

# MOUNTAIN OFF ROAD ENTERPRISES. LLC

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# INSTALLATION INSTRUCTIONS FOR: **JFB500**

### PLEASE READ AND UNDERSTAND TERMS / POLICIES BEFORE PROCEEDING



JFB500 shown with optional tube work!

# HARDWARE KIT:

- 8- 7/16"-14 Crimp Nuts
- 8-7/16" Flat Washers
- 2- 1/2"-13x1.25 bolts
- 2- 1/2"-13 Crimp Lock Nuts
- 4- 1/2" Flat Washers

## 2012 to current models:

- 1- vacuum pump relocation bracket
- 2-5/16x 3/4" bolts
- 4-5/16 flat washers
- 2-5/16 lock nuts
- 2-6 x 30mm bolts
- 2-6mm flat washers

### TERMS / POLICIES:

FIT and TOLERANCES: All parts in M.O.R.E. To products are the results of countless hours of research, testing, fitting and refining. Jeeps have a large tolerances from vehicle to vehicle. In addition to the factory tolerances, most people install other then factory equipment (aftermarket add-ons). M.O.R.E. to have done the best job we can to insure that our parts fit with some of the possibilities. However, you may find it necessary to grind, elongate, bend, or force the parts you buy to fit on your rig. Be sure that you want to install them before you modify them. Please use common sense when installing these parts and let us know how we can improve them.

DAMAGE CLAIMS: All orders are carefully packed, however, mishandling by the carrier can result in damage. The carrier has the responsibility for the shipment from the time it leaves our warehouse until it is delivered to you. All claims for lost or damaged goods should be reported to the carrier, not to M.O.R.E.TM LLC.

RETURNS: No returns will be accepted without prior permission from M.O.R.E.7 LLC. After you receive a Return Goods Authorization (RGA) number, merchandise must be returned prepaid and insured. A claim must be made with in 30 days from receipt of merchandise. The original invoice or a copy with the RGA number written on must accompany all returns. A 20% restocking fee will be charged on all parts returned for credit or refund unless merchandise is proven to be defective or was shipped wrong by M.O.R.E.<sup>TM</sup> LLC. No merchandise will be issued credit or refund if it has been installed, modified, used in any way or is in unsalable condition.

WARRANTY: All merchandise is warranted to be free from defects in materials and workmanship prior to installation. Any alteration or improper use will void this warranty. Because all parts we sell are intended for use in heavy-duty applications it is not possible to warrantee or guarantee the performance of any items. M.O.R.E.™ LLC. products and the products manufactured by others, which we sell may be subject to an infinite variety of conditions due to the manner in which they are used, serviced and/or installed. Purchasers and users of such products rely upon their own judgment as to the suitable use selection, service and installation of such products.

PRODUCT DISCLAIMER: Modification of your vehicle to enhance performance with parts sold by M.O.R.E.™ LLC. may create a dangerous condition which could cause serious bodily injury, and the buyer hereby expressly assumes <u>all risks</u> associated with any such modifications. All parts sold by M.O.R.E.™ LLC. are for racing or off road use only. Mountain Off Road Enterprises LLC. will not accept responsibility for personal injury or property damage arising from the failure of any parts manufactured or sold by M.O.R.E.™ LLC.

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- M.O.R.E.™ recommends pre-fitting this *BUMPER* onto your Jeep® BEFORE you paint it. Make sure that you Have no fit issues with any Aftermarket accessories and that you are happy with all aspects of it. If you are, then paint it and re-install it. Once you modify it in any way, it is NON-RETURNABLE!!!
- 1- Remove the grille facia by removing the plastic screw retainers and carefully pull forward on the bottom to release the snap clips. Remove the turn signal electrical connectors and grille facia is able to be re-moved (See figures 1, 2 & 3)
- 2– Remove Factory bumper, air deflector and plastic trim plate. Remove factory fog lights from the bumper and save the mounting hardware.
- 3– Install winch & fairlead into winch tray using supplied hardware with the winch. Install fog lights into the mounting brackets on the back side of bumper. **For 2012 to current models see page 3.**
- 4– Slide the bumper over the frame and align the bolts with the frame brackets holes. Install 7/16" flat washers and Crimp Nuts on all the bumper bolts and snug but do not tighten. There are 2 holes on the bottom lip of the bumper that will locate on the lower frame bracket. Install the 1/2" x 1.25 bolts, washers and nuts. Tighten all mounting hardware.
- 5- Reattach the fog light wiring, hook up your winch and you are ready to Roll.

Figure 1

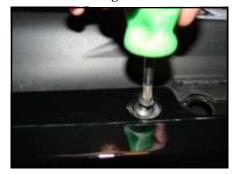


Figure 2



Figure 3





2012 to current models have a small vacuum pump located between the frame rails. This pump will need to be relocated.

Step 1: Remove the 2 nuts holding the pump to the bracket and unhook the hoses and wires from the pump. ( see figure 4 )

Step 2: Using a cutting wheel or a reciprocating saw, remove the front tab of the stock bracket. (see figure 5) Paint the cut edge to prevent rust.

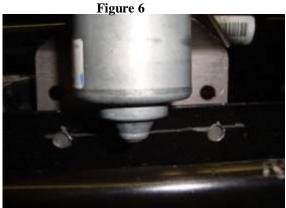
Step 3: Locate the bracket 11 " from the outside edge of the frame and flush with the bottom of the cross member. (see figure 6) Layout and drill 3/8 " holes in the cross member and install the bracket using the  $5/16 \times 3/4$  " bolts, nuts, and washers.

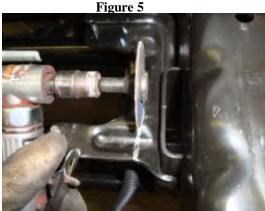
Step 4: Install pump into bracket using the 6x30mm bolts and washers provided and the stock nuts removed in step 1. Reconnect the hoses and wires to the pump.

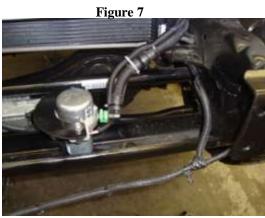
Step 5: The frame on the 2010 and up models will require some additional cutting. (see figure 8) Cut along the line flush with the bottom of the cross member. Paint all cut edges to prevent rust.

You are now ready to install the bumper. Go back to page 2 step 4

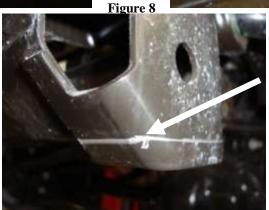












Cut frame here flush with bottom of frame