



Installation Instructions



PRODUCT: JK Frame-Built Combo Bumper Base

REV: D | 11-22-2016 | II-3160

**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



5/16" Hex Drive Socket
7/32" Hex Drive Socket

3/4" Crescent/or Box Wrench
9/16" Crescent/ or Box Wrench



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.

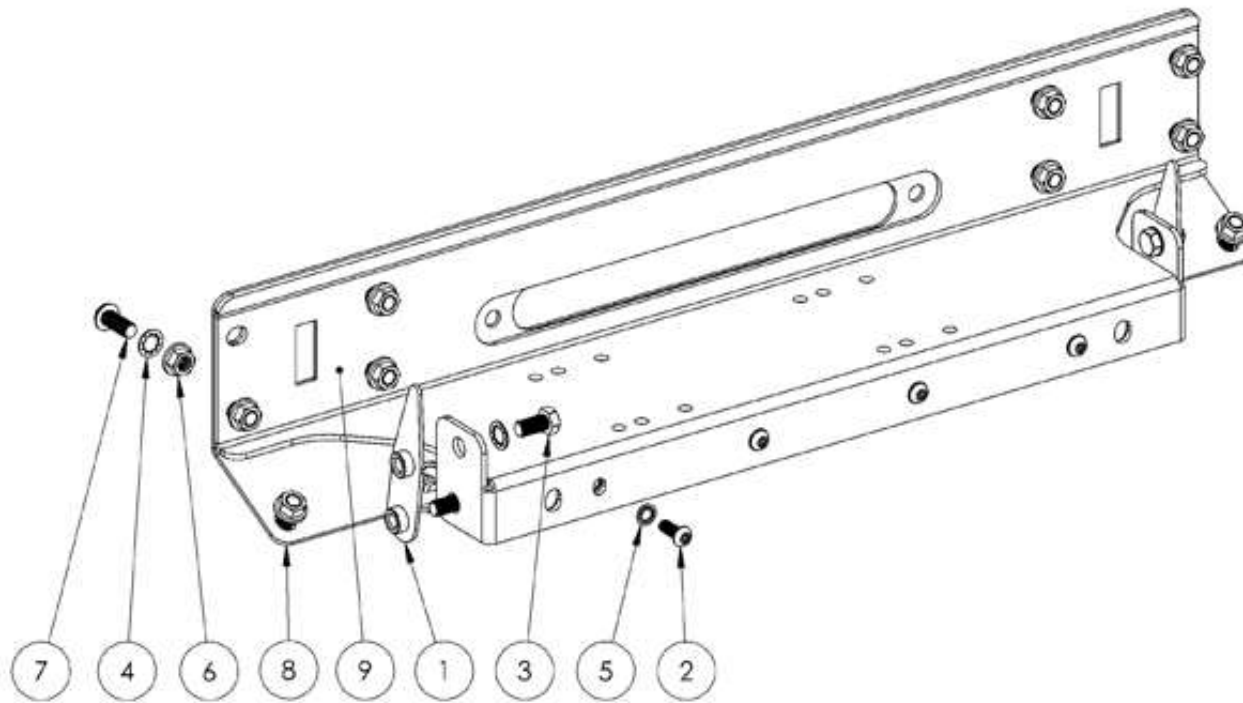
Images: Pictures are provided and parts are labeled throughout the instructions. Each text box contains guidance based on the pictures next to it. The text will refer to alphabetical labels (A, B, etc.) found in the images.

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 PST.

Section 2: Product Components

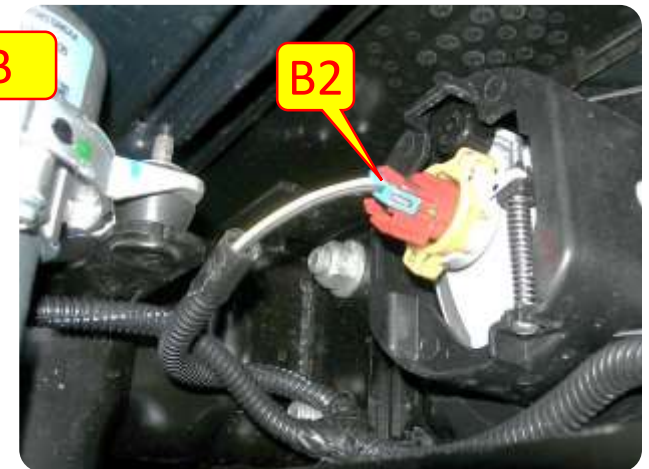
ITEM	PART NUMBER/DESCRIPTION	QTY
1	CP-3641 FLAG NUT, WINCH PLATE JK	2
2	FA-0018-BZ SBHCSCREW, .375-16x1.0L GR 8 BLACK ZINC	4
3	FA-0021 HHCSCREW, 0.5-13 x 1L UNC GRD 8 ZINC PLTD	4
4	FA-0022 LOCK WASHER, .53ID X .90D X .037TH INT BLACK ZINC	12
5	FA-0059 LOCK WASHER, .375 INT TOOTH ZNC PLTD	4
6	FA-0065 FLANGE HEX LOCKNUT, 0.5-13 X 1.03FLG ZNC PLTD	10
7	FA-0074 SBHCSCREW, 0.5-13 X 1.25L GR 8 BLACK ZINC	10
8	WM-3626 WELDMENT, WINCH FACE PLATE JK	1
9	WM-3629 WELDMENT, WINCH PLATE JK	1



Section 3: 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.

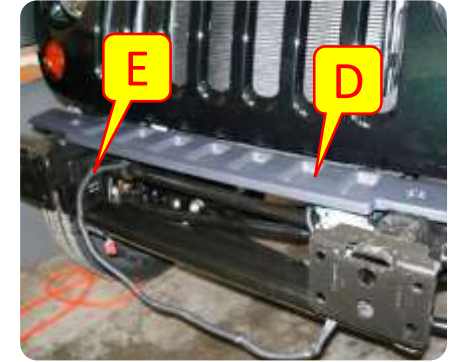


Section 3: Installation Instructions



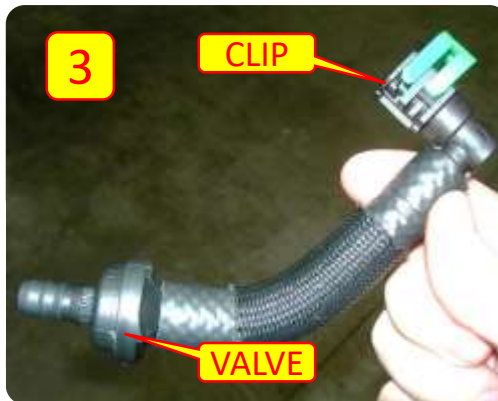
Step 1: Remove Stock Bumper

- 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: 2012+ Model Vacuum Pump Relocation

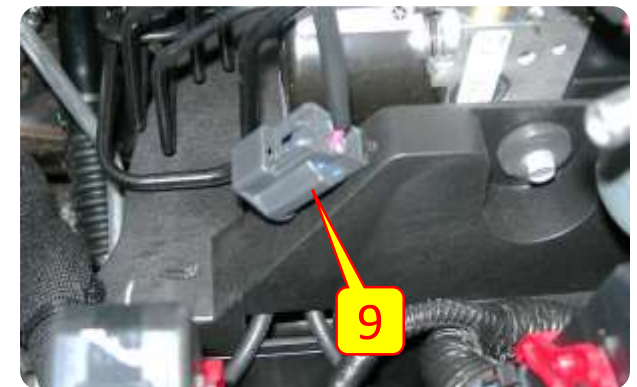
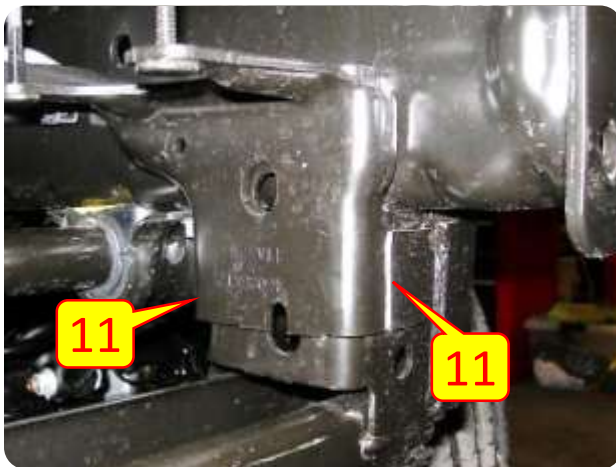
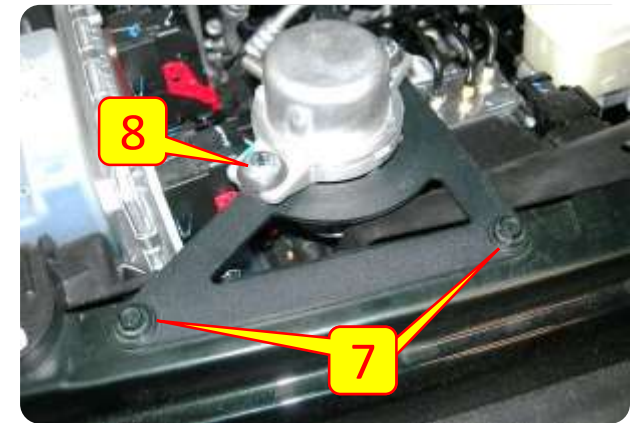
- A. This step is necessary ONLY on 2012+ Models receiving a MetalCloak **Winch** Bumper
 - 1) *NOTE: This step uses the MetalCloak Vacuum Canister Relocation Bracket (#3150, sold separately).*
 - 2) Use a 10MM Socket to remove the Vacuum Canister, and disconnect all tubes/wires. Save ALL stock hardware.
 - 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.*



Section 3: Installation Instructions

Step 2: 2012+ Model Vacuum Pump Relocation

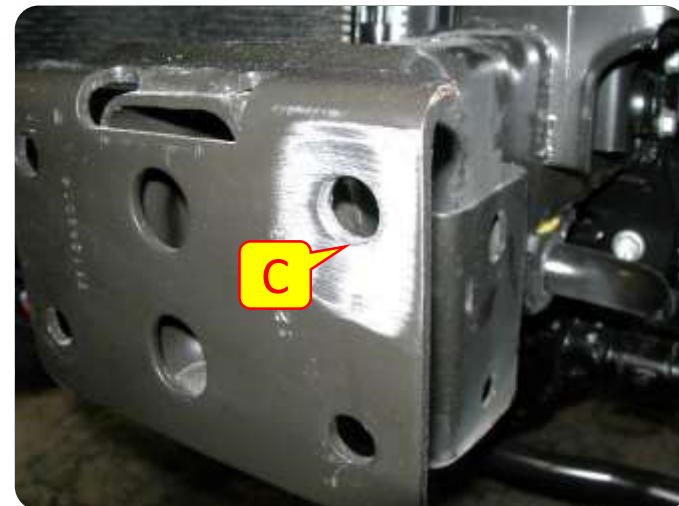
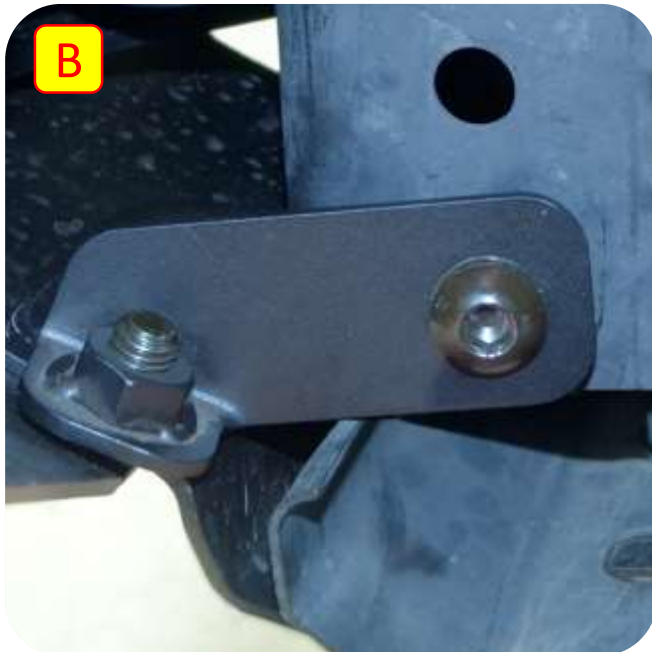
- B. (cont'd) ONLY on 2012+ Models receiving a MetalCloak **Winch** Bumper
- 6) Remove the lower Harness Plug from the wire sleeve and cut. Splice in the 16GA Wire using the Wire Butt Connectors. Use electrical tape (or other preferred method) to protect the spliced connections.
 - 7) Use a 10MM Socket 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) On both sides of the vacuum bracket mark and cut off the stock Vacuum Bracket from the frame (along the vertical line shown).



Section 3: Installation Instructions

Step 2: Prepare JEEP for Installation

- A. 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*).
- B. 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.
- C. Paint any exposed metal to prevent rust.

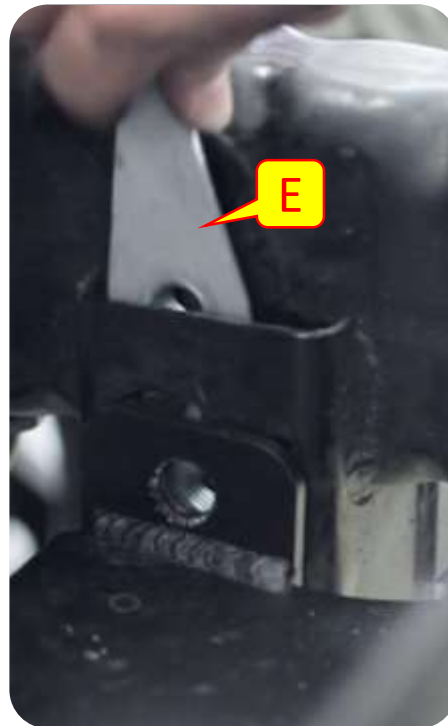


Section 3: Installation Instructions



Step 3: Install MetalCloak Frame-Built Combo Bumper Base

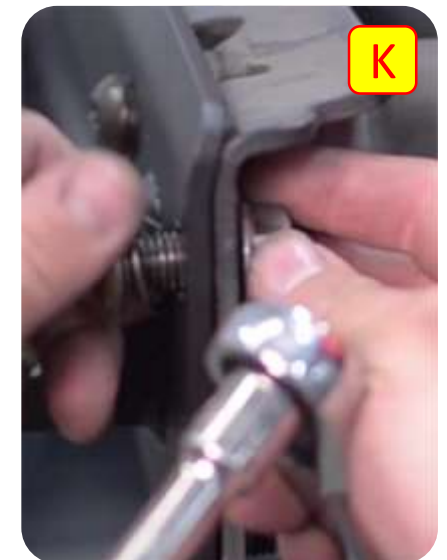
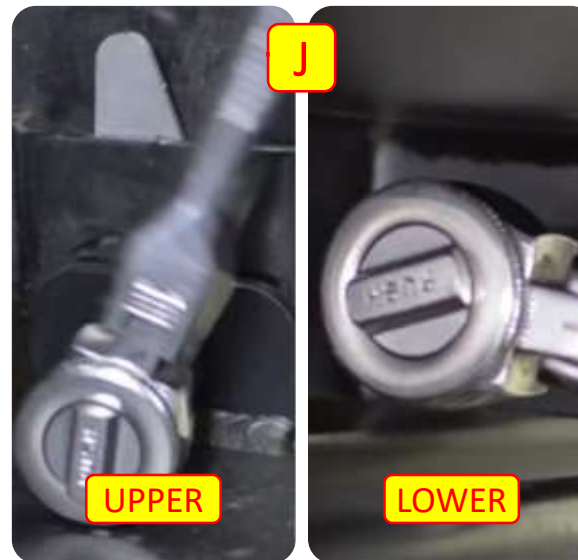
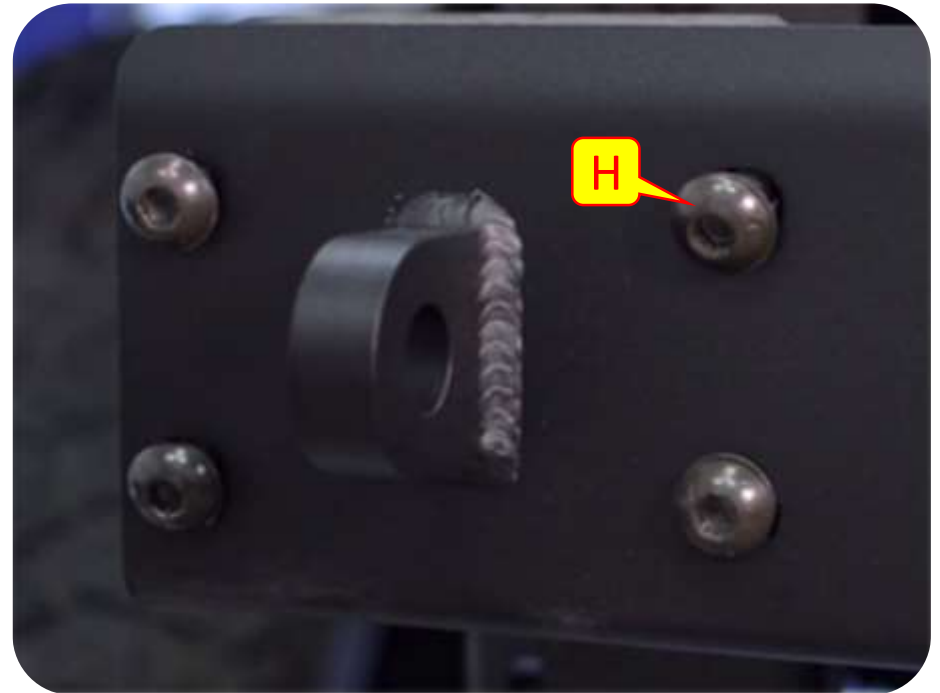
- D. Place the bumper base on to the frame mounts and insert an allen head bolt to hold each side of the base in place.
- E. Slide the flag nut down into the frame rail pocket.
- F. Attach the upper tab of the bumper base with the supplied hex bolt. **Do not fully tighten.**
- G. Attach the lower tab of the bumper base with the supplied hex bolt. **Do not fully tighten.**



Section 3: Installation Instructions

Step 3: Install MetalCloak Frame-Built Combo Bumper Base

- H. Place the remaining allen bolts into the holes that attach to the front of the bumper base.
- I. Tighten the outside upper bolt only on each side of the bumper base
- J. Make sure the bumper is aligned and then tighten the interior bolts in the bumper frame pockets.
- K. Remove the bumper base plate hardware.



Section 3: Installation Instructions



Step 3: Install MetalCloak Frame-Built Combo Bumper Base

- L. Install the end caps on the bumper base cover plate using the provided hardware.
- M. Place the assembled caps and bumper base cover onto the bumper base.
- N. Attach the bumper base cover by installing the allen head bolts through the 4 bumper frame bracket holes located on each side of the bumper. **Do Not Fully Tighten.**
- O. Make the final alignment adjustments on the end caps
- P. Install the four bolts to the rear of the bumper base.
- Q. Install Extreme Reinforcement Bracket (*if applicable*).
- R. Tighten all hardware.

