



## PRODUCT: JK Rear Long Arm Bolt-On Frame Bracket

REV: A | 07-28-2023 | II-7292

**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

7mm Socket 18mm Socket  
21mm Socket 9/16" Socket  
3/4" Socket



Grinder / Cutoff wheel

21mm Wrench



Electric Drill/Drill Bits  
Up to a 1/2"



**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)

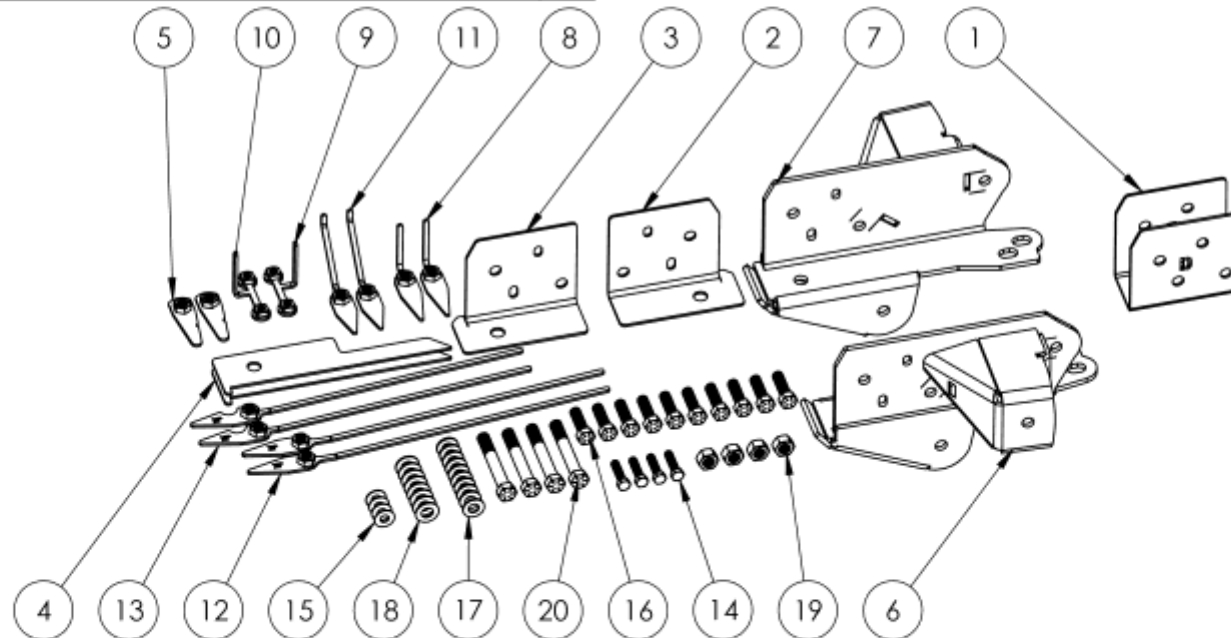
**QUESTIONS:** Any questions or comments about the instructions? Call us at 916-631-8071 M-F 7:00 AM – 5:00 PM PST.

# Section 2: Product Components

NOTES: SEE PAGE 2 FOR BOM

ITEM.	PART NUMBER/ DESCRIPTION	QTY.
1	SS-0288 DRILL TEMPLATE, 4-LINK MOUNT, REAR JK	1
2	SS-0289 SIDE SHIM PLATE, 4-LINK MOUNT, REAR JK-JL	1
3	SS-0289-P SIDE SHIM PLATE, 4-LINK MOUNT, REAR JK-JL	1
4	SS-0290 BOTTOM SHIM PLATE, 4-LINK MOUNT, REAR JK-JL	2
5	WM-5885 WELDMENT, .5-13 FLAG NUT	2
6	WM-5890 WELDMENT, 4-LINK MOUNT, REAR JK-JL	1
7	WM-5890-P WELDMENT, 4-LINK MOUNT, REAR JK-JL	1
8	WM-5891 WELDMENT, FRONT SIDE FLAGE PLATE, 4-LINK MOUNT JK	2
9	WM-5892 WELDMENT, MIDDLE NUT PLATE, 4-LINK MOUNT JK	1
10	WM-5892-P WELDMENT, MIDDLE NUT PLATE, 4-LINK MOUNT JK	1
11	WM-5893 WELDMENT, MIDDLE SIDE FLAG PLATE, 4-LINK MOUNT JK	2
12	WM-5894 WELDMENT, SIDE STICK NUT, 4-LINK MOUNT JK	2
13	WM-5895 WELDMENT, BOTTOM STICK NUT, 4-LINK MOUNT JK	2

HK-7292		
14	FS-06015 HHCS, 0.38-16 x 1.5L STL G8 ZINC, FULL THREAD	4
15	FS-06142 WASHER, 0.41ID X 1.0OD X 0.09TH STL ZINC	4
16	FS-08173 HHCS, 0.5-13 x 1.75L STL G8 ZINC FULL THREAD	10
17	FS-08307 WASHER, 0.53ID X 1.06OD X 0.20TH STL GR8 GOLD ZINC	10
18	FS-09119 WASHER, 0.59ID X 1.16OD 0.10TH STL GOLD ZINC	8
19	FS-09305 TOPLOCK NUT, 0.56-18 X .48H STL GC STL ZINC	4
20	FS-09313 HHCS, 0.56-18 X 4.0L STL GOLD ZINC	4



THE INFORMATION CONTAINED ON THIS DRAWING IS THE EXCLUSIVE PROPERTY OF ARMORED WORKS, LLC. UNAUTHORIZED REPRODUCTION IS PROHIBITED.

**DO NOT SCALE DRAWING**

**PART NUMBER/DESCRIPTION**



7292 4-LINK MOUNT, REAR JK

## Section 3: Installation Instructions



***This is an advanced suspension install for experienced technicians; If you are not competent with advanced automotive mechanics, cutting, drilling, and welding it is recommended to have this system installed by a MetalCloak Authorized Installer.***

**Safety Warning:** *Suspension systems or components that enhance the off-road performance of a vehicle may cause it to handle differently on or off-road than it did from the factory. Care must be taken to maintain control of modified vehicles during sudden maneuvers. Failure to drive the vehicle safely may result in serious injury or death to driver and passengers. MetalCloak recommends always wearing a safety belt, driving safely trying to avoid sudden maneuvers. As with any vehicle maintenance is required to keep it operating safely. Thoroughly inspect your vehicle before and after every off-road use.*

**Installation Warning:** *MetalCloak recommends that certified technicians perform the installations of MetalCloak products. These instructions only cover the installation of our products and may not include factory procedures for disassembly and reassembly of factory components.*

*Read instructions from start to finish and be sure all parts are present before disassembling the vehicle. These instructions are only guidelines for installation and in no way meant as definitive. The installer is responsible to insure that the vehicle is safe for use after performing modifications.*

**Exhaust modifications and CV driveshafts are required for this Long Arm System. Be sure to source these items in order to complete the installation.**

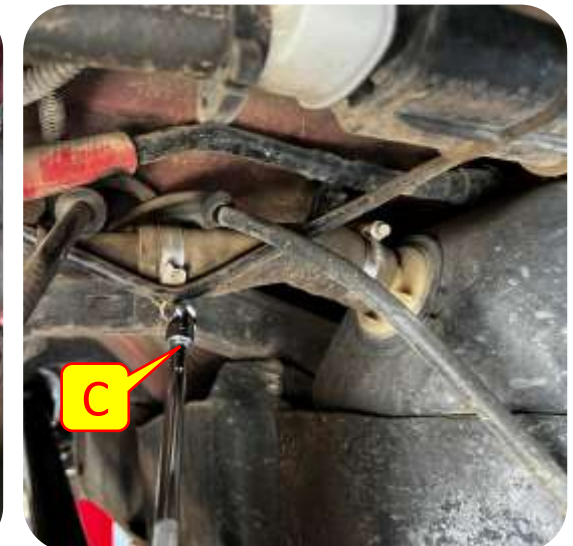
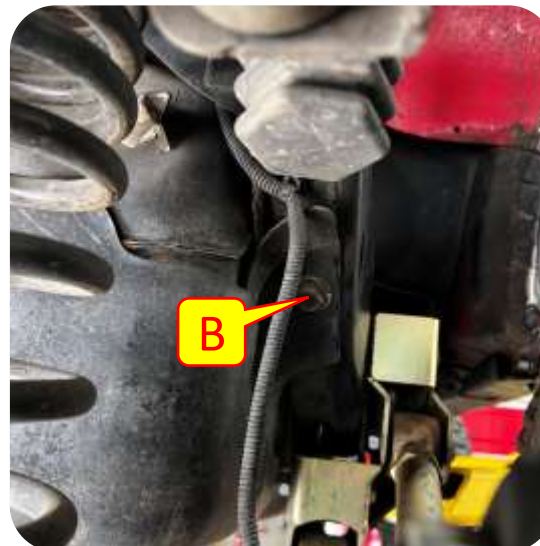
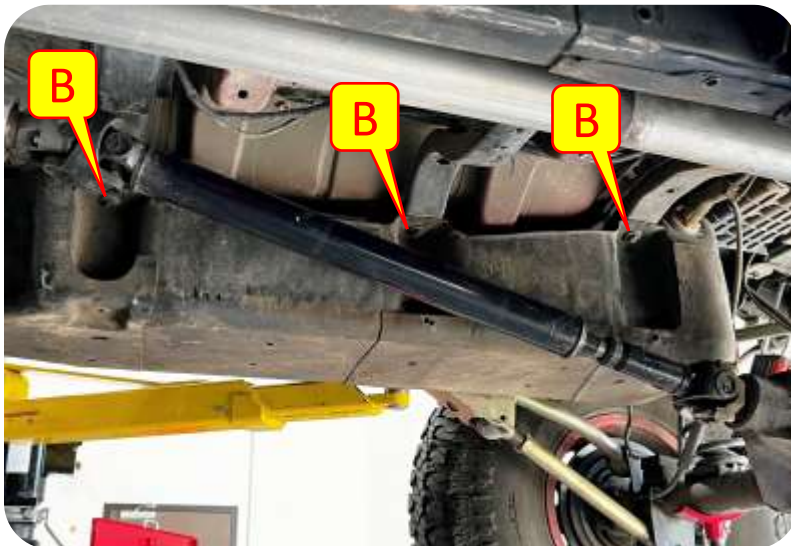
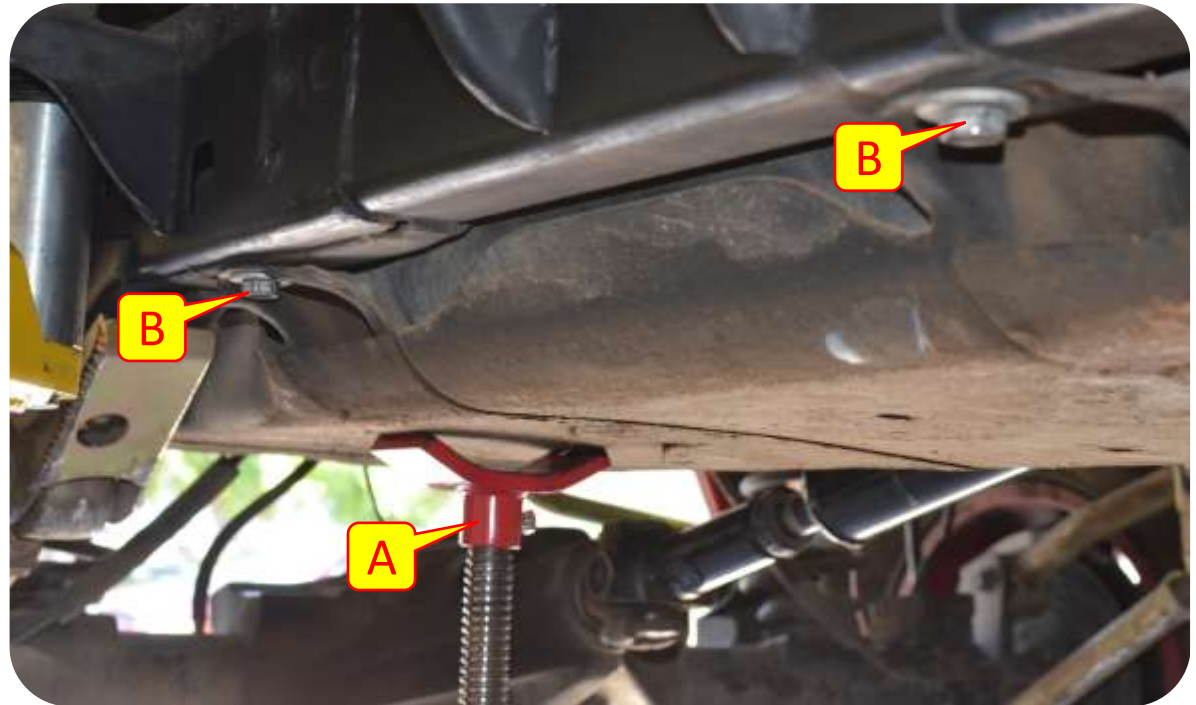
**Important Note:** *MetalCloak does not recommend powder coating your True Dual Rate Coils. The baking process in powder coating can, in some cases, cause the metallurgical properties of the coils to be changed, resulting in the loss of the lift properties of the coils. As such, the process of powder coating the coils will void any warranty stated or implied in relation to the coils.*

**Important Note:** *To install lift components you will need to fully 'droop' your suspension in the front and rear (not at the same time). We strongly recommend that the vehicle be placed on an automotive lift and that all appropriate safety precautions be taken to secure the vehicle while it is off the ground. Always use the necessary axle stands (or equivalent) to support the axle when the suspension components are disconnected for safety, and to ensure the integrity of your suspension system during the installation process.*

## Section 3: Installation Instructions

### Step 1: Remove Gas Tank

- A. Place a jack or something similar under the gas tank to support it.
- B. Remove the bolts holding the gas tank in place with a 18mm socket.
- C. Remove the gas fill neck by loosening the hose clamp using a 7mm socket.



## Section 3: Installation Instructions

### Step 1: Remove Gas Tank

- D. Remove filler breather by pressing on the line fitting. **\*\*be careful not to break as they are not very strong\*\***
- E. Remove sending unit wiring by pressing on the line fitting (*slide the red clip out and depress the tab and pull gently to disconnect electrical*).
- F. Remove the fuel lines in front of the gas tank by removing plastic retaining clip before pressing down on the line fitting. **\*\*Be careful as these lines may be under pressure and release fuel. We recommend using a container to catch any released fuel to prevent mess.\*\***

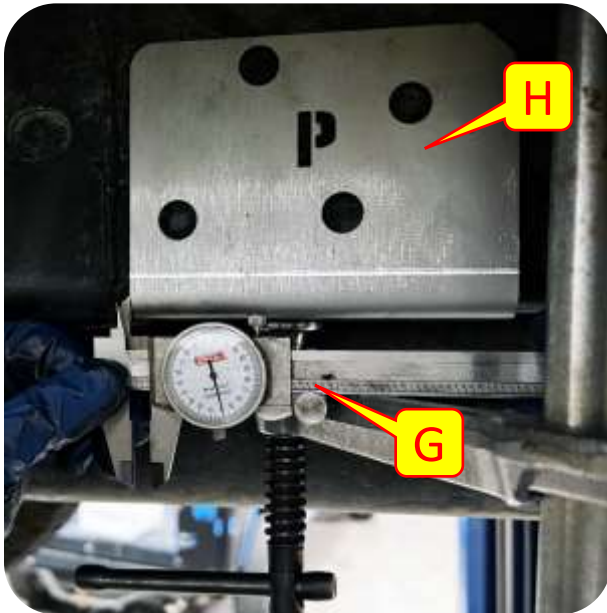
**Important Note:** Move the gas tank at least 25 ft away and make sure the room is well vented as we will be drilling and grinding.



## Section 3: Installation Instructions

### Step 2: Rear Control Arm Bolt On Bracket Installation

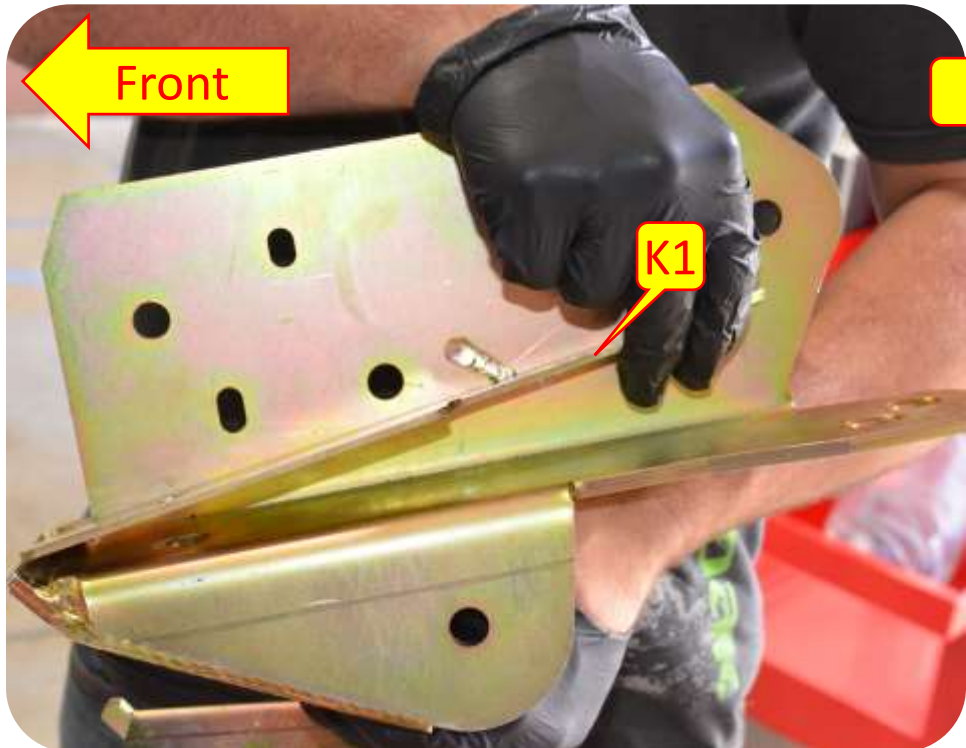
- G. Place the provided drill template onto the frame, measuring a 1/4" away from the front of the seam (*not the weld bead*) and use a c-clamp to hold the drilling template into place. The Chamfer at the top of the template should point to the front of the vehicle close to the body mount. The "P" cut out on the template should be facing outward when drilling the passenger side and the "D" cut out should be facing outward when drilling the driver side.
- H. Mark the holes for drilling.
- I. Center punch the marked holes.
- J. Starting with a smaller drill bit, drill out the four marked locations on the side and one marked location on the bottom and work your way up until you have drilled the locations out to a 1/2". MetalCloak recommends painting any exposed metal to prevent rust.



## Section 3: Installation Instructions

### Step 2: Rear Control Arm Bolt On Bracket Installation

K. Place the control arm bracket shims onto the inside of the rear control arm bracket.

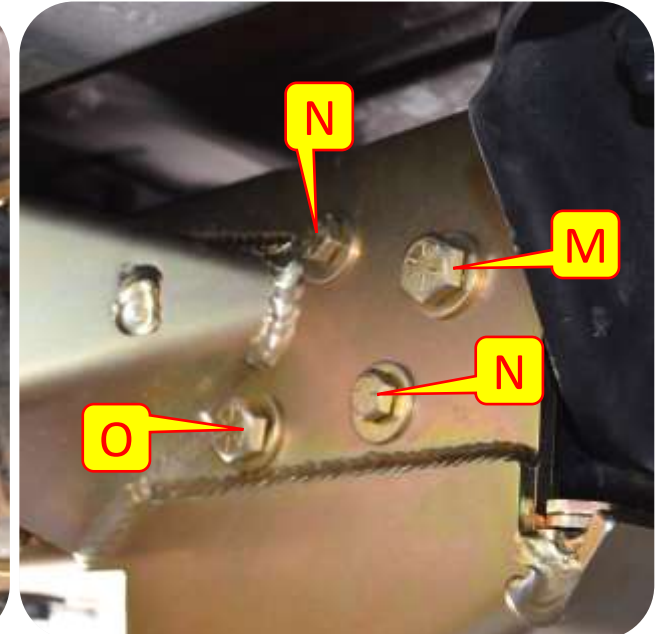




## Section 3: Installation Instructions

### Step 2: Rear Control Arm Bolt On Bracket Installation

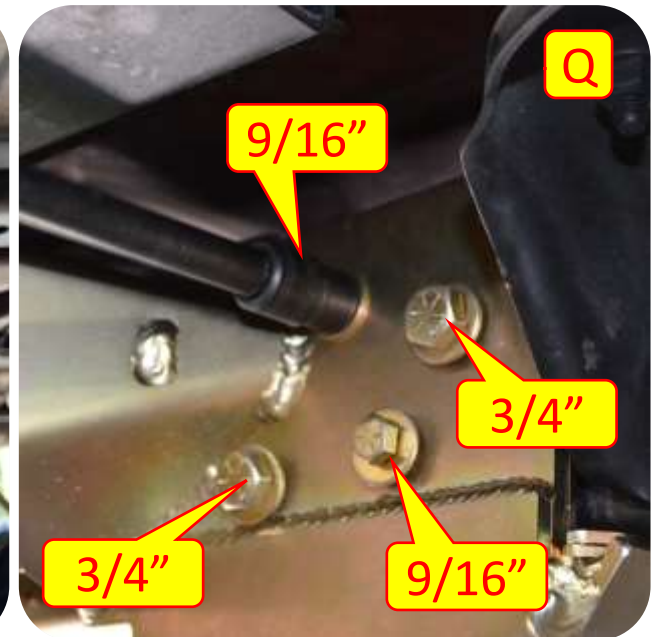
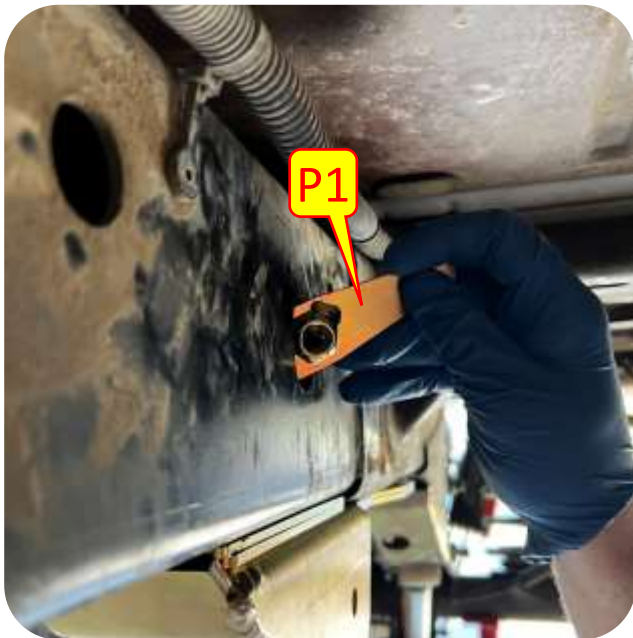
- L. Using the factory 18mm bolt, line up the long arm frame bracket and install loosely (*passenger side only*).
- M. Install the WM-5893 (BOM #8) flag nut through the hole on the inside of the frame and install the provided 1/2" (3/4" head) bolt into front most hole into flag nut and hand tighten.
- N. Install the WM-5892 (BOM #9/#10) flag nut through the hole on the inside of the frame and install the 2x 3/8" (9/16" head) bolt into middle set holes and into flag nut and hand tighten.
- O. Install the WM-5891 (BOM #11) flag nut through the hole on the inside of the frame and install 1/2" (3/4" head) bolt into rear most hole into flag nut and hand tighten.



## Section 3: Installation Instructions

### Step 2: Rear Control Arm Bolt On Bracket Installation

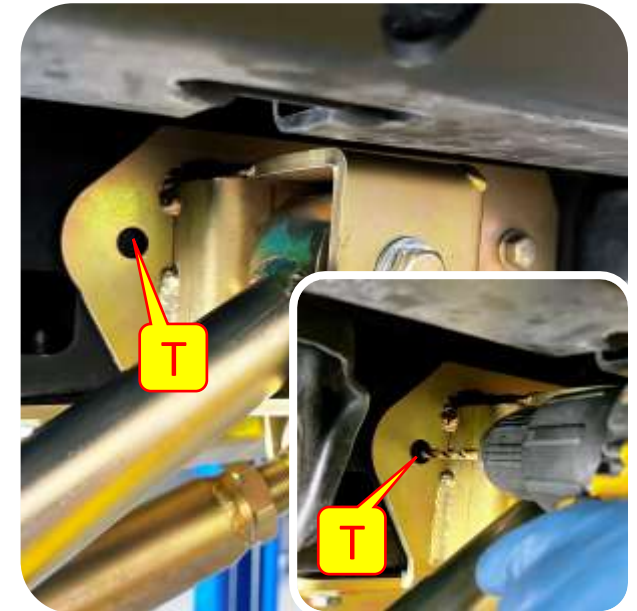
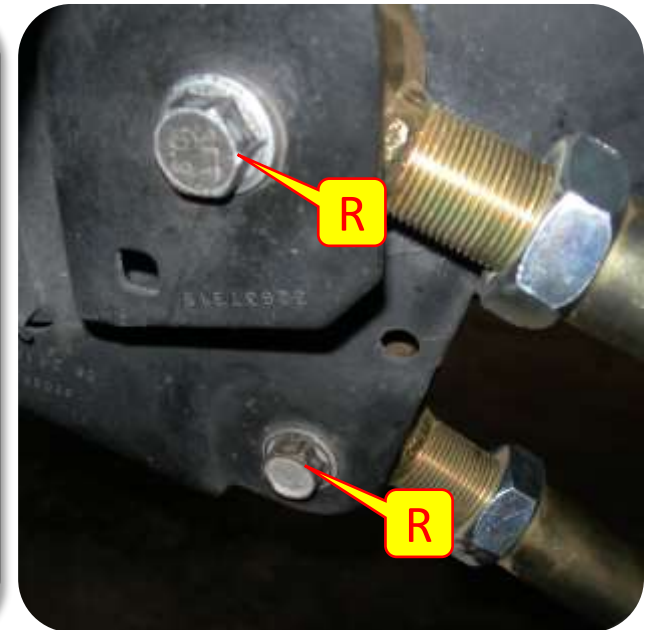
- P. Insert straight flag nut (*BOM #5*) into opening on the inside of the frame and install the 1/2" (3/4" head) bolt into front bottom hole into flag nut.
- Q. Tighten the bracket hardware using a 3/4" socket for the 1/2" hardware and a 9/16" socket for the 3/8" hardware.



## Section 3: Installation Instructions

### Step 2: Rear Control Arm Bolt On Bracket Installation

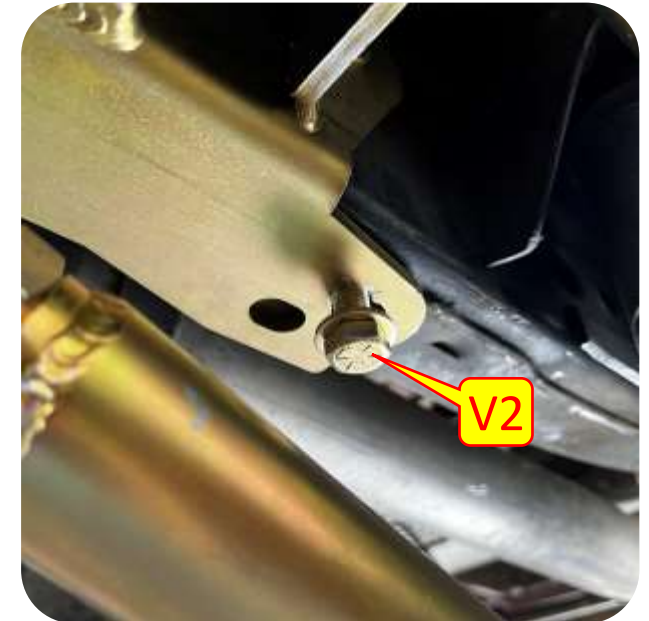
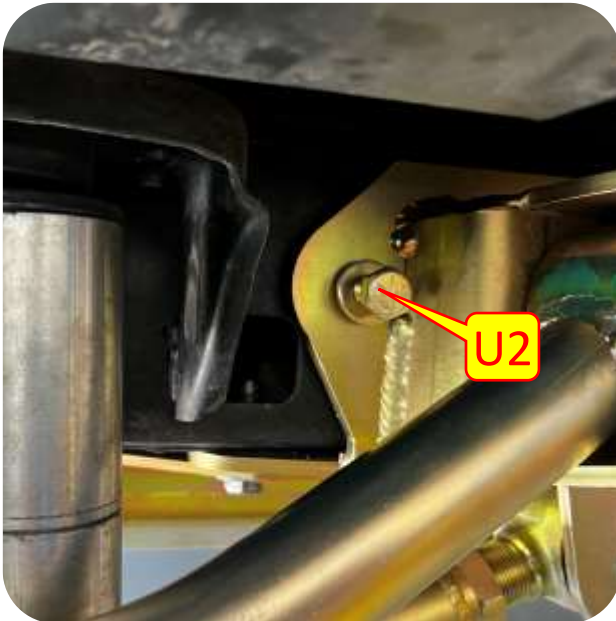
- R. Remove the rear control arms using a 21mm socket and wrench.
- S. Remove the existing rear control arm brackets from the frame, clean the frame and paint the left-over exposed metal.
- T. Drill out the remaining hole on the side rear of the control arm bracket, using the bracket as the reference (*On the driver side only you will also be drilling the hole at the bottom rear of the bracket marked JK*).



## Section 3: Installation Instructions

### Step 2: Rear Control Arm Bolt On Bracket Installation

- U. Install the longer flag nut WM-5894 (BOM#12) from the rear, using the hole made accessible from the control arm mounts that were just removed and install the provided 1/2 (3/4" head) bolt in the side of the rear mount, hole just drilled and tighten with a 3/4" socket.
- V. **Driver Side Only:** Install the long flag nut WM-5895 (BOM#13) from the rear, using the hole made accessible from the control arm mounts that were just removed earlier and install the provided 1/2" (3/4" head) bolt in the bottom of the rear mount, hole just drilled. Tighten with a 3/4" socket.



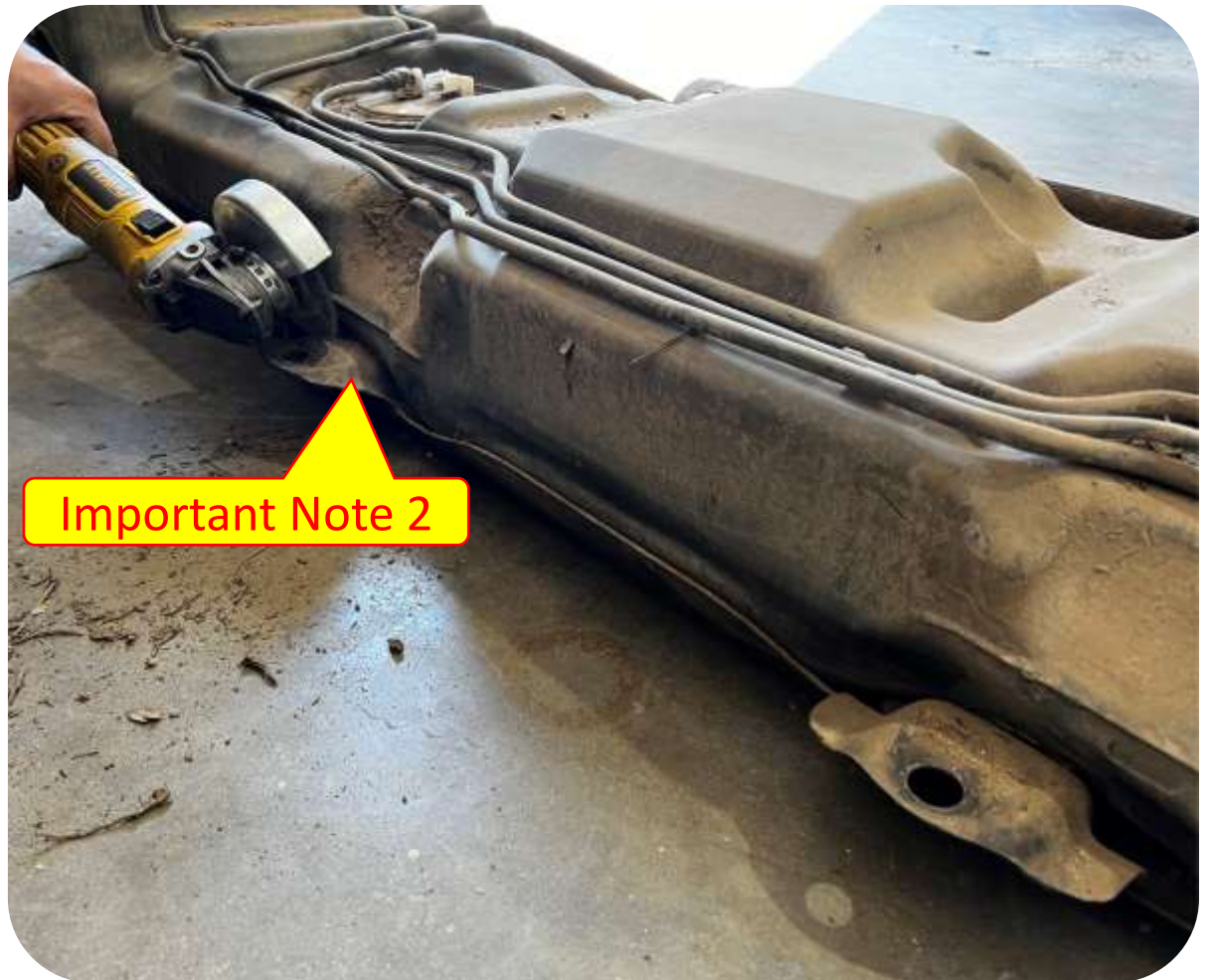
## Section 3: Installation Instructions



### Step 3: Important Notes

**Important Note:** If you're installing the rear long arm kit with our UnderCloak system. Check to see if the UnderCloak system will mount without modification. If the UnderCloak does not fit the gas tank skid plate will need to be modified, you will need to notch out the gas tank skid plate and reinstall the skid plate (See Last Page for Instructions).

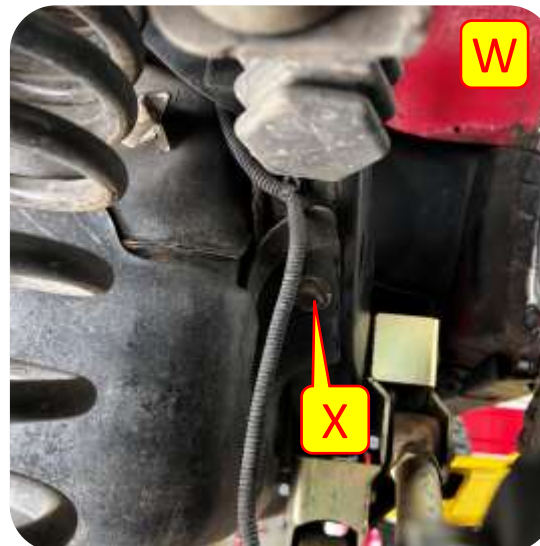
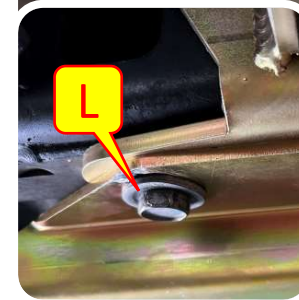
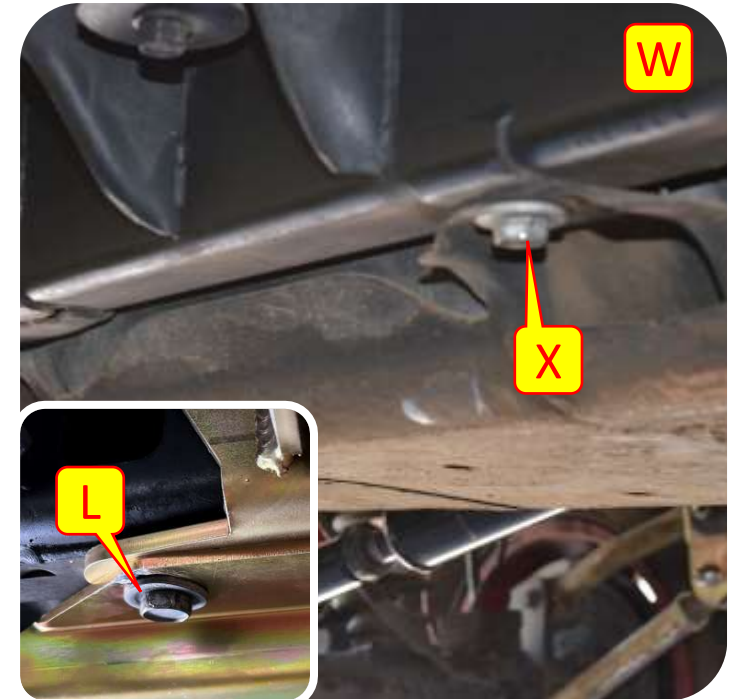
**Important Note 2:** Cut off the gas tank mount as shown. Make sure there is plenty of ventilation before cutting the mount off.



## Section 3: Installation Instructions

### Step 4: Reinstall the Gas Tank

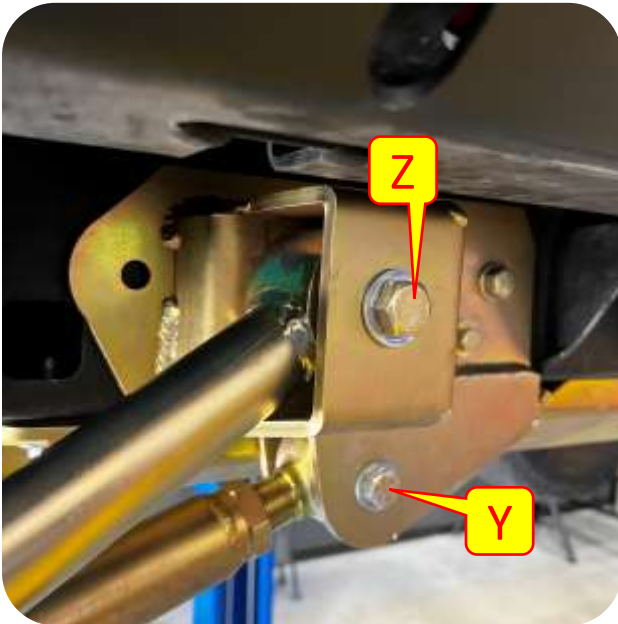
- W. Reinstall the gas tank, reconnect the fuel lines, breather tubes, Evap Canister hose, fuel tubes, and bolts (*reverse steps B-F*) and install the MetalCloak fuel skid if previously equipped.
- X. Tighten the Gas tank bolts using an 18mm socket. **DO NOT forget the bolt at the rear of the passenger side mount installed in step L.** Tighten with a 18mm socket.



## Section 3: Installation Instructions

### Step 5: Install Long Arms

- Y. Install your lower control arms.
- Z. Install your upper control arms.
- AA. Repeat steps on the driver side.



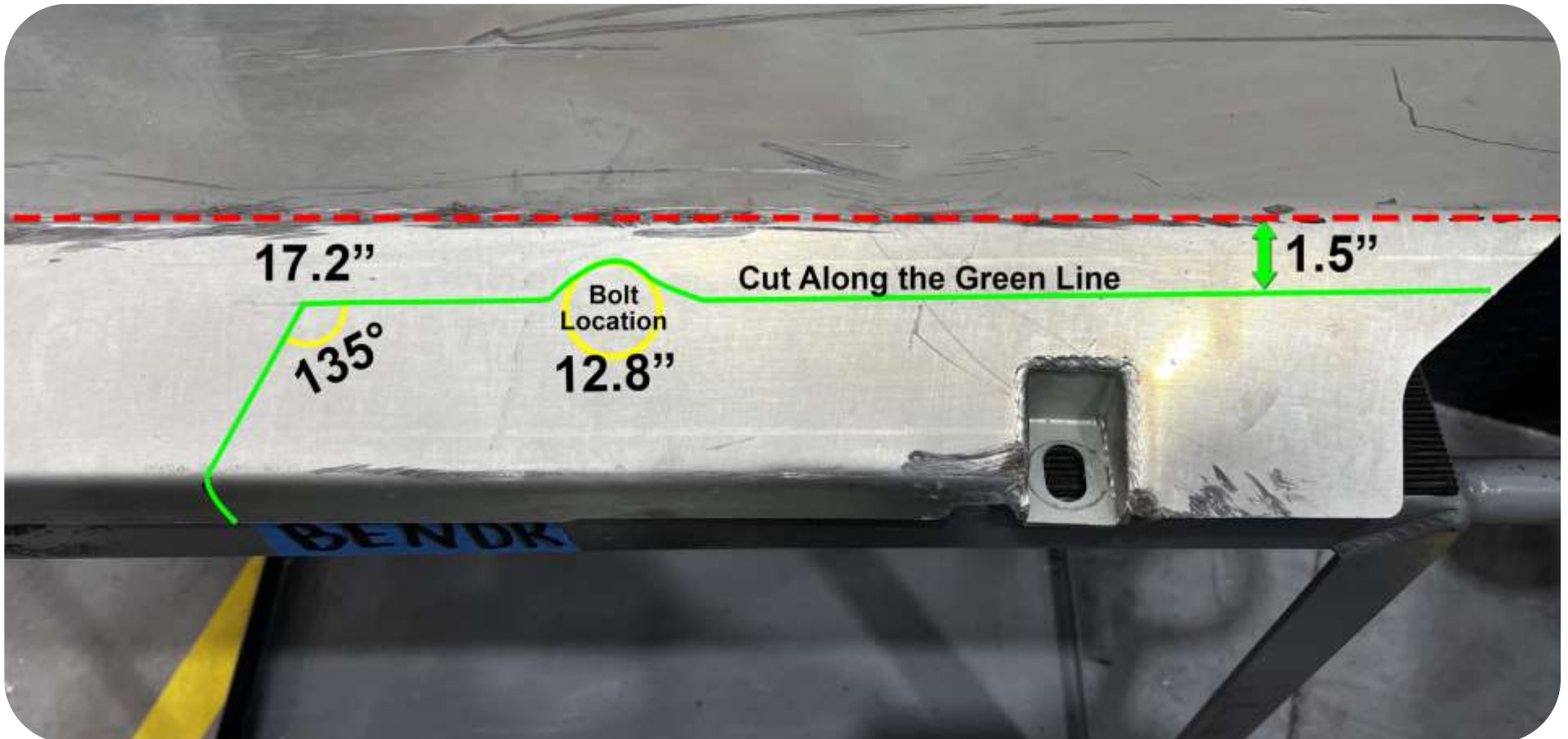
## Section 3: Installation Instructions



### Step 6: Modifying the UnderCloak Gas Tank Skid

**The Following Step is ONLY if you have the MetalCloak UnderCloak System that needs to be modified.**

To modify your UnderCloak Gas Tank Skid Plate measure 1.5" up from the bend line to the cut out for factory arms. from this point measure forward 17.2" in parallels to the bend line (dash line) and then up to the edge of the skid at a 135 deg angle. measure forward 12.8" and draw a circle approximately 1.5" diameter this is to clear the hardware on the long arm mount. Using a cutoff wheel cut along the line (green line). These Measurements are starting points you may need to modify your skid slightly to fit properly.





## Section 3: REAR SUSPENSION Installation Instructions



### Step 7: Rear Pinion Angle Adjustment *(if required)*

- BB. The Control Arm lengths given are recommended as starting points **ONLY**. Your vehicle will tell you if the pinion needs to be adjusted. When you drive the Jeep for the first time after installing the lift or after installing a new drive shaft, if you notice rear drive line vibrations, pay attention to when the vibrations occur.
- CC. If you notice vibrations during acceleration this would indicate that your pinion is too high. You can correct this condition by adjusting your rear upper control arms to a shorter length or by increasing the length of your rear lower control arms.
- DD. If you notice Vibrations during Deceleration this would indicate that your pinion is too low. You can correct this condition by increasing the length of your rear upper control arms, or by adjusting the rear lower arms to a shorter length.