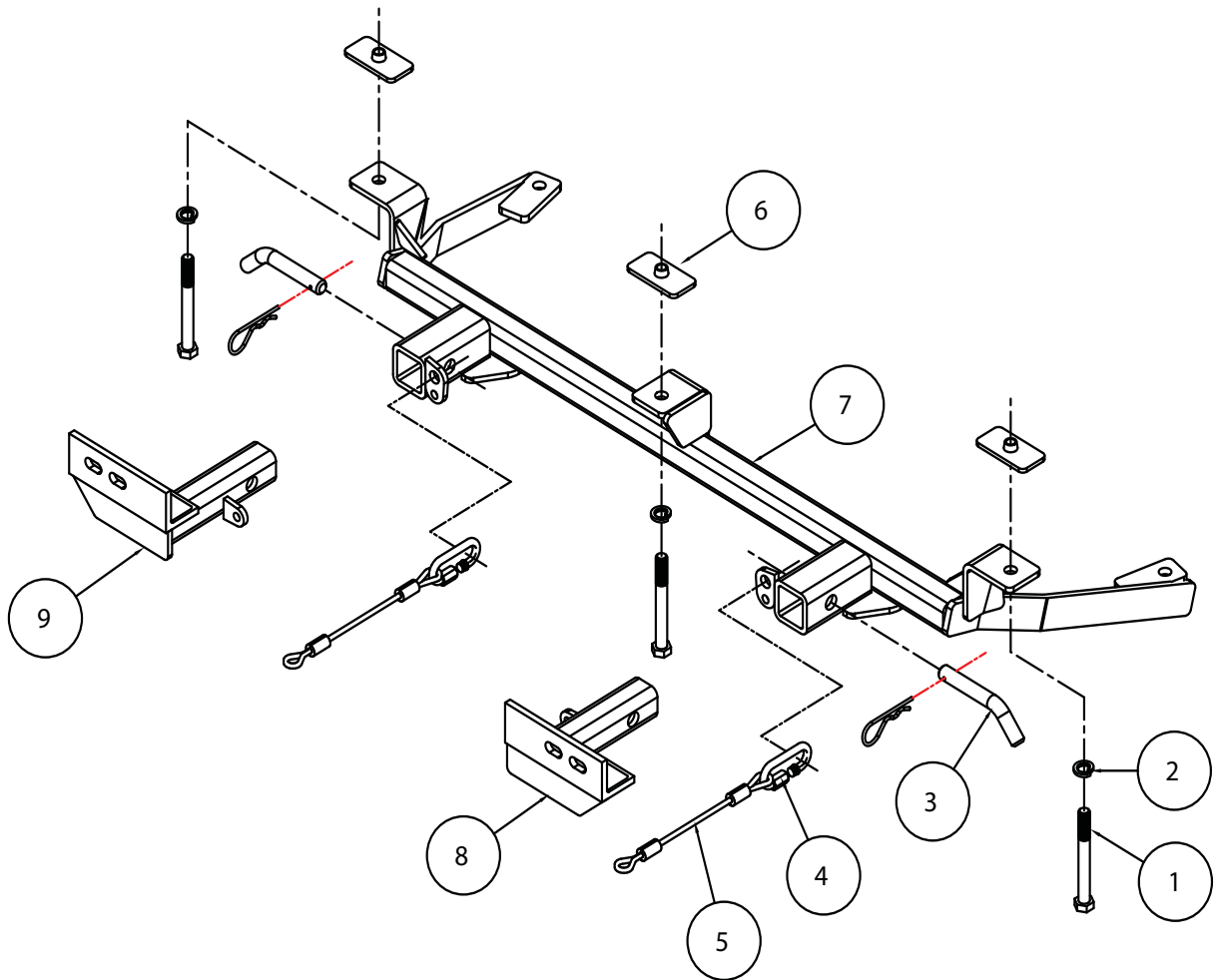




MOUNTING BRACKET KIT INSTALLATION INSTRUCTIONS

KIT# 4420-1



ITEM	QTY	NAME	MATERIAL
1.....	3.....	1/2" x 4 1/2" BOLT.....	350106-00
2.....	3.....	1/2" LOCK WASHER.....	350309-00
3.....	2.....	DRAW PIN.....	357035-00
4.....	2.....	QUICK LINK.....	200008-00
5.....	2.....	SAFETY CABLE 8".....	650646-08
6.....	3.....	1 1/2" x 3" THREADED BACKING PLATE.....	A-003079
7.....	1.....	MAIN RECEIVER.....	C-001849
8.....	1.....	DRIVER SIDE ARM.....	C-001850
9.....	1.....	PASSENGER SIDE ARM.....	C-001851
10.....	1.....	3/4" x 12" SPLIT LOOM.....	300089-75



MOUNTING BRACKET KIT INSTALLATION INSTRUCTIONS

KIT# 4420-1

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 brace, removable front braces and a hardware pack.

The main receiver brace mounts to the front frame and bumper core 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.



IMPORTANT: All brackets **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
- Use lock washers on all fasteners

ROADMASTER Limited Warranty, including One-Year Conditional Warranty Text and Product Registration Card, in Carton.

WARNING

Failure to follow these instructions can result in property damage, personal injury or even death.

- Installation of most mounting brackets requires moderate mechanical aptitude and skills. We strongly recommend professional installation by an experienced installer.
- The installer must read the instructions and use all bolts and parts supplied. Failure to do so could result in loss of the towed vehicle.
- Use Loctite® Red on all bolts used for mounting this bracket.
- Every 3,000 miles, the owner must inspect the fasteners for proper torque, according to the bolt torque requirements chart on the last page of these instructions. The owner must also inspect all mounts and brackets for cracks or other signs of fatigue every 3,000 miles. Failure to do so could result in loss of the towed vehicle.
- The owner must check the vehicle manufacturer's instructions for the proper procedure(s) to prepare the vehicle for towing. Some vehicles must be equipped with a transmission lube pump, an axle disconnect, driveline disconnect or free-wheeling hubs before they can be towed. Failure to properly equip the vehicle will cause severe damage to the transmission.
- If running changes were made by the vehicle manufacturer after this bracket was designed, some bolts or other fasteners in the hardware pack may no longer be the correct size. It is the installer's responsibility to verify that the bracket is securely fastened to the vehicle and fitted with the correct hardware to account for these changes. Failure to securely fasten the bracket could result in loss of the towed vehicle.
- If the towed vehicle has been in an accident, it must be properly repaired before attaching the bracket. Do not install the bracket if any structural frame damage is found. Failure to repair the damage could result in the loss of the towed vehicle.
- Roadmaster manufactures many styles of brackets. If your bracket 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, resulting in non-warranty damage or personal injury.
- Some motorhome chassis have such a tight turning radius that you can damage your motorhome, towed vehicle, tow bar or bracket 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 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, motorhome and/or towed vehicle.
- 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. Refer to the cable instructions for proper routing. Failure to leave enough slack in the safety cables, or failure to connect the safety cables frame to frame, will result in the loss of the towed vehicle.
- This bracket is designed for use with ROADMASTER tow bars and ROADMASTER adaptors only. Using this bracket with other brands, without an approved ROADMASTER adaptor, may result in non-warranty damage or injury.
- Do not use this document for custom fabrication, as it may not show all parts or structural components. Custom fabrication or an attempt to copy this bracket design could result in loss of the towed vehicle.
- Upon final installation, the installer must inspect the bracket to ensure adequate clearance, particularly around hoses, air conditioner lines, radiators, etc., or non-warranty damage to the towed vehicle will result.
- This bracket is only warranted for the original installation. Installing a used bracket on another vehicle is not recommended and will void the warranty.



MOUNTING BRACKET KIT INSTALLATION INSTRUCTIONS

KIT# 4420-1



Fig.C



Fig.D

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. **For 2011 Lincoln MKZ Hybrid models:** see the supplemental instructions found at the end of this document. **For all other models:** remove six plastic fasteners and four screws attaching the upper fascia to the core support (Fig.C).

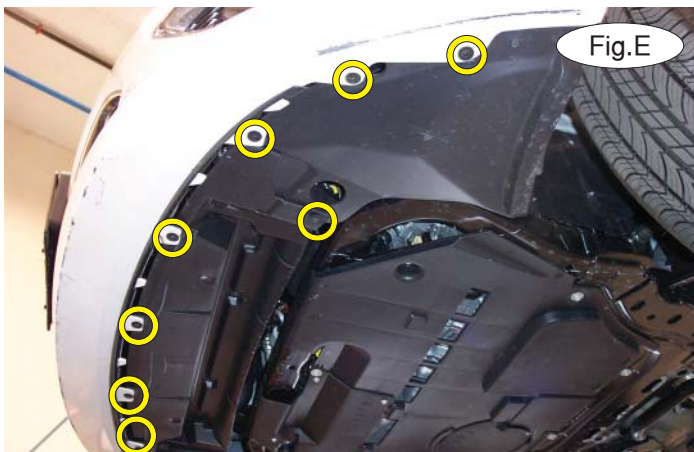


Fig.E



Fig.F

2. On each side, remove three plastic fasteners attaching the fender liner to the fascia (Fig.D).
3. Remove thirteen 7mm screws attaching the fascia to the splash panel (Fig.E – passenger side). *Note:* there are 11 screws across the front and two in the middle.
4. Pull back the fender liner and disconnect the marker lights and fog lights, if the vehicle is so equipped (Fig.F).
5. Pull out and forward to remove the fascia (Fig.G).



Fig.G



MOUNTING BRACKET KIT INSTALLATION INSTRUCTIONS

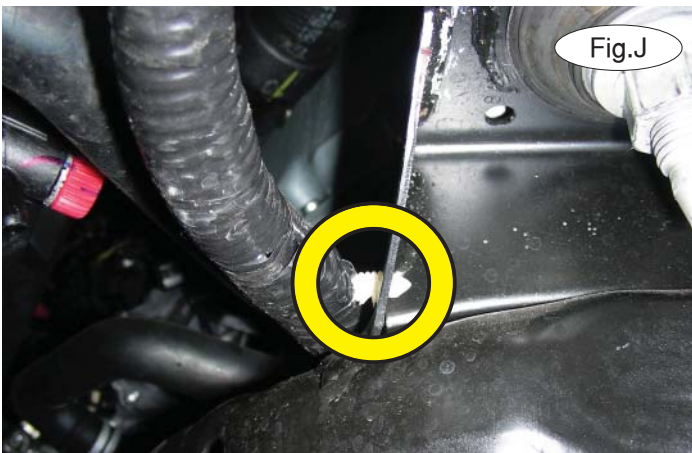
KIT# 4420-1



6. Temporarily remove the shock absorption pad by pressing down to release the eight clips (Fig.H).

7. Using the supplied $\frac{3}{4}$ " x 12" wiring loom, cover the oil cooling line to protect it from the main receiver brace (Fig.I).

Note: due to manufacturing variances, the cooling line may rest on top of the main receiver brace once it's installed.



8. Now, remove one plastic fastener attaching the wiring harness to the subframe (Fig.J).

9. Push the wiring harness slightly into the engine compartment near the oil cooling line to allow clearance for the main receiver brace (Fig.K).

10. Use a floor jack to support the subframe of the vehicle and remove two 21mm subframe nuts and flat washers (Fig.L).





MOUNTING BRACKET KIT INSTALLATION INSTRUCTIONS

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11. Place the rear mounts of the main receiver brace over the studs you exposed in the previous step, and finish with the 21mm subframe nuts and lock washers (Fig.M). *Note:* use thread lock on the nuts.

12. Clamp the center mounting point of the main receiver brace to the bumper core (Fig.N). Torque the two 21mm subframe nuts to 104 ft./lbs.

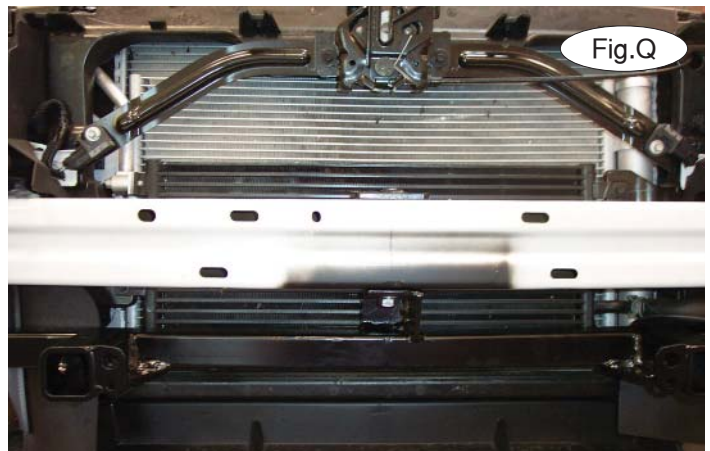
13. On each side, using the pre-existing upper holes in the main receiver brace as a template, drill a ½" hole through the bottom and top layers of the bumper core (Fig.O). If you experience difficulty in drilling due to the hard composition of the bumper core, drill a pilot hole first. Make certain you use a sharp drill bit. *Note:* use a piece of metal behind the drill to protect engine components.



14. Working on the passenger side end mounting point, place a ½" lock washer over a ½" x 4½" bolt, and place a 3/16" x 1½" x 3" threaded backing plate on top of the bumper core. Bolt through the main receiver brace and bumper core and into the nutted backing plate (Fig.P).

15. Repeat step 11 on the driver's side end mounting point, then remove the clamp. Using the pre-existing hole in the main receiver brace as a template, drill a ½" hole through the center mounting point and through the bumper core.

16. Place a ½" lock washer over a ½" x 4½" bolt, and place a 3/16" x 1½" x 3" threaded backing plate on top of the bumper core above the center mounting point. Bolt through the main receiver brace and bumper core and into the nutted backing plate (Fig.Q).





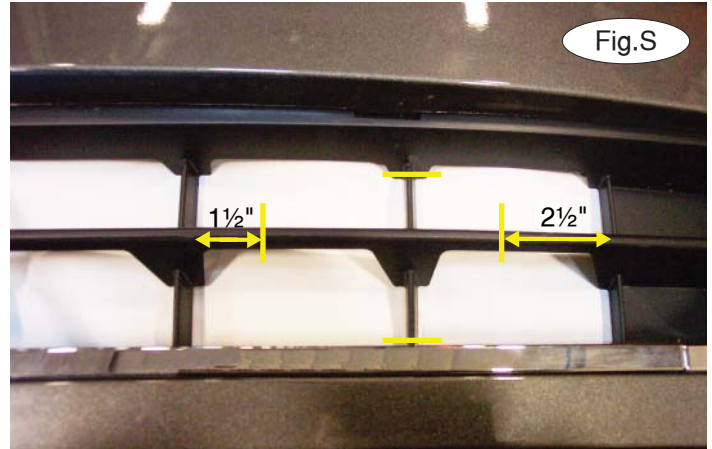
MOUNTING BRACKET KIT INSTALLATION INSTRUCTIONS

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Fig.R



Fig.S



17. Trim the shock absorption pad using the yellow lines in Figure R as a guide for trimming both sides of the pad, then reinstall it by reversing step 6.

18. **For Lincoln MKZ Hybrid models:** trim the fascia, measuring over 1½" from the first vertical rib, and 2½" over from the side piece. Use the yellow lines and measurements in Figure S as a guide for trimming. **For all other models:** trim the fascia using the yellow lines in Figure T as a guide for trimming.

Fig.T



Fig.U



19. Torque all remaining bolts to the bolt torque requirements found at the end of this document.
20. Reassemble the fascia by reversing steps 1 through 5.
21. 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.
22. Attach the 8" safety cables with the cable connectors (Q-Links) to the front of the receiver braces (Fig.U).
23. Attach the ends of the safety cables to the tow vehicle's safety cables.
24. Install the tow bar to the mounting bracket according to the manufacturer's instructions.

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.



MOUNTING BRACKET KIT INSTALLATION INSTRUCTIONS

KIT# 4420-1

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

<i>Thread Size</i>	<i>Grade</i>	<i>Torque</i>
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

<i>Thread Size</i>	<i>Grade</i>	<i>Plated / Unplated</i>
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

<i>Thread Size</i>	<i>Grade</i>	<i>Plated / Unplated</i>
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.

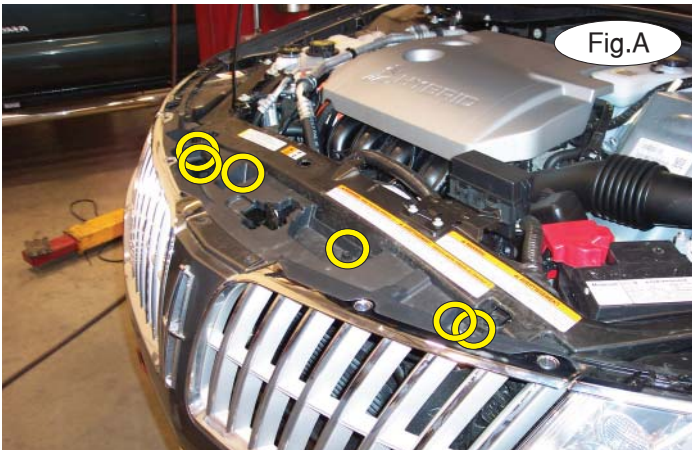
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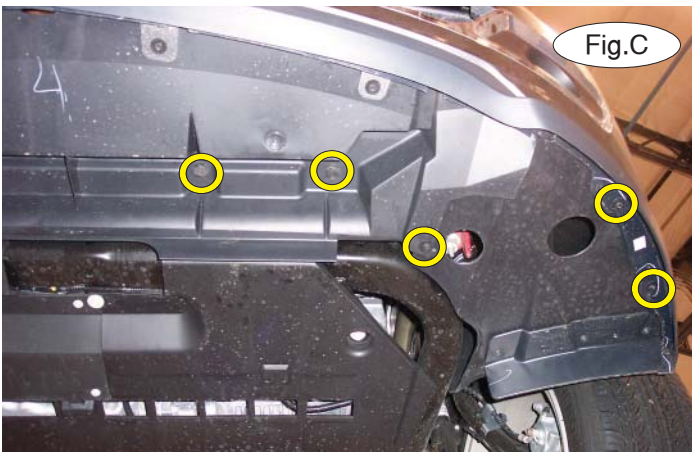
MOUNTING BRACKET KIT INSTALLATION INSTRUCTIONS

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Supplemental Instructions for 2011 Lincoln MKZ Hybrid Fascia Removal



1. Remove four 10mm (head) bolts and two plastic fasteners attaching the top of the fascia to the radiator support (Fig.A).
2. On each side, remove three plastic fasteners attaching the fender liner to the fascia (Fig.B).
3. On each side, remove three 7mm (head) bolts and two plastic fasteners attaching the center splash shield to the fender liners and radiator support (Fig.C).



4. Pull back the fender liners and disconnect the fog lights (Fig.D).
 5. Pull out and forward on the corners of the fascia to remove (Fig.E).
- Now, return to step 6 in the regular instructions to finish the installation.

