



# MOUNTING BRACKET KIT INSTALLATION INSTRUCTIONS

**KIT# 1422-1**

05/18/11  
KS

ROADMASTER, Inc. 6110 NE 127th Ave. Vancouver, WA 98682 1-800-669-9690 fax 360-735-9300 www.roadmasterinc.com

## Fascia Removal Supplement – 2005 Jeep Liberty

This supplement supersedes steps 1 and 2 in the mounting bracket installation instructions.



Fig.A



Fig.B



Fig.C

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. Loctite® Red must be used on all bolts for mounting this bracket, including the steering box bolts. Make certain you have Loctite® Red on hand, as you will not be able to reassemble the steering box without it. Now, begin the installation. Unsnap the six plastic tabs on the top of the grille (Fig.A) and remove the grille. (Some models may have two T25 Torx bolts on the grille. If this is the case, remove them as well.)

2. If the vehicle is equipped with fog lights, use a T30 Torx to remove the fog light mounting bolt (Fig.B).

3. Unplug the wiring harness. Lift the plastic and pull the harness through to remove the fog light (Fig.C).

4. Remove the two 10mm (head) bolts on the fascia. There is one on each side (Fig.D).



Fig.D



Fig.E

5. On each fender well, remove the two plastic fasteners that connect the fascia to the fender liner (Fig.E).

6. On the underside of the fascia, remove the two 10mm bolts (Fig.F) and the two plastic fasteners (Fig.G).



Fig.F



Fig.G



Fig.H



Fig.I



Fig.J

7. Pull down and away on each side of the front fascia (Fig.H), and remove the marker lights (Fig.I) and the turn signal plugs (Fig.J). Remove the fascia.

Fascia Removal Supplement continues on next page



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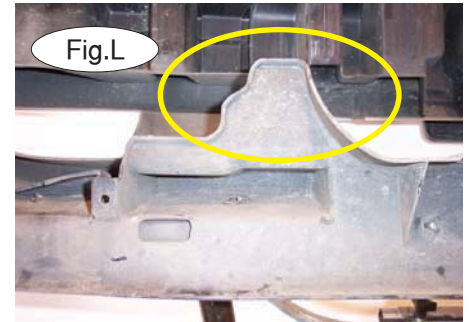
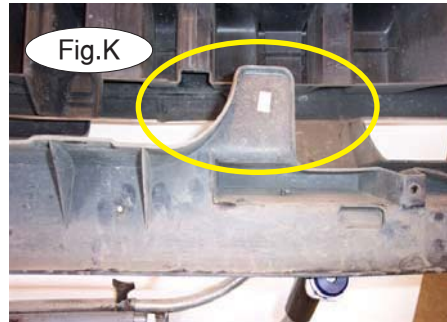
continued from preceding page

This supplement supersedes steps 1 and 2 in the mounting bracket installation instructions.

8. Due to manufacturing variances, some vehicles may be equipped with two radiator cowlings on the back of the fascia. These will need to be trimmed off in order to allow clearance for the main receiver brace. The two cowlings are shown in Figures K and L.

9. Reinstall the fascia by reversing steps 1 through 7 in this supplement.

10. Some models do not have tow hook openings in the fascia. If this is the case, a small portion of the fascia (on each side) will have to be trimmed to accommodate the main brace. Test fit the fascia, and trim as required.



**Proceed to step 3 in the mounting bracket kit  
installation instructions.**

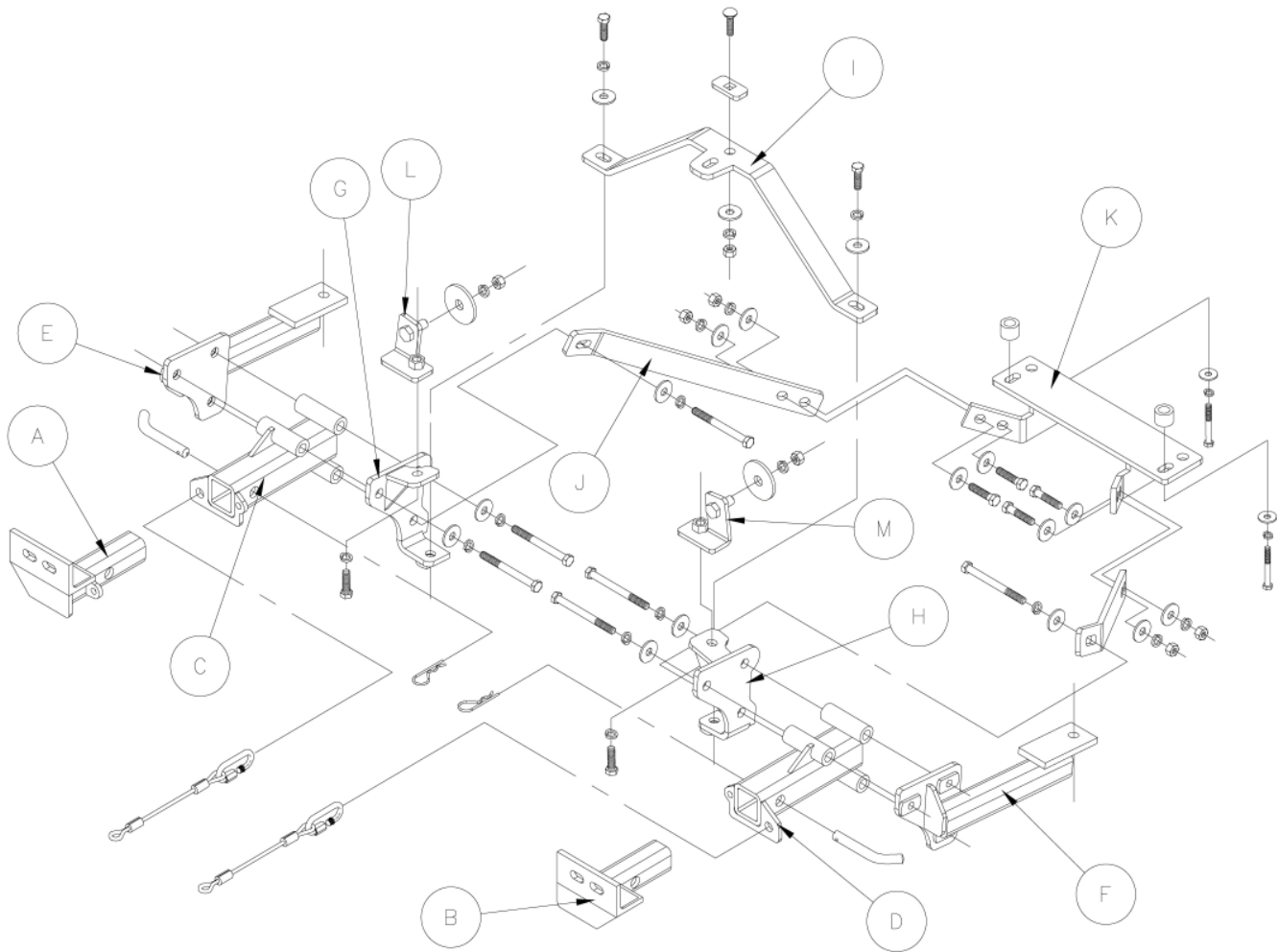


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## **PARTS LIST:**

- 1- **FRONT BRACE (A)** - Passenger side
- 1- **FRONT BRACE (B)** - Driver's side
- 1- **MAIN BRACE (C)** - Passenger side
- 1- **MAIN BRACE (D)** - Driver's side
- 1- **REAR MAIN BRACES (E)** - Passenger side
- 1- **REAR MAIN BRACES (F)** - Driver's side
- 1- **MOUNTING PLATE (G)** - Passenger side
- 1- **MOUNTING PLATE (H)** - Driver's side
- 1- **UPPER CENTER BRACE (I)**
- 2- **LOWER STRAP BRACE (J)**
- 1- **LOWER MIDDLE MOUNTING BRACE (K)**
- 1- **UPPER MOUNTING BRACE (L)** - Passenger side
- 1- **UPPER MOUNTING BRACE (M)** - Driver's side



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## HARDWARE

- (2) 10mm x 1.5 x 55mm bolts
- (2) 10mm lock washers
- (2) 10mm flat washers
- (4) ½" x 1¾" bolts
- (2) ½" x 1½" bolts
- (2) ½" x 1¼" bolts
- (1) ½" x 1½" carriage bolt
- (6) ½" x 5" bolt
- (2) ½" plate washers
- (17) ½" flat washers
- (17) ½" lock washers
- (7) ½" nuts
- (1) ¼" x 1" x 2" square hole backing plate
- (2) 1" O.D. x ¾" tube spacers
- (2) 10" safety cables
- (2) cable connectors
- (2) 5/8" draw pins
- (2) 1/8" spring pins

**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.
- **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.
- **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.
- 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.**
- 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.



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This bracket kit is one of our XL series, which is designed to be partly removable. The kit consists of the two main receiver braces, two front braces, two mounting plates, one upper center brace, two upper mounting braces, two rear main struts, two lower strap braces, one lower middle mounting brace and a hardware pack. The main receiver brace mounts below the bumper core behind the front bumper fascia and through existing openings in the bumper fascia. The rear and side braces install behind the fascia to the main frame then up to the front of the brace. The front braces install in the receiver braces.

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.

*Note:* to install this bracket to a 2005 Jeep Liberty, begin with the supplemental instructions. After completing the supplement, proceed with these instructions, at step 3.

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.** Loctite® Red must be used on all bolts for mounting this bracket, including the steering box bolts. Make certain you have Loctite® Red on hand, as you will not be able to reassemble the steering box without it. Now, begin the installation by removing four bolts (10mm head) from the middle of the lower fascia. This will allow you to pull down on the back of the fascia and install your struts once the main receiver brace is installed. *Note:* some vehicles may have plastic fasteners instead of bolts.

2. Remove the license plate and holder.

3. Remove two 17mm nuts from the ends of the sway bar linkage, then unbolt the sway bar mounts (four 17mm nuts). Remove the sway bar and set aside. *Note:* these may be 18mm nuts.

4. Remove the bottom skid plate (four bolts).

5. If the vehicle is equipped with tow hooks, remove both the front tow hooks (three 15mm nuts per hook) and the mounting U-bolt and spring nut. If the vehicle doesn't have tow hooks, proceed to the next step.

6. Look in the front of the bumper fascia and locate the large square holes in the bottom of the bumper core on each side. Put the upper braces through these holes, on each side, over the existing holes located approximately 1½" inboard from the large access holes. Put the upper bolts in the braces through the existing holes in the back of the bumper core. (If they don't line up, you may have the driver's side in the passenger side. Try switching them around). Bolt the braces to the rear of the bumper core into the upper braces with ½" nuts, plate washers and lock washers. The bottom of the braces should be in line with the existing holes in the bottom of the bumper core at this time.

7. Starting with the driver's side, remove a large subframe bolt (19mm or 21mm head) located above the sway bar mounting area. Take the driver's side rear main brace and bolt through the rear-mounting hole with this bolt.

8. Repeat step 5 for the passenger side. Caution – only remove one of these large bolts at a time.

9. Now, find the two main receiver braces and inner plates. Bolt these to each rear brace, using two ½" x 5" bolts, flat washers, lock washers and nuts through the two top holes. Tighten to hold alignment.

10. Bolt through the main receiver braces and the bottom of the bumper core into the upper braces installed in step 6, with a ½" x 1½" bolt and lock washer. Tighten these bolts.

11. Now return to the large subframe bolts and torque, using the chart at the bottom of these instructions.

12. Replace the sway bar, reversing step 3.

13. Pull the bottom of the fascia down and insert the center brace between the frame bottom and the fascia. Position it between the main receiver braces against the bottom of the bumper core with the middle-mounting ear pointing forward. Leave loose at this time.

14. Remove two large 24mm nuts on the bottom cross member, then hold the lower middle mounting brace in position, replace the nuts and torque to 130-ft. lb. *Note:* be sure to hold these bolts on the top when tightening, and when these nuts are removed, BE SURE YOU DON'T MOVE THE STEERING. Failure to do so will result in the steering needing realignment.



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15. Hold the lower strap braces in position, and trim the lower fascia edge, for clearance to bolt from the inner plate to the lower center brace.
16. Now, take the lower strap braces and bolt to the inside plates on top with the remaining 1/2" x 5" bolts, flat washers and lock washers and the mounting ears below with 1/2" x 1 3/4" bolts, flat washers, lock washers and nuts.
17. Bolt the ends of the center brace to the lower mounting tabs on the inner mounting plates with 1/2" x 1 1/4" bolts, lock washers and flat washers.
18. Fishwire a 1/2" x 1 1/2" carriage bolt and 1/4" x 1" x 2" backing plate through the rear of the bumper core into the center hole through the center brace. Finish with a 1/2" nut, lock washer and flat washer.
19. Insert the front braces. Check the alignment, then tighten all bolts to the specifications at the bottom of these instructions.
20. Replace the bottom skid pan, using 1" O.D. x 3/4" tube spacers and 10mm x 1.50 x 55mm bolts, flat washers and lock washers in front. Use the stock bolts removed earlier in the back of the plate.
21. Tighten all bolts to the torque specifications at the bottom of these instructions.
22. Insert the front braces in the receiver braces and secure using 5/8" draw pins and 1/8" spring pins.
23. Install the tow bar according to the manufacturer's instructions.
24. Attach one end of the 10" safety cables to the receiver braces with the included cable connectors. Attach the other end of the cables to the tow vehicle's safety cables and the tow bar.

## 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.