Installation Instructions

PRODUCT: **JK Front Bumper**

REV: C | 07-01-2015 | II-3100

READ INSTRUCTIONS IN FULL BEFORE INSTALLATION.

QUESTIONS? CALL 916-631-8071 M-F 7:00 AM – 5:00 PM PST

The MetalCloak experience includes the ease of installation of our products. We design for most contingencies, but installation may be different based on different Jeep condition, configuration and/or year.

We are continually trying to improve our products and instructions – please help us by providing feedback and pictures if you find any part of the instructions that do not match your particular Jeep or are not easily understandable.

If you have any difficulties at all, please give us a call. Thank you and enjoy your MetalCloak Products!

IMPORTANT NOTE: We use Stainless Steel Hardware where possible. Therefore, a tube of Silver Anti-seize is provided and should be used on all bolts—only a small amount is needed.

WARRANTY INFORMATION: This article is sold without warranty expressed or implied. No warranty or representation is made as to this products ability to protect the user from injury or death. The user assumes that risk. The effectiveness, warranty and longevity of this equipment are directly related to the manner in which it is INSTALLED, USED and/or MAINTAINED. THE USER ASSUMES ALL RISK. By purchasing this product and opening the packaging, purchasers expressly acknowledge, understand and agree that they take, select and purchase these MetalCloak products from Armored Works, LLC, its affiliates and distributors and agents as is and with all faults. The entire risk as to the quality and performance of these MetalCloak products is with the purchaser. Working on your vehicle can be a dangerous activity. If you are unsure of what you are doing, please leave mechanical or safety critical work to a skilled mechanic. We take no responsibility for the incorrect use and/or installation of MetalCloak products.

Section 1: Tools & Notes on Installation

Tools Required: This list is the recommended tools for ease of installation. Other versions of the same tool can be used. For example, Allen Wrenches instead of Allen Drive Sockets.

Socket & Ratchet Wrench

10MM Socket/Wrench
18MM Socket/Wrench
16 MM Socket/Wrench

Socket Extension

Electric Drill

Phillips & Flat Screwdrivers

9/16” Drill Bit

Electric Cutting Wheel
or Reciprocating Saw

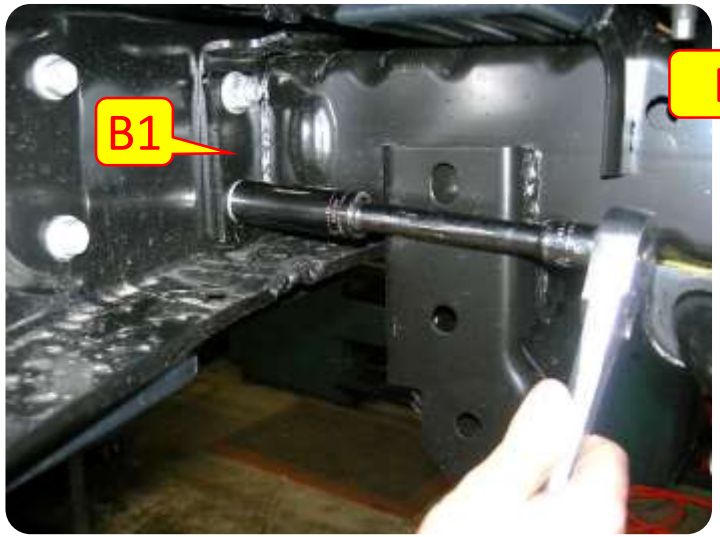
HOW TO USE THIS GUIDE: The installation guide contains ALL steps for installation. Please read and follow the instructions in order of each page top to bottom, and left to right.
Jeep Model: Instructions may apply to multiple Jeep models, but are labeled separately where appropriate (i.e. TJ vs. LJ).
Options: Because of the number of component options we offer, these instructions may contain steps that will not match your particular configuration. You can skip these steps.
Images: Pictures are provided and parts are labeled throughout the instructions. Each text box contains guidance based on the pictures next to it. The text will refer to alphabetical labels (A, B, etc.) found in the images.
Installation Notes: Terms may be used in the body of the instructions that you may not be familiar with, if you have any questions feel free to contact us at the number below, or email techhelp@metalcloak.com
QUESTIONS: Any questions or comments about the instructions? Call us at 916-631-8071 M-F 7:00 AM – 5:00 PM

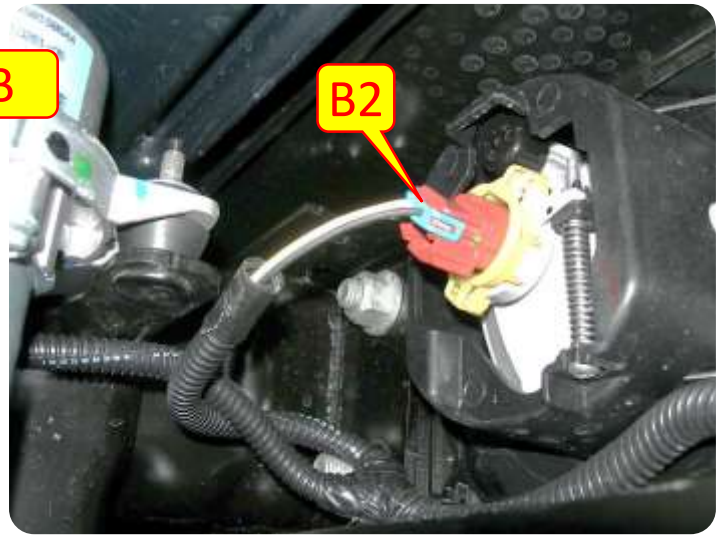
Section 2: Installation Instructions

Step 1: Remove Stock Bumper

A. Remove the lower Plastic Cowl. Use a Phillips Screwdriver to remove the center "plug" from the Retaining Clips, and then use a Flat Screwdriver to pry the Clips free. Don't be surprised if you have to drill the plug out of several clips. It helps to squeeze the plastic on the back as you unscrew.

B. Use a 16MM Socket or Wrench to remove the 8 stock Flange Nuts holding the bumper to the frame. Remove the Backing Plates behind the Nuts as well [B1]. You may need to unplug/remove the stock Fog Lights to gain access to the bolts inside the frame rails [B2], especially on 2012 models or later.

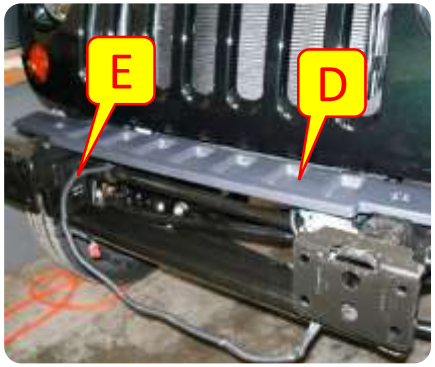




Section 2: Installation Instructions

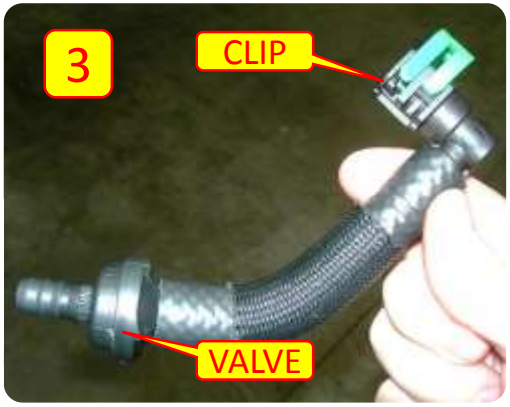
Step 1: Remove Stock Bumper (cont'd)

C. Remove the Bumper from the frame and support. Unplug Fog Lights and use a Flat Screwdriver to pry the Wire Clips free, or cut the wires free.
D. Remove the stock Bumper Cover.
E. For a Winch Base, remove Wire Clips from the frame.



Step 2: Prepare JEEP for Installation

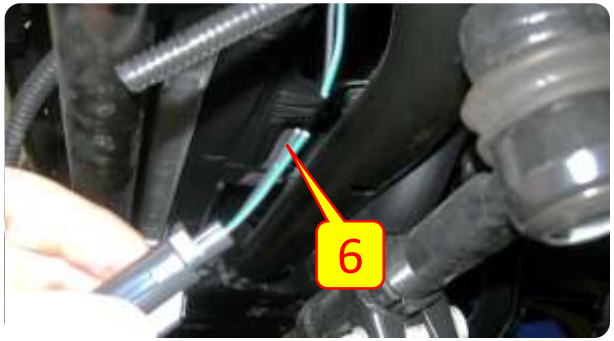
F. This step is necessary ONLY on 2012+ Models receiving a MetalCloak **Winch** Bumper
   1) *NOTE: This step uses the MetalCloak Vacuum Canister Relocation Bracket (#3150, sold separately).*
   2) Use a 10MM Socket to remove the Vacuum Canister, and disconnect all tubes/wires. Save ALL stock hardware.
   3) Remove the hose section with Clip and One-Way Valve from the lower end of the stock hose.
   4) Disconnect the upper section of the hose and attach the Valve at this junction on the ENGINE side.
   5) *OPTIONAL: you can completely remove and discard the eliminated section of hose.*

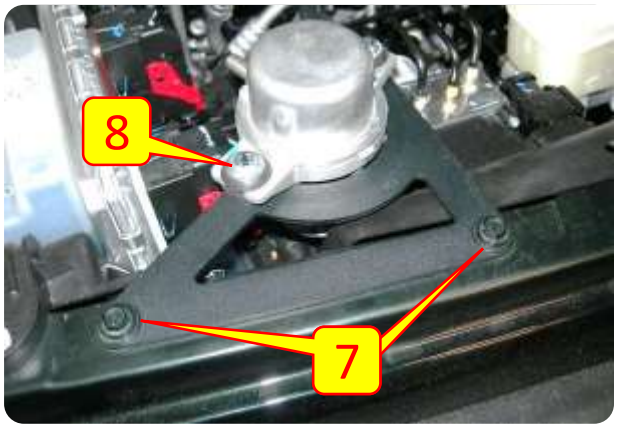


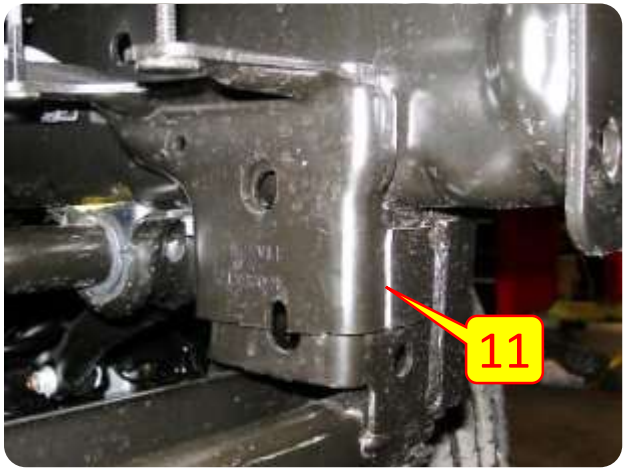
Step 2: Prepare JEEP for Installation

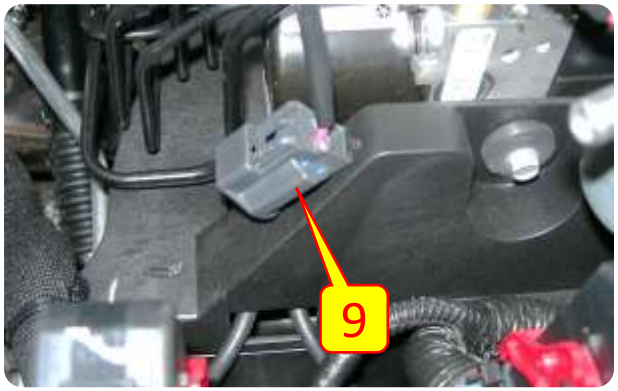
F. (cont'd) ONLY on 2012+ Models receiving a MetalCloak **Winch** Bumper

6) Remove the lower Harness Plug from the wire sleeve and cut. Splice in the 16GA Wire using the Wire Butt Connectors. Use electrical tape (or other preferred method) to protect the spliced connections.
7) Use a 10MM Socket to remove the two stock bolts shown, and install the Relocation Bracket.
8) Install the Vacuum Pump on the bracket using the Relocation Kit's M6 Bolts and the stock M6 Nuts from the original bracket.
9) Drill 2 holes, 5/8" apart, on the stock plastic mounting bracket and install the Vacuum Plug in the holes.
10) Reattach the hose and wires to the Vacuum Pump, in the new location. Use zip-ties to secure the extended 16GA Wires.
11) Mark and cut off the stock Vacuum Bracket from the frame (along the vertical line shown).









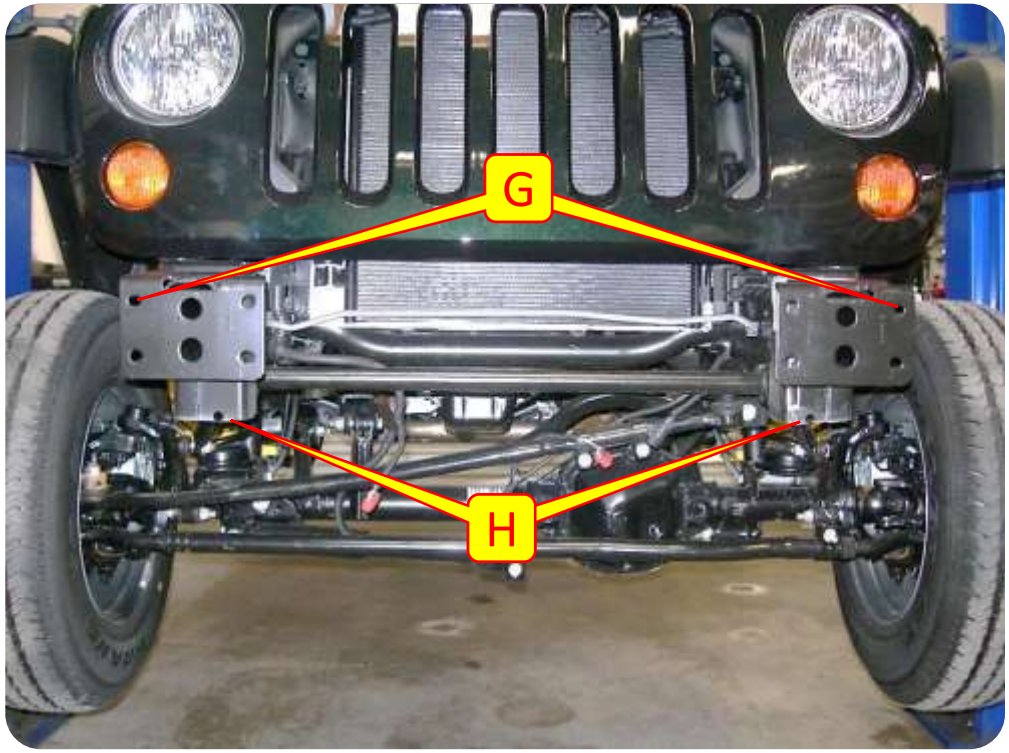
Step 2: Prepare JEEP for Installation (cont'd)

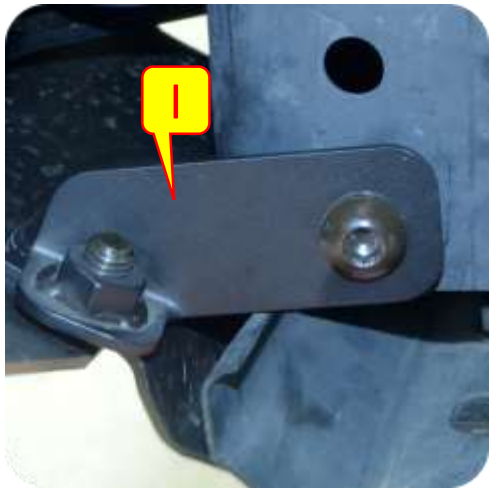
G. Use a 9/16" or 5/8" Drill Bit to open the smaller holes on the stock Bumper Mount Plates (1 per side, as indicated).

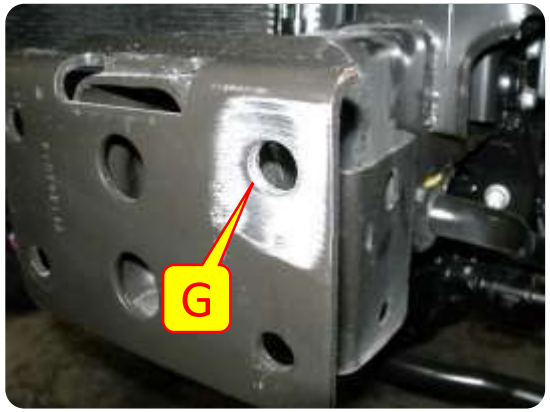
H. You also need to cut off the stock Frame Crossbar. The Frame Uprights will look different depending on the year of your JK; just be sure the Uprights extend no lower than 6.75" from the TOP of the Frame Rails after trimming [H1].

I. If using the Extreme Reinforcement Bracket Kit (*p/n 3140*), you will need to mark and drill the upper hole with a 9/16" drill on newer models.

J. Paint any exposed metal to prevent rust.







Step 3: Install MetalCloak Frame-Built Bumper

For "No-Winch" Full Bumper, follow steps N-R and U-V, with additional notes on page 9. ***READ ALL BEFORE PROCEEDING!!***

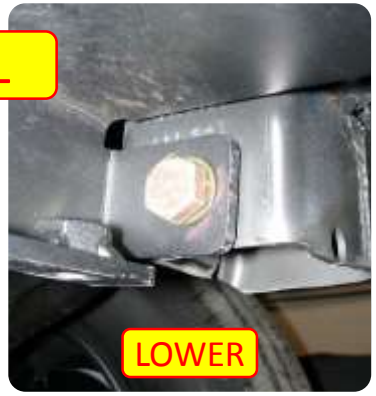
K. Hang the Winch Base between the frame rails, and clamp in place. *If working alone, a couple bolts work well.*

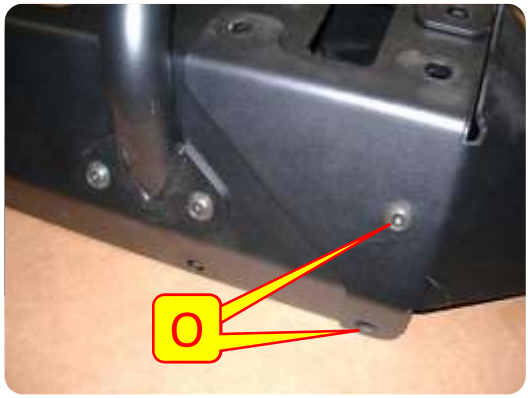
L. Align the 2 inside holes with the Frame Upright. Install 1/2" Hex Bolts with Lock Washers, backed by Hex Flange Nuts. *IMPORTANT NOTE: Make sure all 8 front holes are aligned, and THEN fully tighten Hex Cap Screws.*

M. Drop your Winch into the Winch Base, align with the appropriate holes, and fully install Winch hardware.

N. Assemble Winch Guard or Stinger with Face Plate. Install 1/2" x 7/8" Button Head Screws and Hex Flange Nuts in the Stinger Plates, through the Face Plate, and fully tighten.

DO NOT FULLY TIGHTEN ANY HARDWARE AFTER THIS POINT, UNTIL ALL COMPONENTS ARE INSTALLED.





O. Align the Caps in with the Face Plate and install 1/2" x 1.25" Button Head Screws and Hex Flange Nuts in the lower 2 positions. If installing the Extreme Reinforcement Bracket, do not install the bottom Screw just yet.

Step 3: Install MetalCloak Frame-Built Bumper

P. Locate the Stinger Backing Plate, 1/2” x 7/8” Button Cap Screws and 1/2” Lock Washers. Install through the Stinger Bracket and Cap.

Q. Lift Bumper into place and install 1/2” x 1.25” Button Cap Screws backed by 1/2” Flange Nuts in all 8 locations on the front face.

R. If necessary, use a pry bar to align the holes and get the Screws started.

S. Install 1/2” x 1.25” Button Cap Screws with 1/2” Lock Washers through the rear of the Winch Base, into the Stinger Arms.

T. Install 1/2” x 7/8” Button Cap Screws and 1/2” Lock Washers through the bottom of the Face Plate into the Winch Base (4 locations).

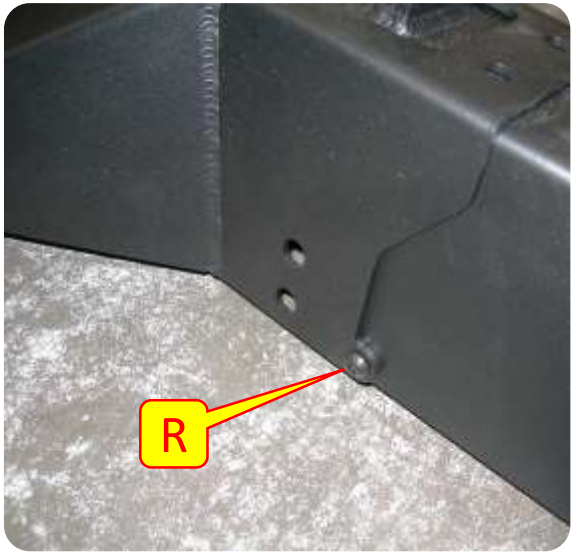
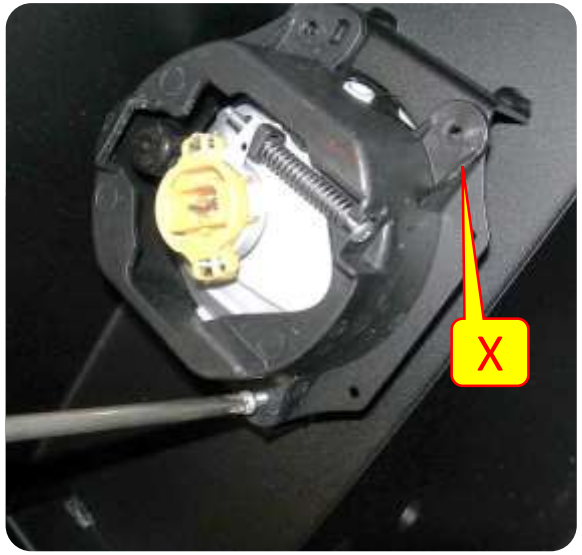
U. Install Extreme Reinforcement Bracket (if applicable).

V. Fully tighten all hardware.

Step 3: Install MetalCloak Frame-Built Bumper

The following notes are for the "No-Winch" Full Bumper Base ONLY.

W. On the Full Bumper Base, install the provided 5/16" Button Cap Screw and Flange Nut through the Cap and Base (1 on each side), preferably before installation on the JEEP.

X. If re-using the stock Fog Lights in the Full Bumper Base or 60 Light Caps, use a Phillips Screwdriver and the provided #10 Self-tapping Screws to install the lights into the Light Brackets. The "ears" on the stock light housings should be parallel to the ground when on the JEEP.

Y. If not re-using the Fog Lights, install the provided 3.5" Hole Plugs on the face of the Full Bumper.