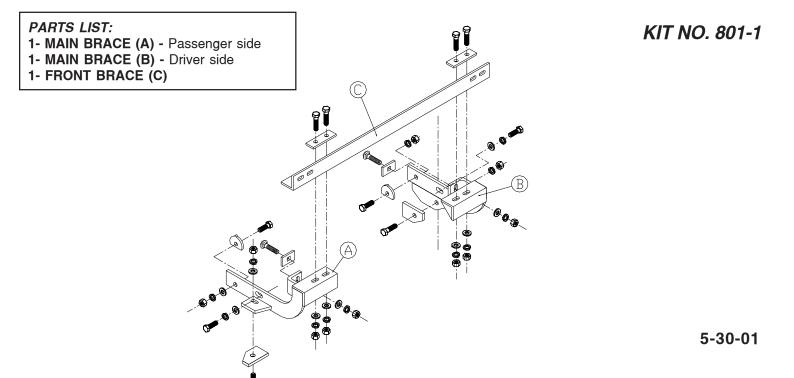
## **MOUNTING BRACKET KIT**

## INSTALLATION INSTRUCTIONS



**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.

Failure to follow these instructions 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 ROAD-MASTER adaptors only. Using this bracket with other brands, without an approved ROADMASTER adaptor, may result in non-warranty damage
- · 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 warranteed 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 NO. 801-1

- 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. This bracket kit uses the tie downs, frame rails and front bumper as attachment points. Begin by removing the lower skid plate.
- 2. Locate two slotted holes (one on each side) on the outside of the frame, approximately 4" behind the bumper. Insert a ½" x 1¾" bolt and clipped plate washer in through the front of the frame and into the slotted hole. Mount the main brace to this bolt and temporarily install a ½" nut onto the bolt. Tighten the nut enough to hold the brace in place, then repeat this step on the opposite side. *Note:* four additional plate washers are provided for spacers if needed for the Dodge Raider.
- 3. Temporarily install the front brace onto the two main braces with ½" x 2" bolts, backing plates, lock washers and nuts. Align the braces so that they are even with each other, then tighten the bolts. Adjust the partially assembled brackets so that the angle clips are flat against the face of the bumper. Once the brackets are even, mark the holes at the angled clips, then remove the main braces and front brace previously installed. Drill two 17/32" holes into the face of the bumper, then reinstall the braces with lock washers and nuts, then reinstall the front brace with ½" x 2" bolts, backing plates, lock washers and nuts. On both sides, insert a ½" x 1½" carriage bolt and 1¼" x 2" backing plate into the angled clips, through the backside of bumper. Finish with ½" flat washers, lock washers and nuts.
- 4. Bolt the brace to the tie down on the driver's side with a ½" x 1¾" bolt, special backing plate, lock washer and nut. Bolt the brace to the tie down on the passenger side with a ½" x 3" bolt, special backing plate, lock washer and nut.
- 5. The rear most hole in the brace should line up with the hole left vacant from the removal of the skid plate. Install the skid plate using the original bolts, with the exception of the holes in the braces. Bolt through the skid plate and the brace into the frame with the 10mm x 1.25 x 35mm bolts, lock washers and fender washers provided in the kit. There are extra 10mm fender washers in kit to take up any gaps in the installation of the skid plate.
- 6. Tighten all bolts according to the torque chart below. Mount the tow bar directly to the face plate according to the manufacturer's instructions.

### Hardware List:

- (4) 1/2" X 2" BOLTS
- (2) ½" X 1½" CARRIAGE BOLTS
- (2) 1/2" CLIPPED PLATE WASHERS
- (2) 10mm X 1.25 X 35mm BOLTS
- (2) 10mm LOCK WASHERS
- (4) 10mm FENDER WASHERS
- (1) ½" X 3" BOLT
- (3) 1/2" X 13/4" BOLTS

- (10) 1/2" NUTS
- (10) 1/2" LOCK WASHERS
- (10) 1/2" FLAT WASHERS
- (2) 3/8" SPECIAL BACKING PLATES
- (2) 1/4" X 11/4" X 2" SQ. HOLE BACKING PLATE
- (2) 1/4" X 11/4" X 4" 2-HOLE BACKING PLATE
- (4) 1/2" PLATE WASHERS

### **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.

ST	ANDARD B	OLTS	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 10	04 ft./lb. 97 ft./lb.
5/8	5	150 ft./lb.						