) unless otherwise instructed. All bolts ***must*** be torqued for proper strength. If more than one bolt is used per fastening point, the diagram may only show one. Use flat washers over all slotted holes and lock washers on all fasteners.

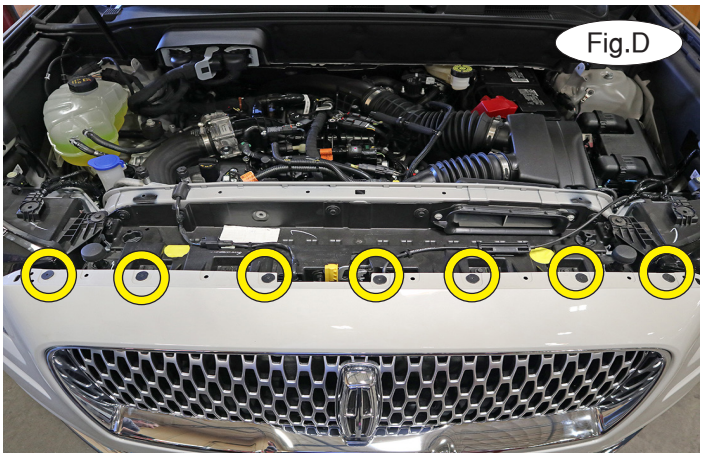
⚠ WARNING

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 warranteed for the original installation.** Installing a used baseplate on another vehicle is not recommended and will void the warranty.

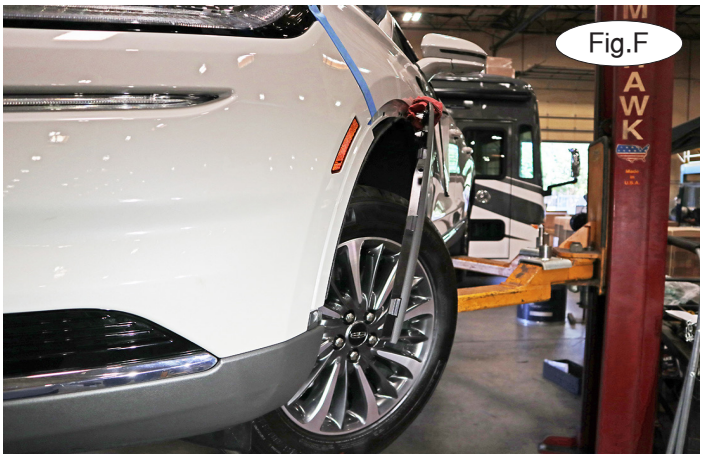
ROADMASTER, Inc. 6110 NE 127th Ave. Vancouver, WA 98682 360-896-0407 fax 360-735-9300 www.roadmasterinc.com



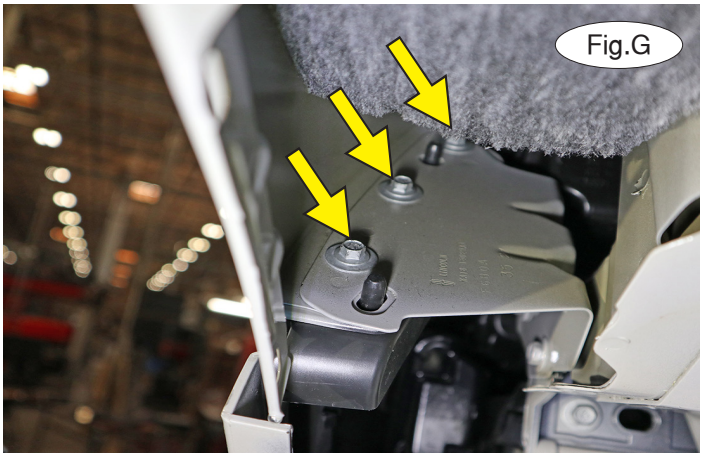


Important: **Please use all supplied bolts and parts and read all instructions carefully before beginning this installation. The majority of questions you may have can be answered within the text, and proper installation will ensure safe and secure travel.**

1. On each side, remove 8 plastic fasteners attaching the radiator cover to the fascia and core support (Fig.C). Lift straight up to remove it and set it aside for now.
2. Remove seven T20 Torx bolts attaching the top of the fascia to the core support (Fig.D).

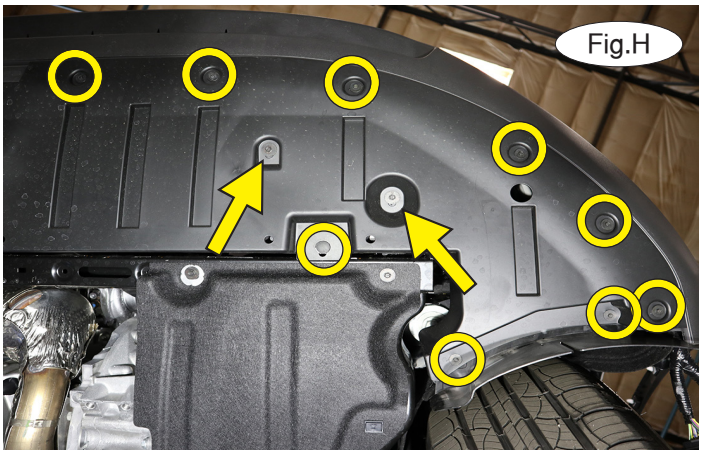


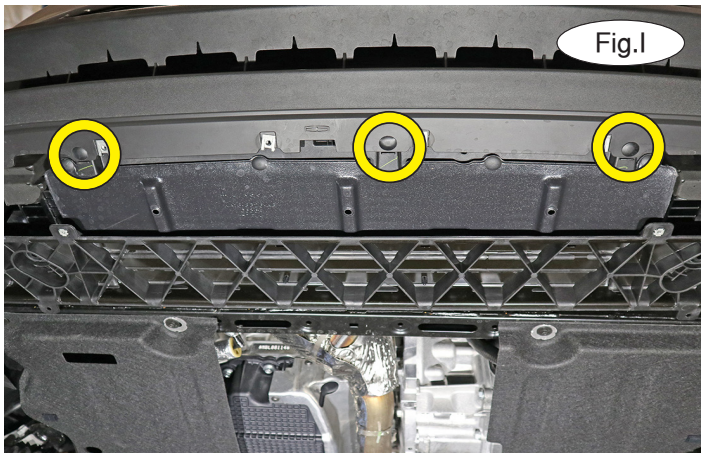
3. On each side, turn the wheel inward and remove five plastic fasteners attaching the fender well to the fascia (Fig.E).
4. On each side, pull down the fender liner and pull out on the trim, reaching behind to release the arrowhead fasteners until you reach the back of the wheel arch and use a soft rag to prop it away from the vehicle (Fig.F). Disconnect any wiring harnesses attaching the fascia to the vehicle.
5. On each side, remove three 8mm bolts attaching the fascia seam to the fender (Fig.G).



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.

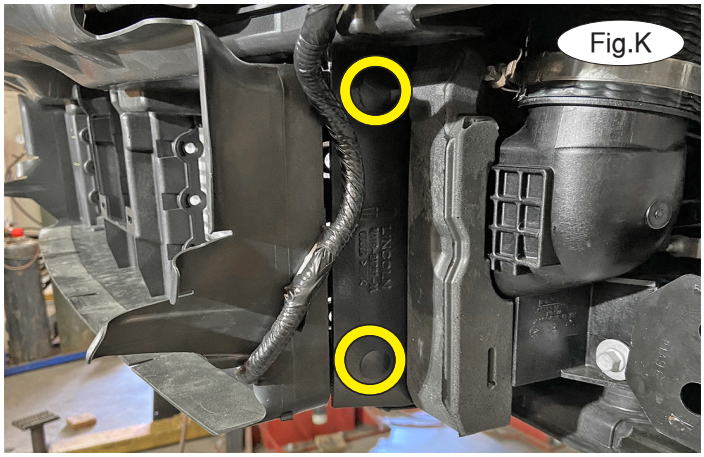
ROADMASTER, Inc. 6110 NE 127th Ave. Vancouver, WA 98682 360-896-0407 fax 360-735-9300 www.roadmasterinc.com





6. On each side, remove one plastic fastener and eight 5.5mm screws (Fig.H – circles) and two 7mm screws (Fig.H – arrows) attaching the splash shield to the fascia and core support.

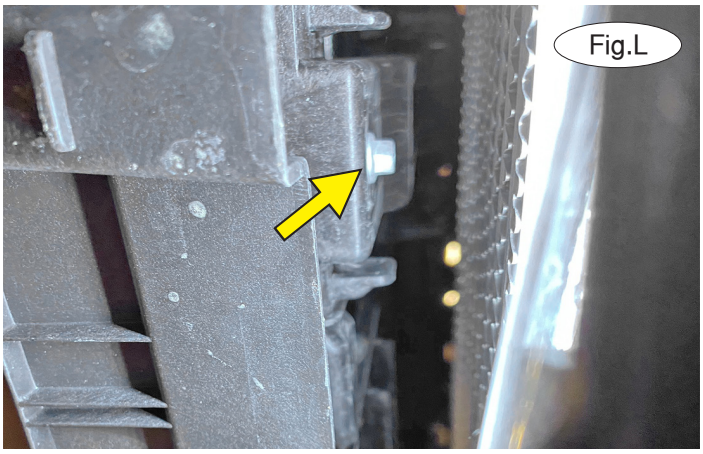
7. Remove three push fasteners attaching the lower fascia to the shutter housing (Fig.I).

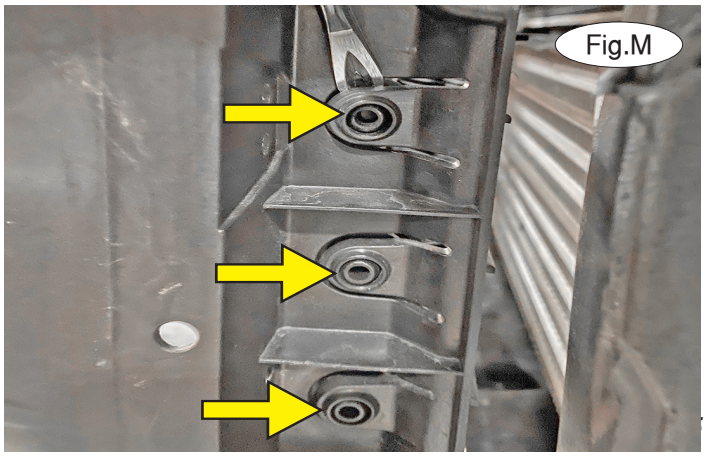


8. With the help of a second person, pull down firmly at the seam to release the locating pins (Fig.J). Remove the fascia.

9. On each side, remove two push fasteners attaching the side air deflector to the lower shutter housing (Fig.K). The air deflectors will not be replaced.

10. **If your vehicle is not equipped with a shutter system:** Proceed to the next step. **If your vehicle is equipped with a shutter system:** Remove the 7mm bolt attaching the upper shutter to the lower via a ladder system (Fig.L). *Note:* It helps to apply gentle forward pressure before removing it. Then, remove all three ribs on each side by prying outward on the retaining clips (Fig.M).





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

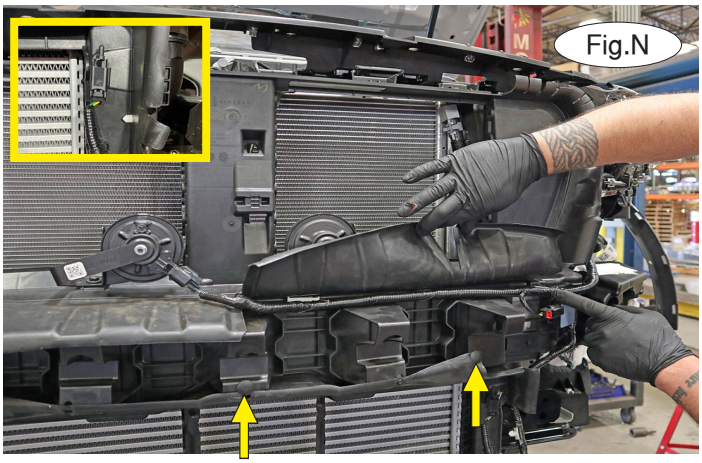


Fig.N

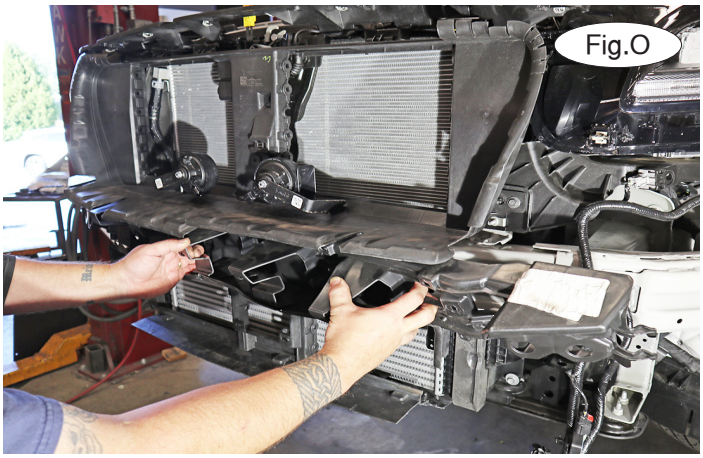


Fig.O

11. Unplug the two horns and then release all of the clips attaching the wiring harness to the bumper bezel. Disconnect the ambient temperature sensor and its harness from the lower shutter housing. Remove three push fasteners attaching the upper part of the lower shutter housing to the bumper bezel (Fig.N – only two are shown). Pull down and out to remove the bumper bezel (Fig.O). Set it aside for now.

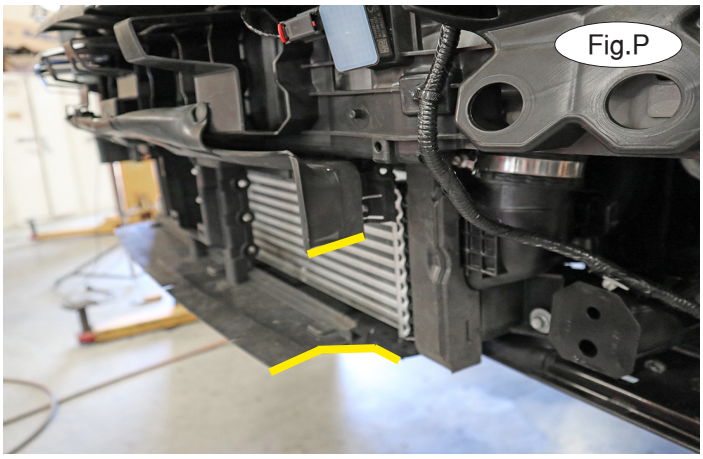


Fig.P

Fig.Q

12. On each side, trim the lower shutter housing (Fig.P) and the cross ribs as shown (Fig.Q).

13. On each side, trim the subframe horn as shown using a cutoff wheel (Fig.R).

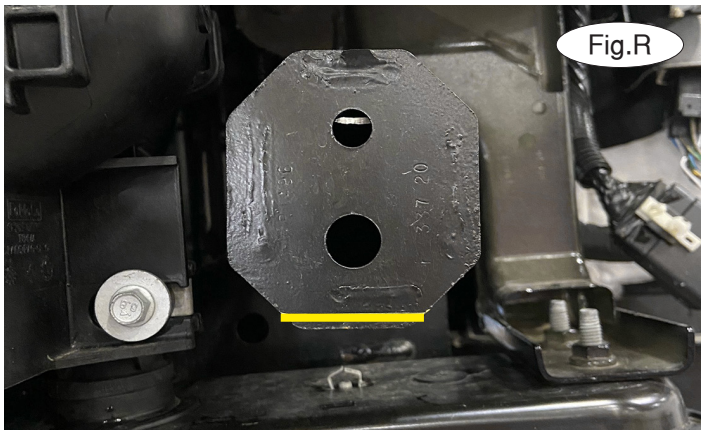


Fig.R

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.

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

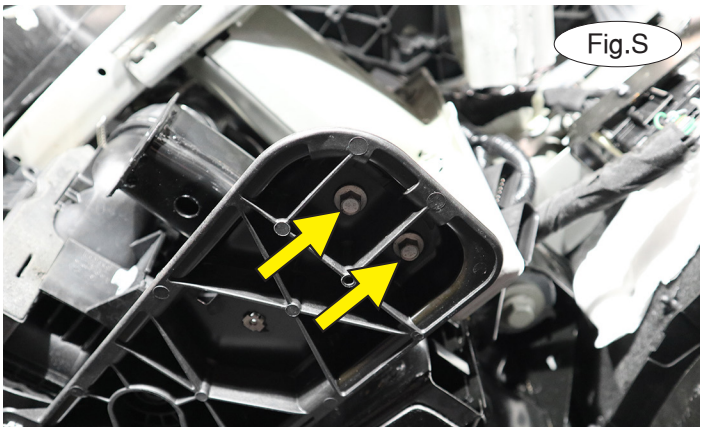


Fig.S

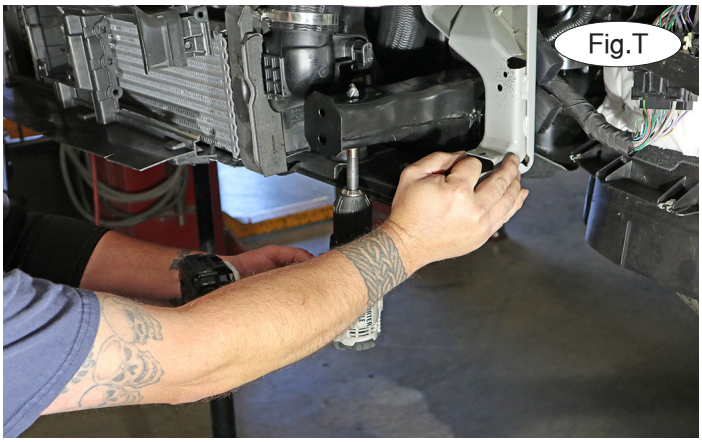


Fig.T

14. Use a jackstand to support the lower radiator support. Then, on each side, remove two 10mm bolts attaching the lower radiator support to the frame (Fig.S). Then, on each side, use a 17/32" drill bit to enlarge the existing holes in the top and bottom of each subframe horn (Fig.T). *Note:* You will need to push the lower radiator support out of the way while drilling.

15. Permanently remove two 13mm nuts attaching the bumper core to the frame (Fig.U).

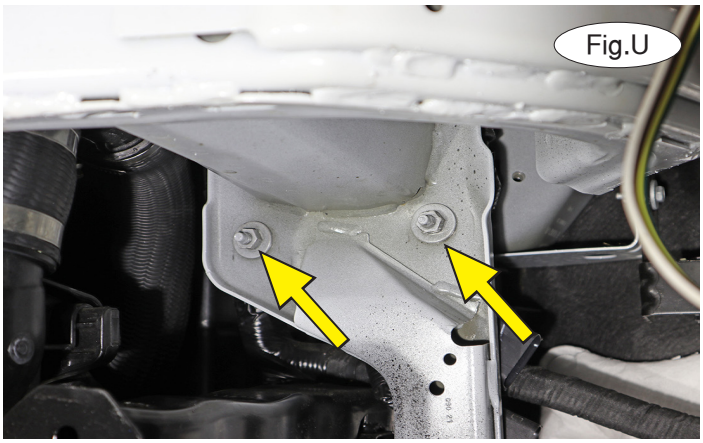


Fig.U

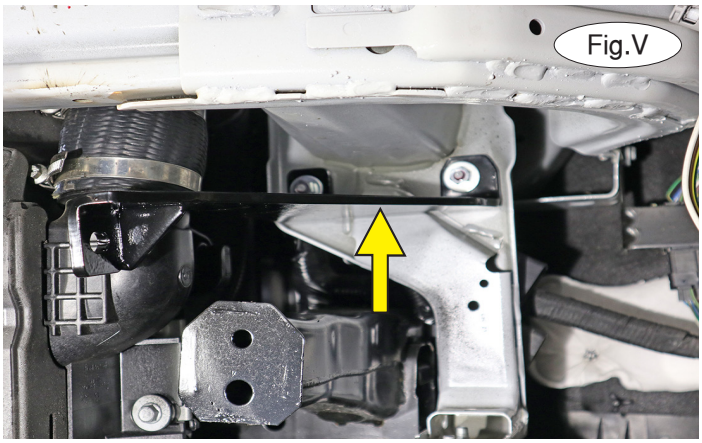


Fig.V

16. On each side, use the drawing on page one to locate the side-specific rear brace. Place it over the studs you exposed in the previous step. Place Loctite over the studs and then use a M8 fender washer and M8 x 1.25 nut to secure each one (Fig.V).

17. Working on the driver's side only, prepare one ½" x 4" bolt with a ½" flat washer and Loctite. Then, with the assistance of a second person, place the baseplate under the subframe horns and above the lower shutter housing. *Note: If the vehicle is equipped with Adaptive Cruise Control, ensure that the unit nests in the cutouts of the baseplate (Fig.W).*

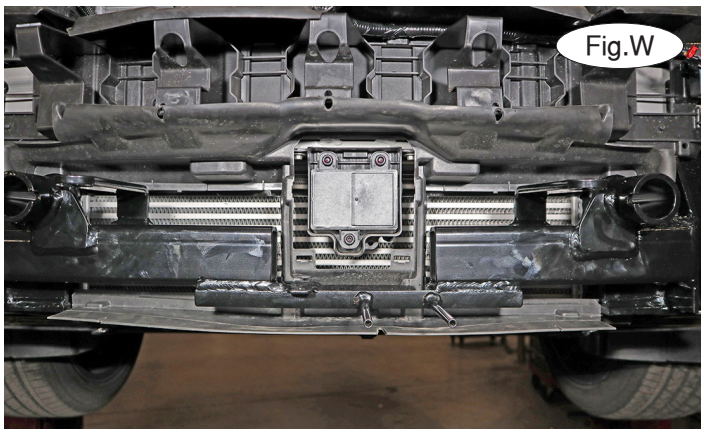
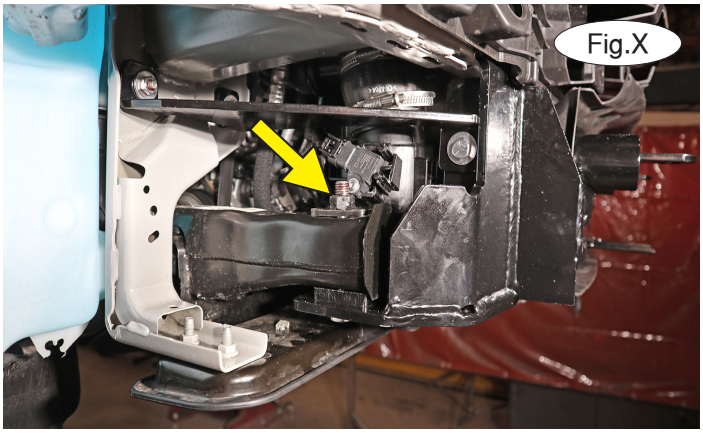


Fig.W

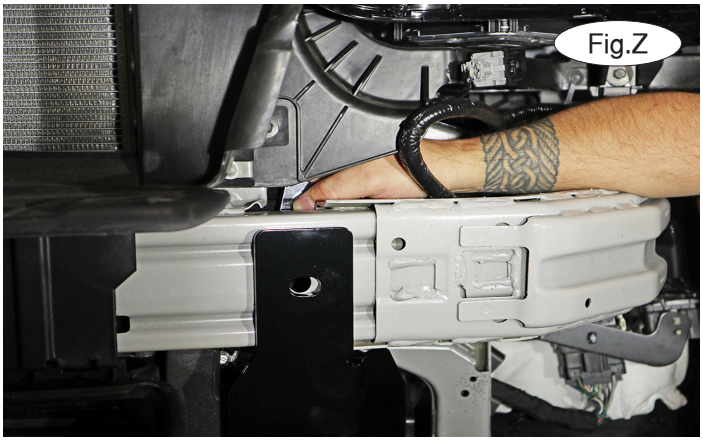
18. Now, locate the 3/8" x 1¾" x 2" backing plate with offset hole and place one between the bottom of the frame horn the baseplate. *Note: The backing plate should have the hole offset to the rear of the vehicle.* Place a 3/16" x 1" x 2" backing plate with nut on the top of the frame horn. Now, bolt up through the baseplate, backing plate with offset hole, the frame horn and into the nutted backing plate (Fig.X – next page). Tighten the bolts to the torque specifications found at the end of these instructions.

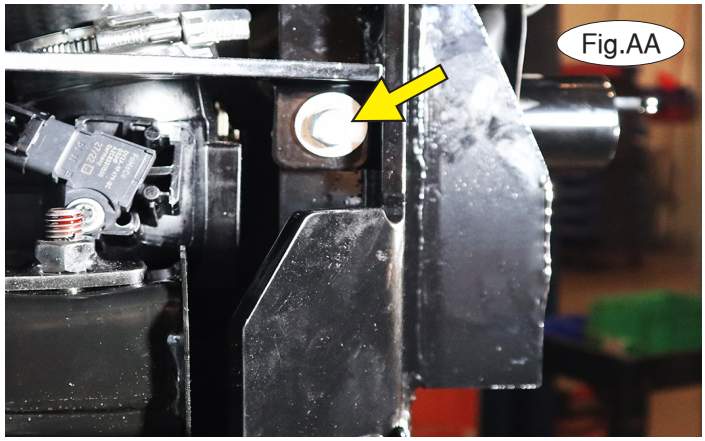
ROADMASTER, Inc. 6110 NE 127th Ave. Vancouver, WA 98682 360-896-0407 fax 360-735-9300 www.roadmasterinc.com



19. Repeat step 18 for the passenger side. Then, on both sides, replace the 10mm bolts you removed in step 14 and remove the jackstand.

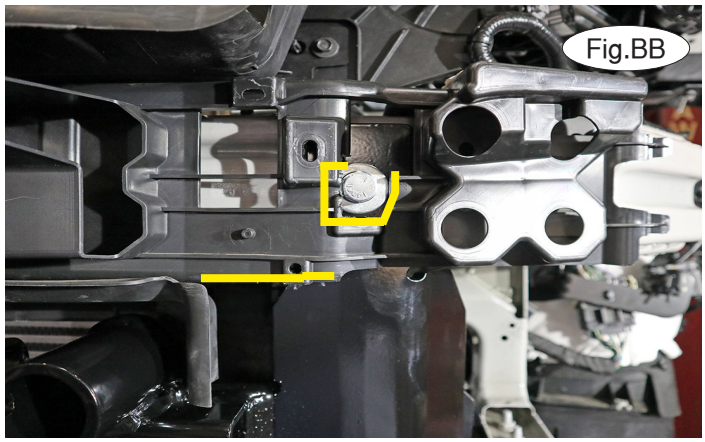
20. On each side, use a large C clamp or bar clamp to pull the baseplate up against the bottom of the bumper. Then, use a 17/32" drill bit and using the baseplate as a guide, drill through the bumper core (Fig.Y). Then, place ½" flat washers, ½" lock washers and Loctite over two ½" x 3½" bolts. Locate the two ¼" x 1¼" x 3" nutted backing plates. On each side, place it vertically behind the bumper core and over the hole you just drilled (Fig.Z). Bolt through it and tighten it to the bolt torque specifications.





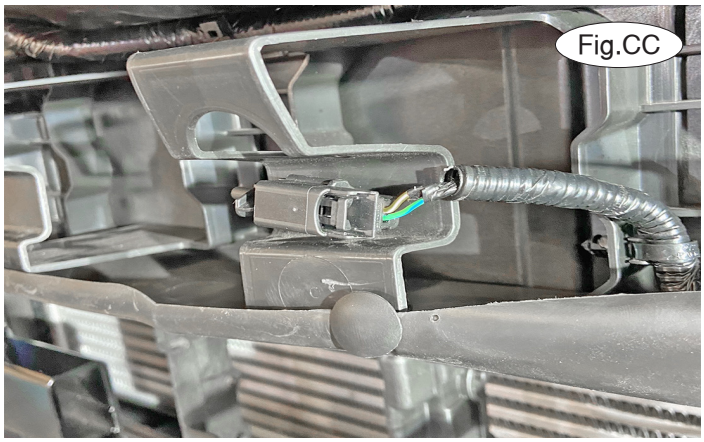
21. On each side, place a 3/8" flat washer and Loctite over a 3/8" x 1½" bolt. Pass the bolt through the rear brace and the main brace and finish it with a 3/8" flat washer, 3/8" lock washer and 3/8" nut (Fig.AA). Tighten it to the bolt torque specifications.

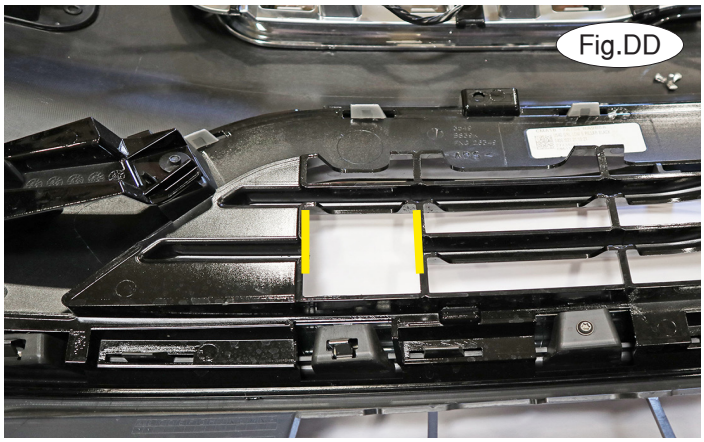
22. Reinstall the bezel and push fasteners and plug in the horns, reversing step 11. On each side, trim in two places as shown to allow clearance for the baseplate (Fig.BB).



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.

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





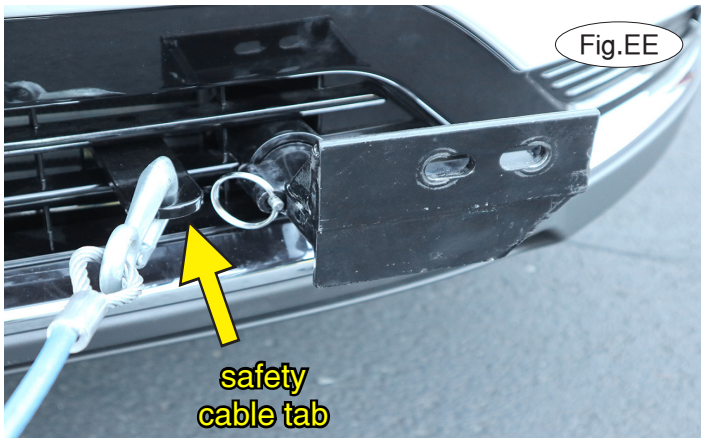
23. Relocate the ambient temperature sensor as shown (Fig.CC).

24. On each side, trim the fascia as shown by removing the lower outside rib (Fig.DD). *Note*: *Due to manufacturing variances, you may need to trim an additional amount to allow clearance for the baseplate.*

25. Reinstall the fascia, reversing steps 1 through 9.

26. On each side, insert the removable front arm into the front receiver 90 degrees from its final towing position, depressing the spring-loaded pin against the receiver. 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. ***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.***

27. Install the tow bar to the baseplate according to the manufacturer's instructions.



IMPORTANT!

Safety cables are required by law. When towing, connect safety cables to the safety cable tabs illustrated on the separate insert with the drawing and parts list and in Figure EE. 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.

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
5/16-18	5	13 ft./lb.
3/8-16	5	23 ft./lb.
7/16-14	5	37 ft./lb.
1/2-13	5	57 ft./lb.
5/8-11	5	112 ft./lb.

METRIC BOLTS

Thread Size	Grade	Torque
6mm-1.0	8.8	6 ft./lb.
8mm-1.0	8.8	18 ft./lb.
8mm-1.25	8.8	16 ft./lb.
10mm-1.25	8.8	36 ft./lb.
10mm-1.5	8.8	31 ft./lb.

METRIC BOLTS

Thread Size	Grade	Torque
12mm-1.25	8.8	64 ft./lb.
12mm-1.5	8.8	60 ft./lb.
12mm-1.75	8.8	55 ft./lb.
14mm-2.0	8.8	88 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.