



Installation Instructions



**PRODUCT: JK SPOD Mount Vacuum Pump Relocation Kit**

REV: A | 08-31-2015 | II-3151

**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.



Ratchet

3/8" Socket

5/16" Socket



Drill

7/32" Drill Bit



Wire Cutters

Wire Stripper/Crimper



Phillips Head Screwdriver

5/32" Allen 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](mailto:techhelp@metalcloak.com)

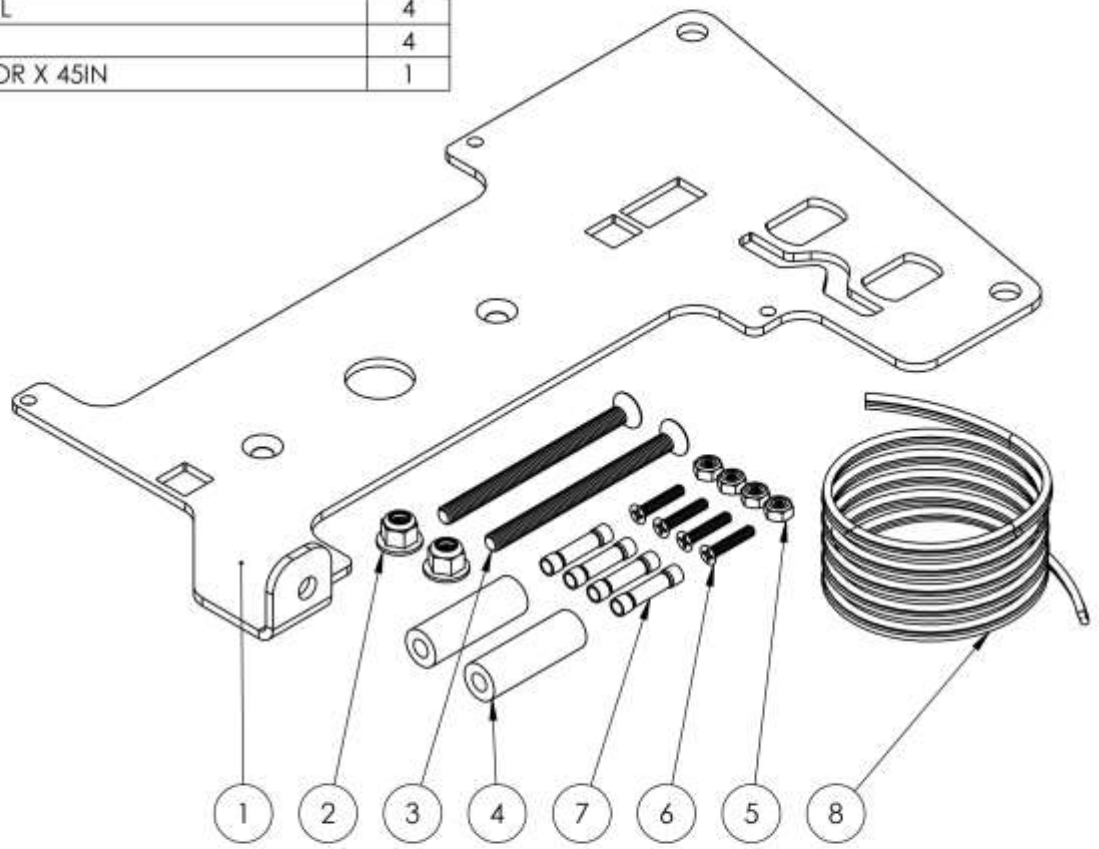
**QUESTIONS:** Any questions or comments about the instructions? Call us at 916-631-8071 M-F 7:00 AM – 5:00 PM PST.

## Section 2: Product Components

DC-0001 REV A

SHEET 1 OF 1

ITEM	PART NUMBER/DESCRIPTION	QTY
1	CP-3643 PLATE, SPOD MOUNT-VACUUM RELOCATION, JK	1
2	FA-0086 FLANGE HEX NYL LOCKNUT, M6-1.0 X .56FLG ZNC PLTD	2
3	FA-0132 FHSCREW M6-1 X 80L 10.9 ZNC PLT STL	2
4	FA-0133 SPACER, 13OD X 6.3ID X 40L ALUM	2
5	FA-0134 HEX NYL LOCKNUT 6-32 X .17TH ZNC PLT STL	4
6	FA-0135 FHSCREW, 6-32 X .75L ZNC PLT STL	4
7	FA-1024 18-22GA BUTT SPLICE	4
8	FA-1025-45 WIRE, 18GA TWO-CONDUCTOR X 45IN	1



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**DO NOT SCALE DRAWING**

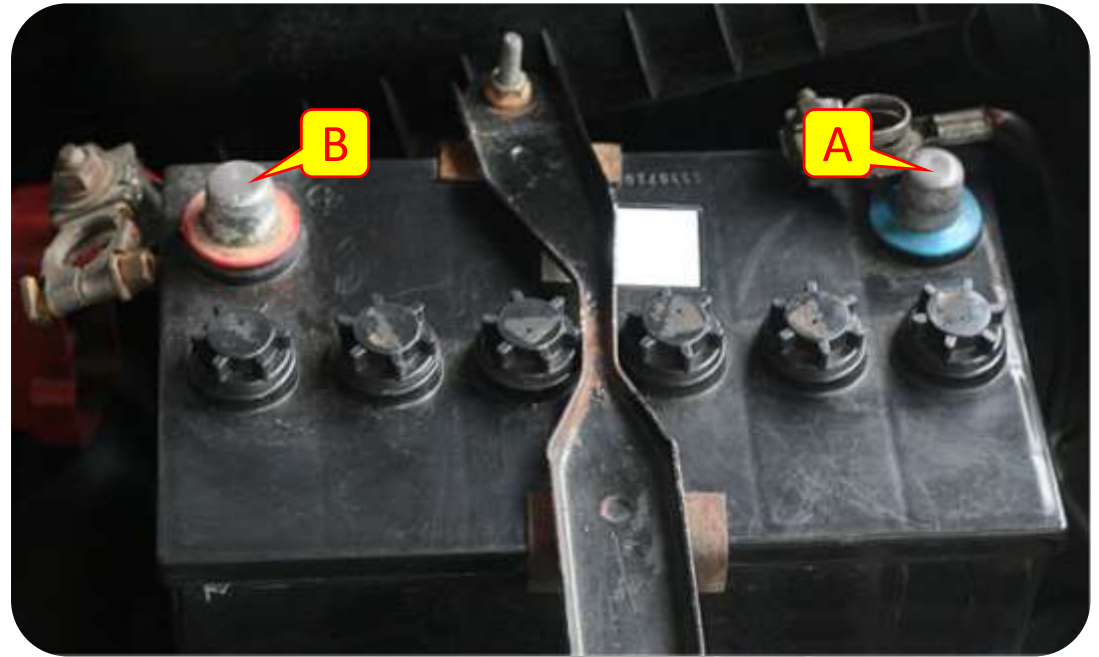
**Metal Cloak**  
 A DIVISION OF ARMORED WORKS, LLC

**PART NUMBER DESCRIPTION** 3151 SPOD MOUNT-VACUUM RELOCATION KIT, JK

## Section 3: Installation Instructions

### Step 1: Vacuum Pump Removal

- A. Disconnect the negative terminal of the battery.
- B. Disconnect the positive terminal of the battery.
- C. Remove the two mounting nuts using a 10mm socket to disconnect the pump from the stock bracket.
- D. Pop the green retainer clip off the quick disconnect to release the vacuum line from the pump.



## Section 3: Installation Instructions

### Step 1: Vacuum Pump Removal



- E. Pull the small intake hose from the pump.
- F. Remove the electrical connector and disconnect the harness.
- G. Pry out the connector clip and disconnect the vacuum hose.



## Section 3: Installation Instructions

### Step 1: Vacuum Pump Removal

- H. Separate the check valve and quick disconnect from the vacuum line.
- I. Remove approximately 3 ft. of factory large vacuum hose from split connector in engine compartment near PCM module so that you can reroute & reconnect the vacuum connector clip to the vacuum line.
- J. Using wire cutters remove the harness connector so you can reuse both the connector and the original wiring.



**Note:** Discard small vacuum pump exhaust hose. The new location for the vacuum pump will not require exhaust hose.



## Section 3: Installation Instructions

### Step 2: Vacuum Pump Relocation Wiring



- K. Strip back the wiring with wire strippers and extend using the provided butt connectors and crimp close.
- L. Route the wire to prevent any potential damage.

#### WIRING DIAGRAM



## Section 3: Installation Instructions

### Step 2: Vacuum Pump Relocation Wiring



- M. Use the butt connectors to connect the extension wire to the original wiring and crimp close.
- N. Use a zip-tie to secure new wiring to the Jeep.



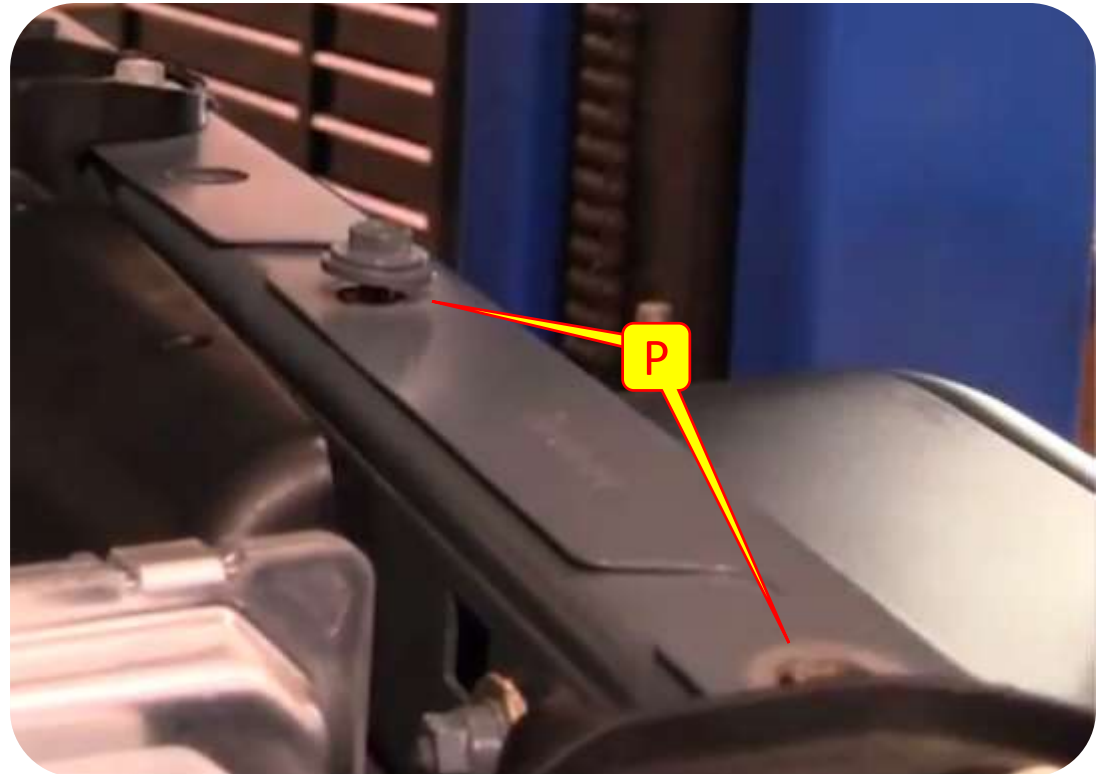
#### WIRING DIAGRAM





## Section 3: Installation Instructions

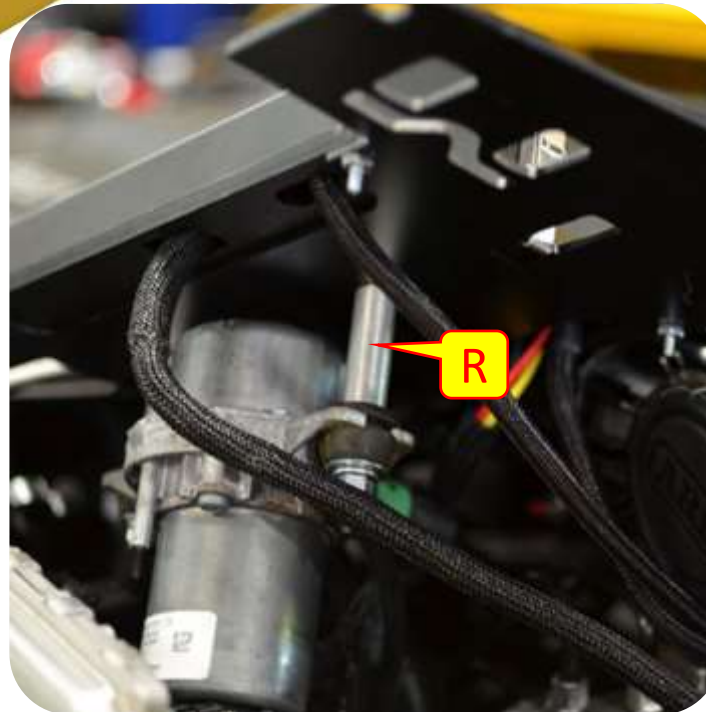
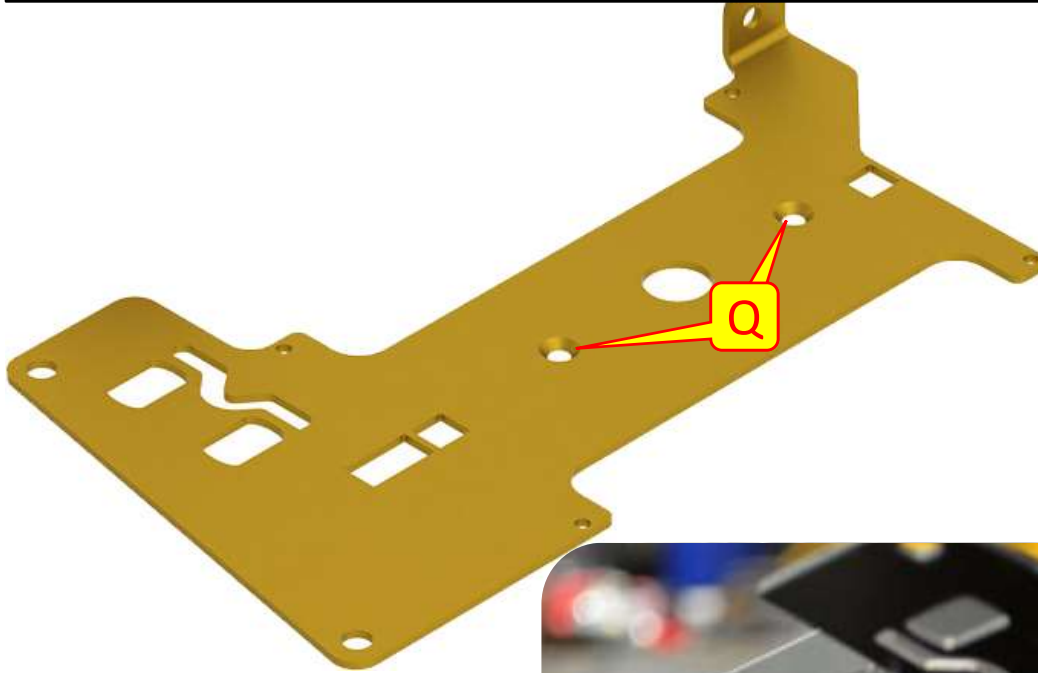
### Step 3: Install Vacuum Pump



- O. Drill two 7/32" holes for the harness plug in the plastic piece of the ABS mount.
- P. Using a 3/8" socket remove the two upper fender bolts.

## Section 3: Installation Instructions

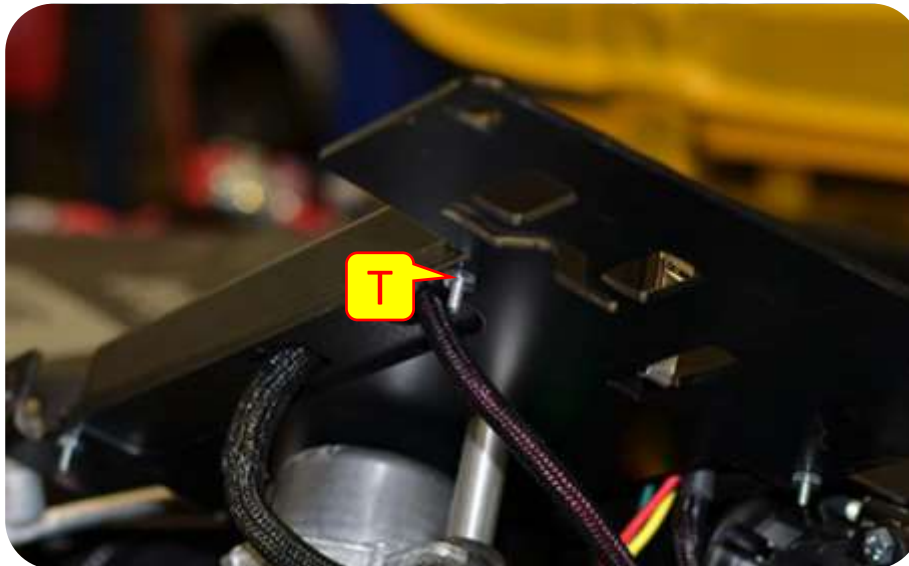
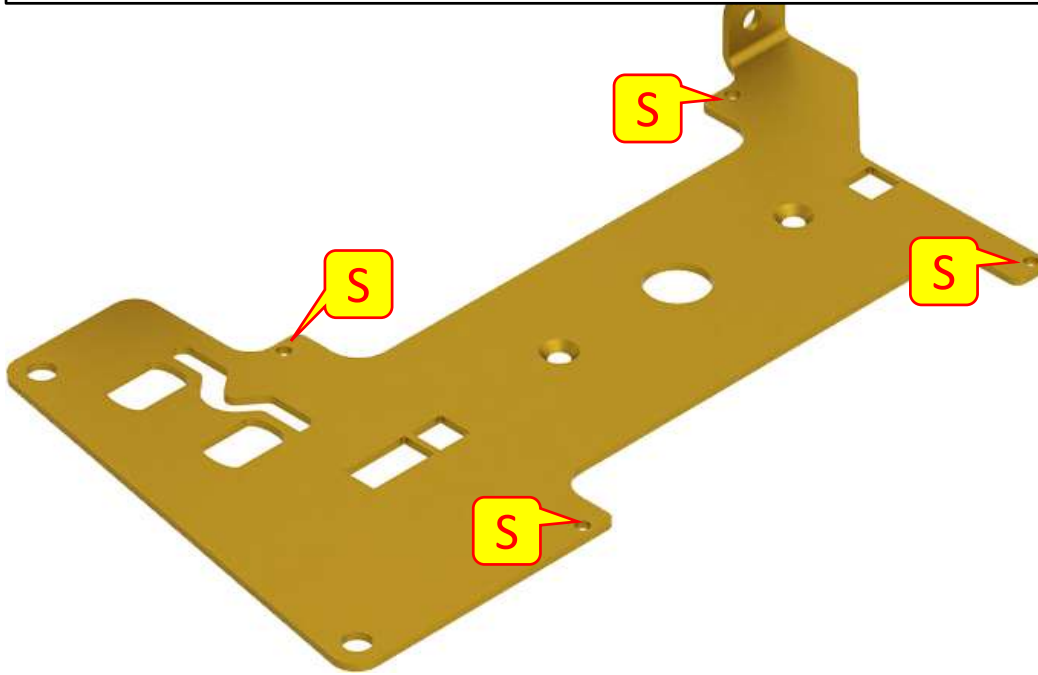
### Step 3: Install Vacuum Pump



- Q. Install the Vacuum canister underneath the SPOD mount using the provided holes.
- R. Slide the spacers over the bolts before installing the Vacuum Canister. Tighten down the vacuum canister using a 10mm socket and 5/32" allen wrench.

## Section 3: Installation Instructions

### Step 3: Install Vacuum Pump



- S. Install the SPOD into the four hole locations using the provided hardware.
- T. Using a Phillips head screwdriver and a 5/16" socket. Tighten down the SPOD Mount to the bracket.

## Section 3: Installation Instructions

### Step 3: Install Vacuum Pump

U. Using a 3/8" socket attach the SPOD Mount bracket to the Jeep.



## Section 3: Installation Instructions

### Step 3: Install Vacuum Pump

- V. Press the harness plug into the two drilled holes in the plastic piece of the ABS mount.
- W. Reconnect quick disconnect and intake hose.
- X. Pop the green retainer clip on the quick disconnect and use zip-ties on any loose wiring.
- Y. Make sure all hardware is tightened and wiring is zip-tied to avoid potential damage.
- Z. Reconnect the positive on the battery.
- AA. Reconnect the negative on the battery.

