



PRODUCT: JT Leveling Lift Kit, Stock Shock Edition

REV: C | 04-04-2024 | II-A3125

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!

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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. Be sure to use metric on metric and SAE on SAE.



Socket & Ratchet Wrench

Set of SAE & Metric Sockets & Wrenches



Die Grinder

Metric Hex Sockets and/or Hex (Allen) Wrenches



Electric Drill
1/8" up to 1/2" Drill Bits

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 3: Installation Instructions

Important Note: MetalCloak recommends replacing the factory drive shaft. The factory drive shaft binds at transfer case side and the factory drive shaft is too short for additional travel. An aftermarket drive shaft clears t-case and is optimal for maximum travel

Factory Drive Shaft T-Case Bind



Factory Drive Shaft Misalignment



Aftermarket Drive Shaft Correction



Section 3: Installation Instructions



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

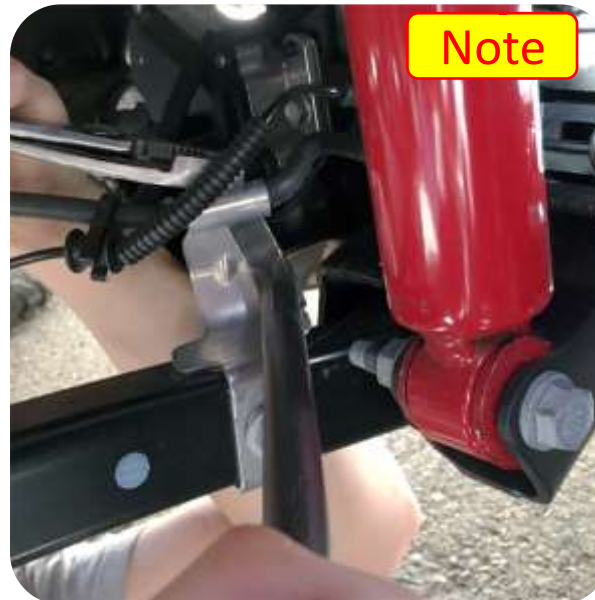
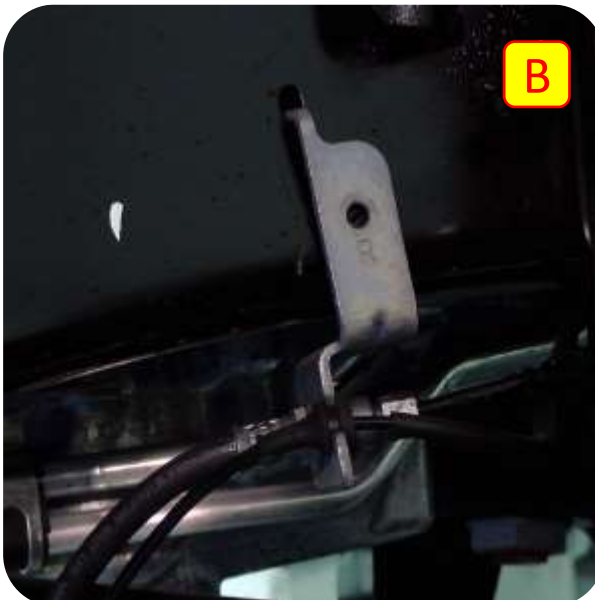


Step 1: Remove Stock Components

- A. Disconnect front sway bar links using a 18MM wrench and 6MM Allen Wrench. **Save all Hardware**
- B. Using a 10MM Socket disconnect the brake line brackets that is attached to the frame. **Save all Hardware.**

Important Note: The brake line on the lower front control arms (drivers and passenger side) must be removed from the bracket. It may be pried out or cut; be VERY careful not to damage the brake line!!!

Important Note: To help prevent strain on the brake lines MetalCloak recommends clipping all zip ties attached to the brake lines.

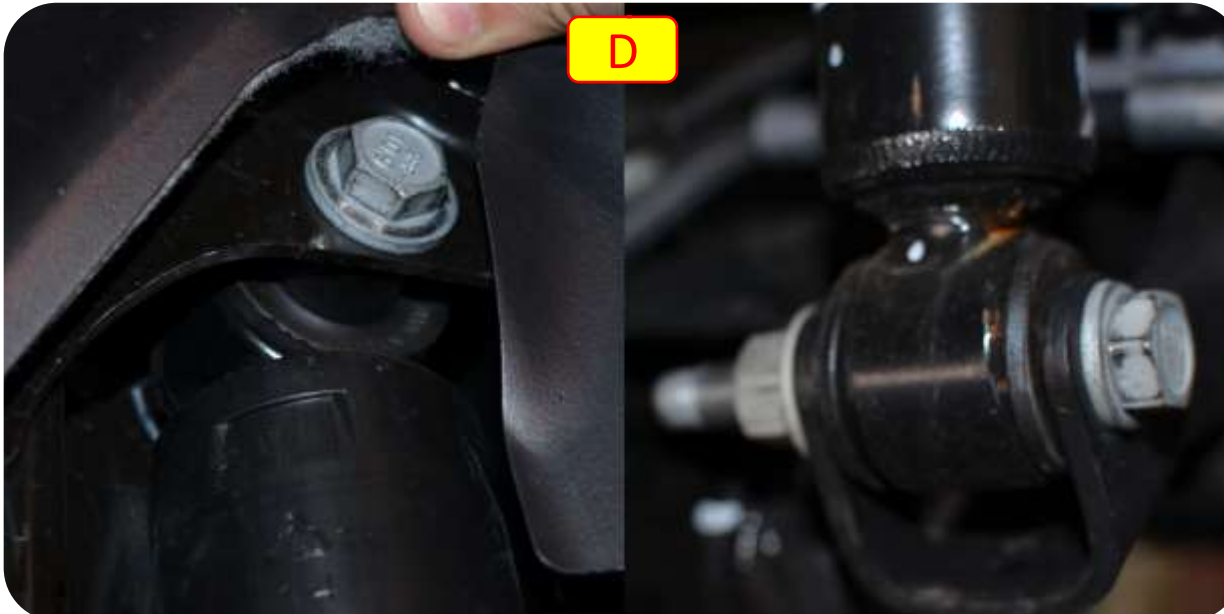


Section 3: Installation Instructions

Step 1: Remove Stock Components

Important Note: Disconnect any electronics attached to the axle (Locker plug, Front axle disconnect plug, etc.)

- C. Using a 21MM Socket disconnect the stock track bar. Save all hardware.
- D. Use a 18MM Socket and Wrench to remove the shocks. Save all hardware
- E. Remove stock springs, and any spacers that have been used if vehicle has been previously lifted.



Section 3: Installation Instructions



Step 1: Remove Stock Components

F. Disconnect the upper control arm heat shield on both sides at the frame using a 10MM Socket. Save heat shields and all hardware.



Section 3: Installation Instructions



Step 2: Install Control Arms

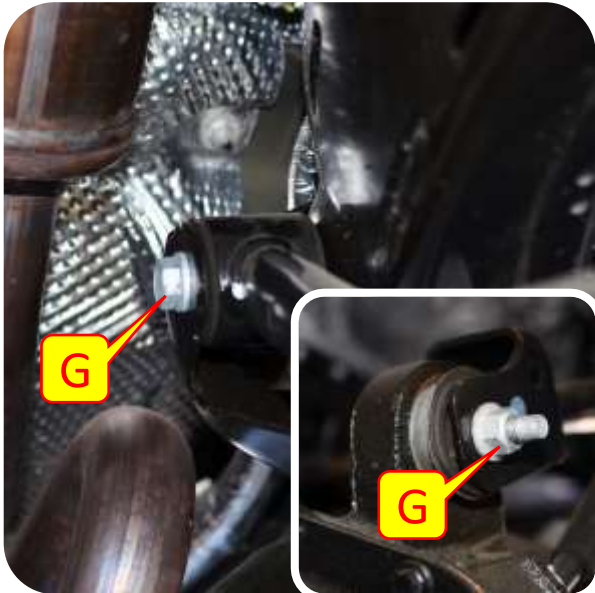
Important Note: *These Control Arm Specifications are Just Starting Points measured eye to eye. **ALL JEEPS ARE DIFFERENT.** MetalCloak Recommends Seeing a Suspension Specialist for Correct Control Arm Lengths for **YOUR** Jeep.*

		Front Control Arms		Rear Control Arms	
	Castor Angle	Upper	Lower	Upper	Lower
Factory Control Arms	Stock	20 1/4"	24"	17 1/2"	20"
MetalCloak 3.5" Lift	6 Degrees	19 3/4"	24"	17 1/2"	20 1/8"

Step 2: Install Control Arms

Important Note: *MetalCloak Recommends installing one control arm at a time. Loosening but not removing all control arm bolts first will make removal easier.*

- G. Use a 24mm Socket & Wrench to remove the stock bolts from the front lower control arms. **Save all hardware.**

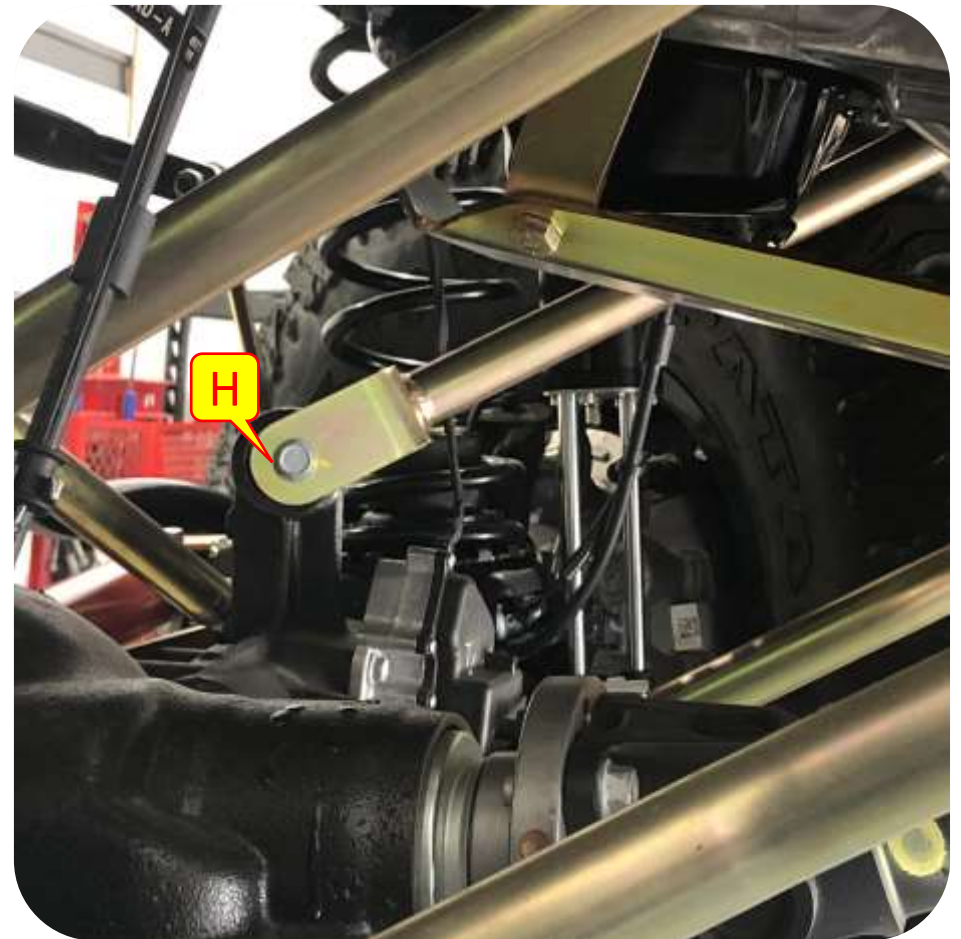
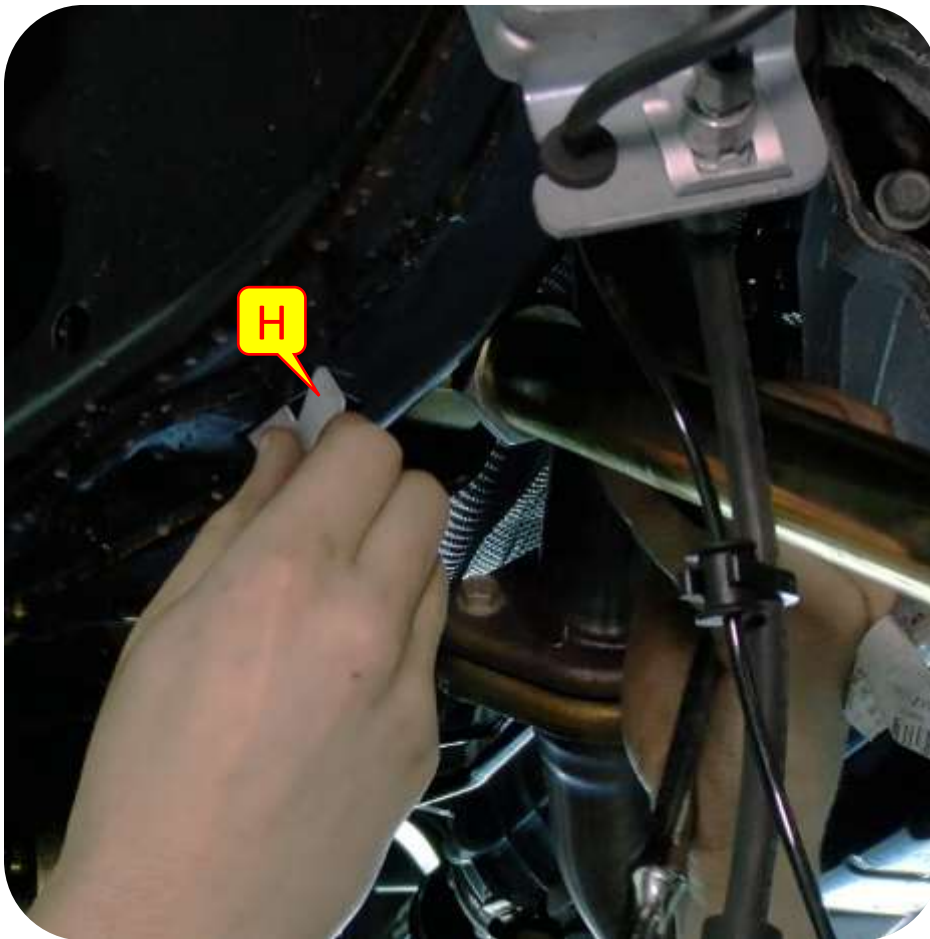


Section 3: Installation Instructions



Step 2: Install Control Arms

H. Install the MetalCloak Front Upper Control Arm using the stock hardware.






Section 3: Installation Instructions



Coil Isolator Information Guide

Important Note: MetalCloak's suspension systems include a unique coil design that utilizes upper isolators to position the coil. The following table will help you identify where to install the isolators included with your kit. You must remove the stock isolators before installing the provided coil isolators. If you have any questions give us a call at 916-631-8071.

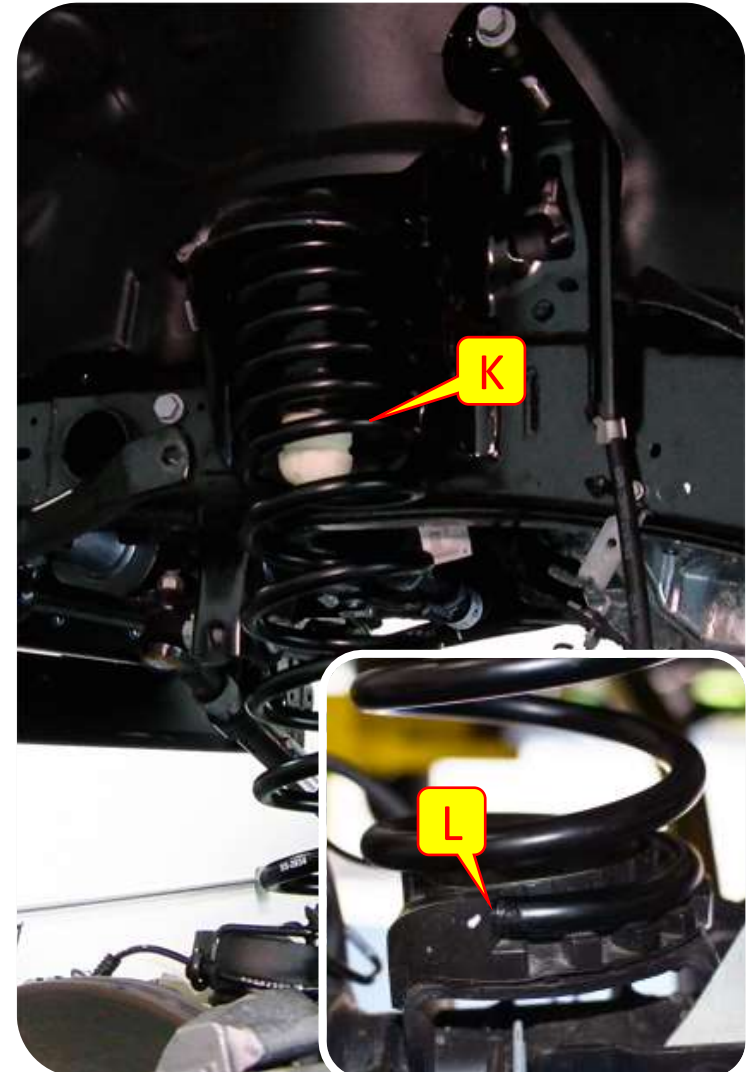
Coil Isolators		
Tall Isolator	Jeep Model	Installation Locations
	JL Wrangler 3.6L Non-E Torque	Upper Front Passenger
	JL Wrangler Diesel	Upper Front Driver & Passenger
	JT Gladiator Diesel	Upper Front Driver & Passenger
Short Isolator	Jeep Model	Installation Locations
	JK Wrangler (All Models)	Upper Front Driver & Passenger
	JL Wrangler 3.6L Non-E Torque	Upper Front Driver
	JL Wrangler 3.6L E-Torque	Upper Front Driver & Passenger
	JL Wrangler Turbo	Upper Front Driver & Passenger
	JT Gladiator 3.6L Motor	Upper Front Driver & Passenger
Rear Isolator	Jeep Model	Installation Locations
	JL Wrangler 3.6L Non-E Torque	Upper Rear Passenger

Section 3: Installation Instructions

Step 3: Install Coils and Bump Stops

- I. Using a 10mm socket disconnect the bracket from the spring perch on the axle.
- J. Drill out the center hole using a step bit or you can start your hole with a smaller drill bit and work your way up to a 1/2".
- K. Install the front coils. Make sure the tightly wound coils are oriented upward.
- L. Slip the bottom of the coil onto the coil base on the axle. Rotate the coil until it is seated properly on the coil base.

Important Note: Droop your suspension to gain access to the spring perch. Be sure to watch the ABS lines so they do not get over extended and break.



Important Note: If the axle does not droop enough to allow the coil to be put in place a coil compressor can be used to compress the coil to allow fitment.

Section 3: Installation Instructions

Step 3: Install Coils and Bump Stops

Important Note: Your individual build may require an addition or removal of bump stop pucks for your tire size fitment.

- M. Select the appropriate Screw length so that the threads stick out of the bottom Disks approximately $\frac{3}{4}$ ". Assemble your bump stops inside the installed coil by feeding the $\frac{1}{2}$ " Countersunk Screw through the Cover Plate, and then threading through the Bump Stop Disks. The center hole in the Disk is intentionally small to create the most rigid assembly possible after installation.
- N. The $\frac{1}{2}$ " Screw is backed by a $\frac{1}{2}$ " Flanged Nylon Lock Nut. Install the nut and tighten the hardware using a $\frac{5}{16}$ " Hex Key Socket or Allen Wrench and a $\frac{3}{4}$ " Wrench. Tighten until everything is tight; the hardware will not bottom out, but instead will begin to compress the Disks.

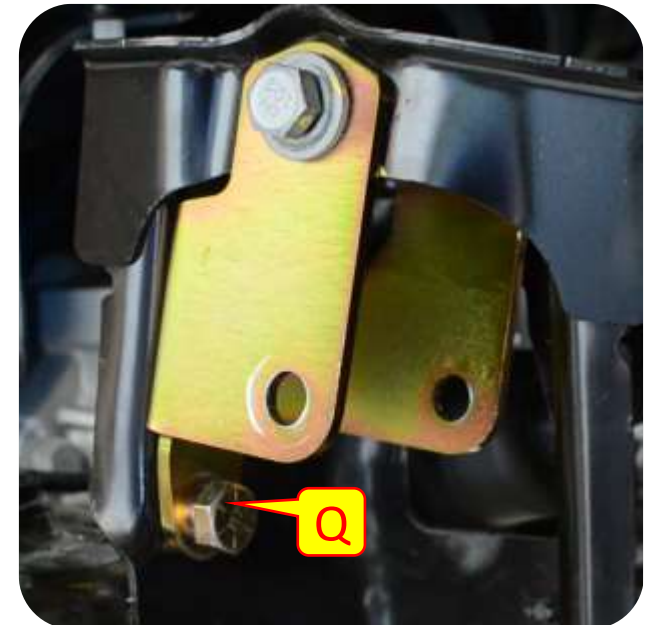
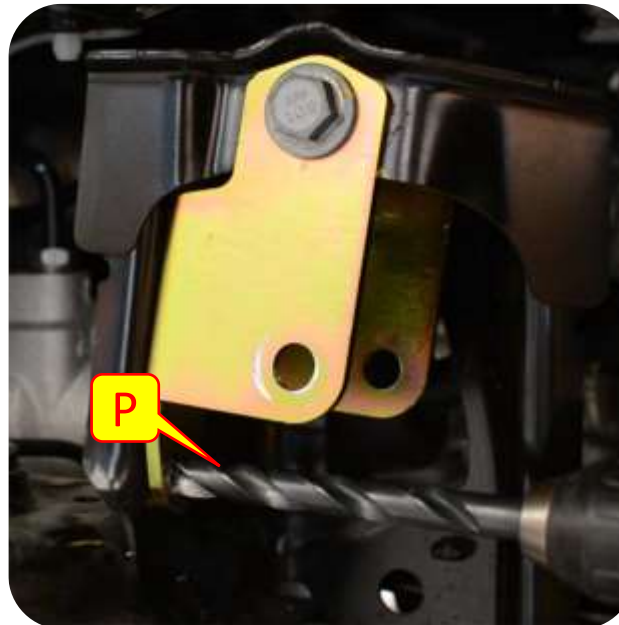
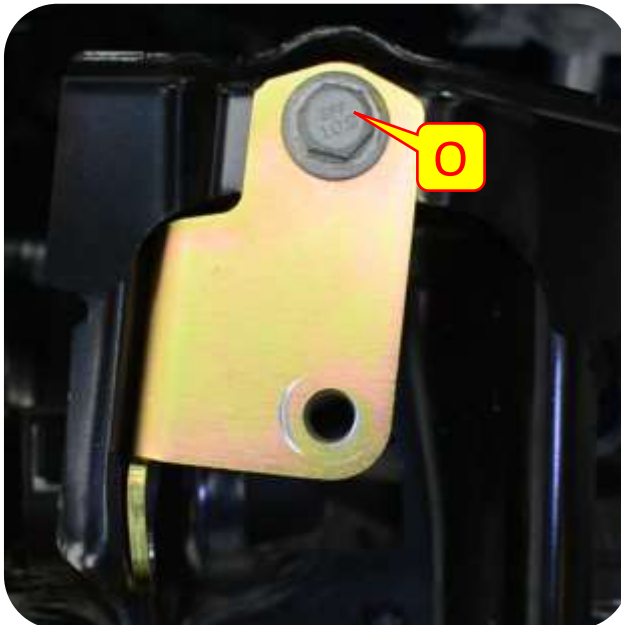


Section 3: Front Shock Installation Instructions



Step 4: Install Upper Shock Mounts

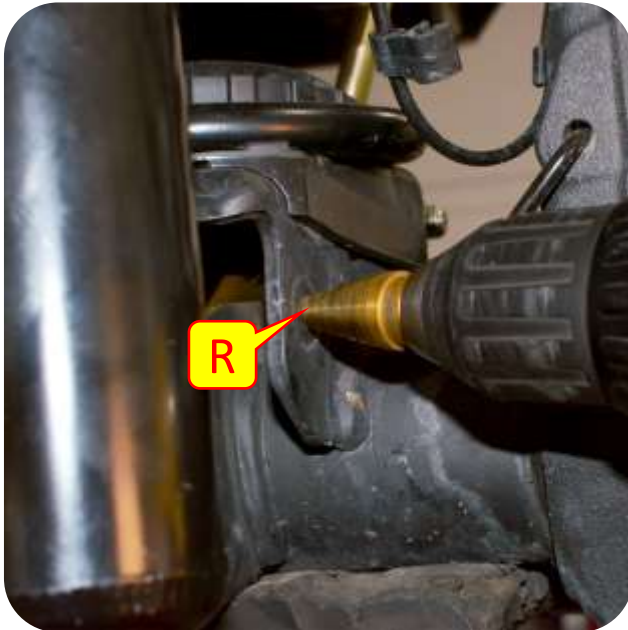
- O. Place the shock bracket into place aligning the top bracket hole to the factory location and install the stock bolt into the top hole of the bracket and tighten with the side hole against the coil bucket.
- P. Using a 1/2" drill bit drill out the side hole. Once the hole is drilled loosen the top shock bracket bolt.
- Q. Using a 3/4 socket and wrench tighten down the side bolt.



Section 3: Installation Instructions

Step 5: Install Outboard Shock Spacer & Shocks

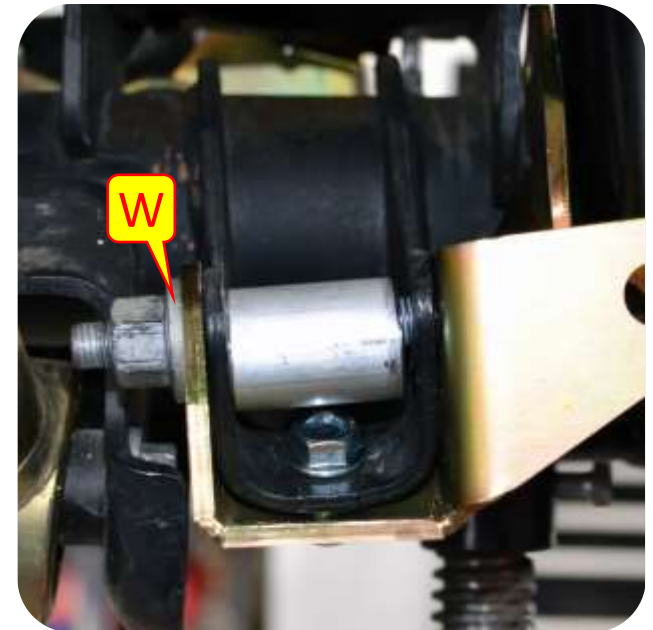
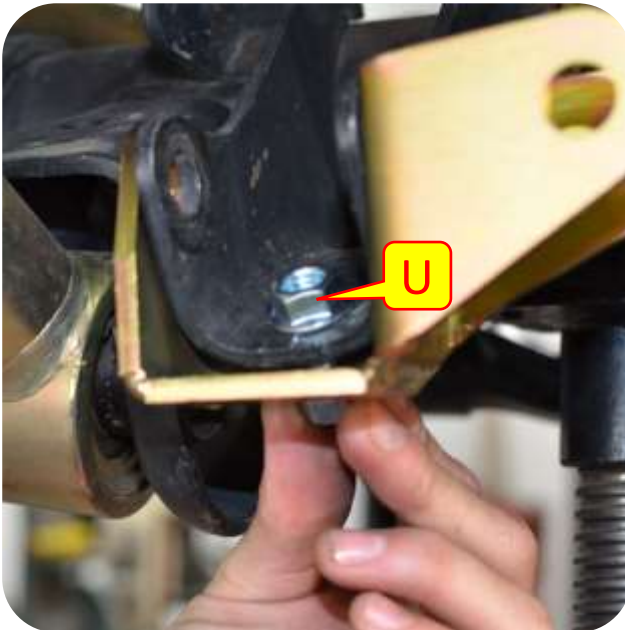
- R. Drill out the brake line bracket hole using a 3/8" drill bit or step bit.
- S. Drill out the hole located on the bottom of the stock shock mount using a 3/8" drill bit or step bit.
- T. Place the outboard spacer on the stock shock mount so it aligns with the pre-existing holes.



Section 3: Installation Instructions

Step 5: Install Outboard Shock Spacer & Shocks

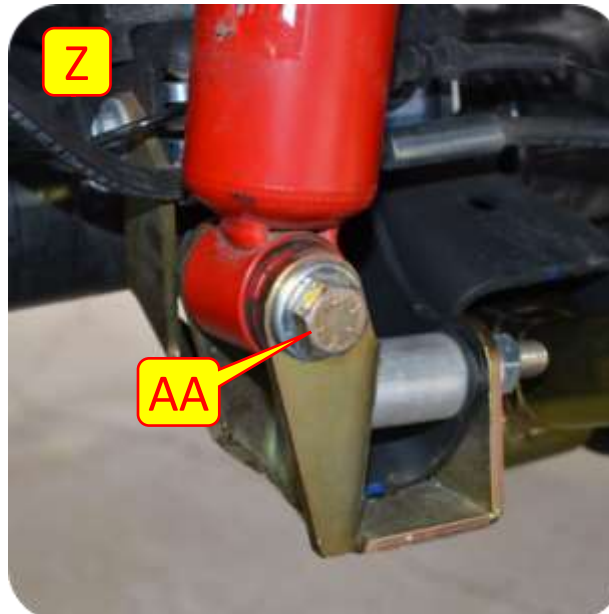
- U. Install the lower shock mount bolt hand tight.
- V. Install the provided bolt and nut into the brake line bracket mount location hand tight.
- W. Install the spacer and stock hardware into the stock location and tighten using a 18mm socket and wrench.
- X. Using a 14mm wrench and socket tighten the two remaining bolts.



Section 3: Installation Instructions

Step 5: Install Outboard Shock Spacer & Shocks

- Y. Install the shock
- Z. Align the shock with the outboard shock mount.
- AA. Install the shock with the provided 1/2" bolt and flange lock nut.
- BB. Using a 19mm wrench and socket tighten the 1/2" bolt and flange lock nut.
- CC. Secure the brake line bracket back on to the coil perch with a zip tie.



Section 3: Installation Instructions



Step 6: Install Sway Bar Quick Disconnects (Option 1)

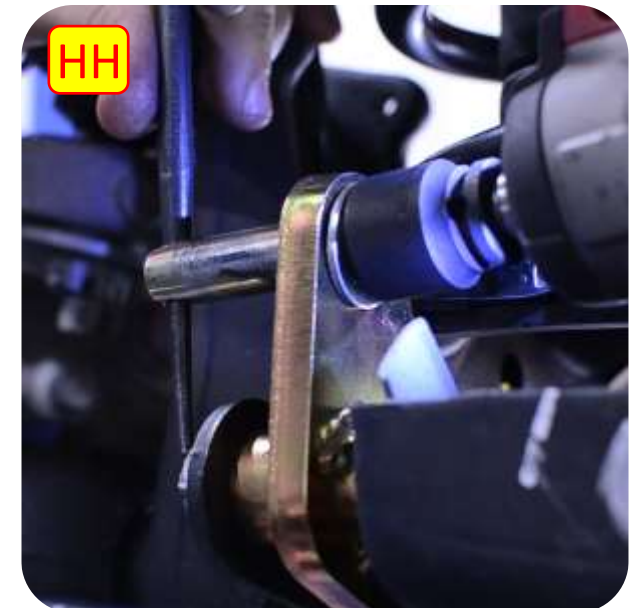
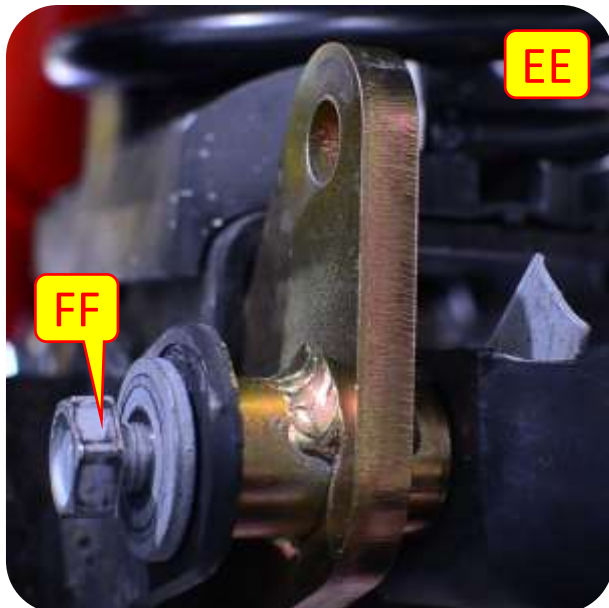
DD. Disconnect the front sway bar links using a 18mm wrench and a 6mm allen wrench. **Save Hardware.**

EE. On the passenger side install the Sway bar rise bracket at the axle using the stock bolt and flag nut.

FF. Tighten the bolt with an 18mm socket.

GG. Install the Quick Disconnect pin, washer, and nut to the top hole located on the sway bar rise bracket.

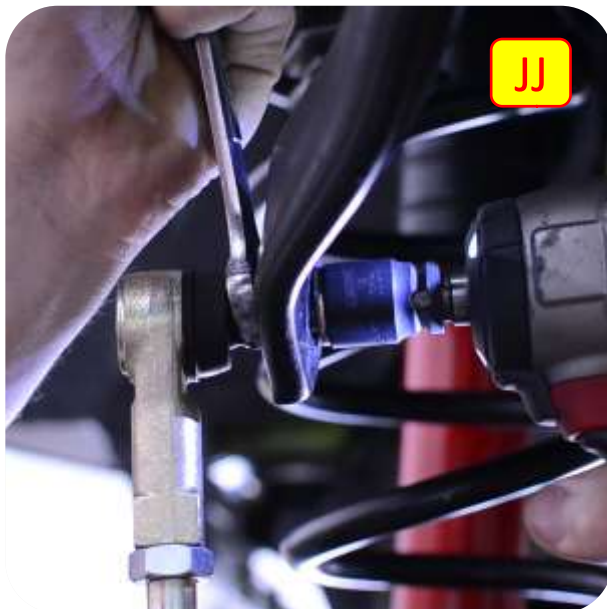
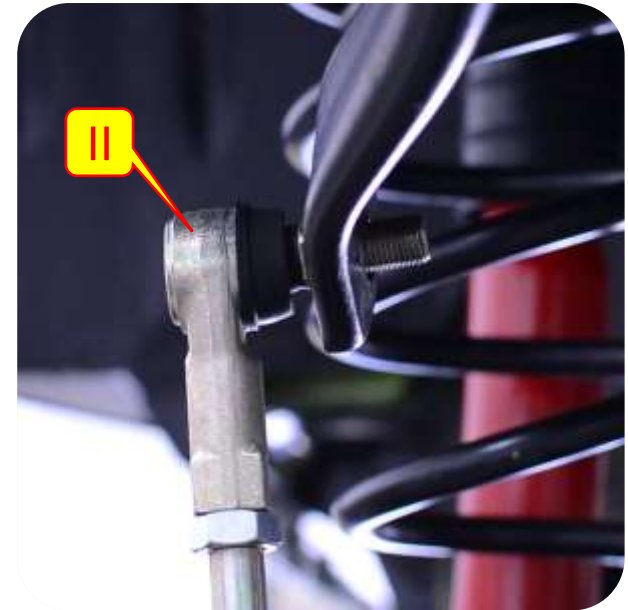
HH. Tighten the disconnect pin using a 3/4" socket and hold the pin in place using a small screwdriver or punch.



Section 3: Installation Instructions

Step 6: Install Sway Bar Quick Disconnects (Option 1)

- II. Install the shorter sway bar disconnect to the sway bar.
- JJ. Using a 15mm socket and a 9/16" wrench tighten the sway bar disconnect to the sway bar.
- KK. Install the lower end of the quick disconnect to the sway bar rise pin.
- LL. Install the hitch pin into the quick disconnect pin.



Section 3: Installation Instructions



Step 6: Install Sway Bar Quick Disconnects (Option 1)

MM. On the driver side install the longer sway bar disconnect to the sway bar.

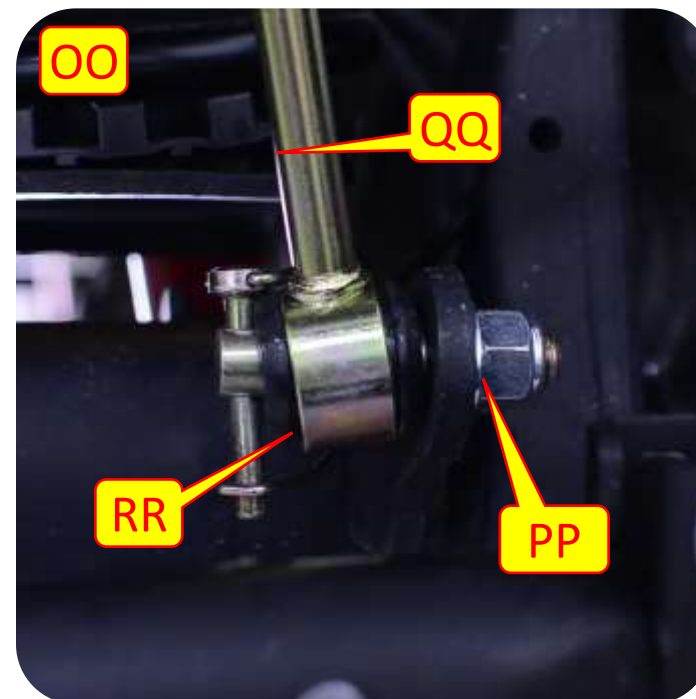
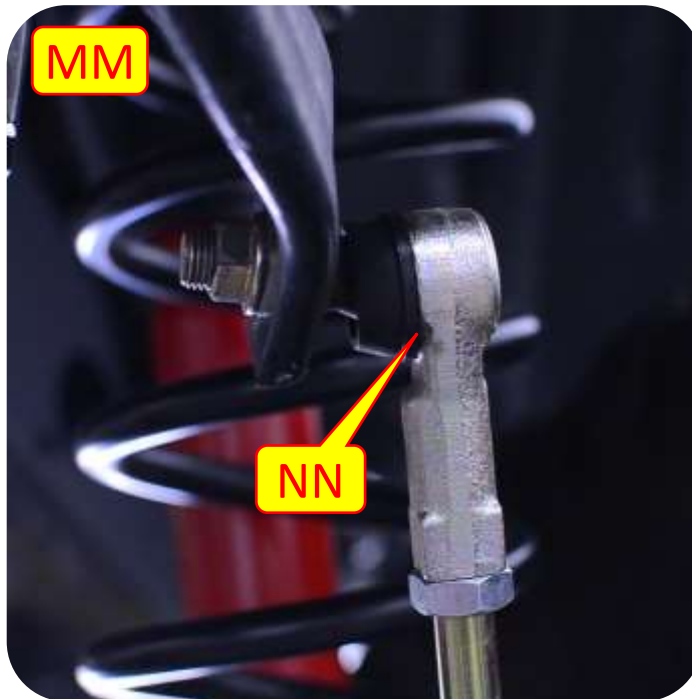
NN. Using a 15mm socket and a 9/16" wrench tighten the sway bar disconnect to the sway bar.

OO. Install the Quick Disconnect pin, washer, and nut to the stock disconnect location *(Make sure the pin is facing inward)*.

PP. Tighten the disconnect pin using a 3/4" socket and hold the pin in place using a small screwdriver or punch.

QQ. Install the lower end of the quick disconnect to the sway bar rise pin.

RR. Install the hitch pin into the quick disconnect pin.

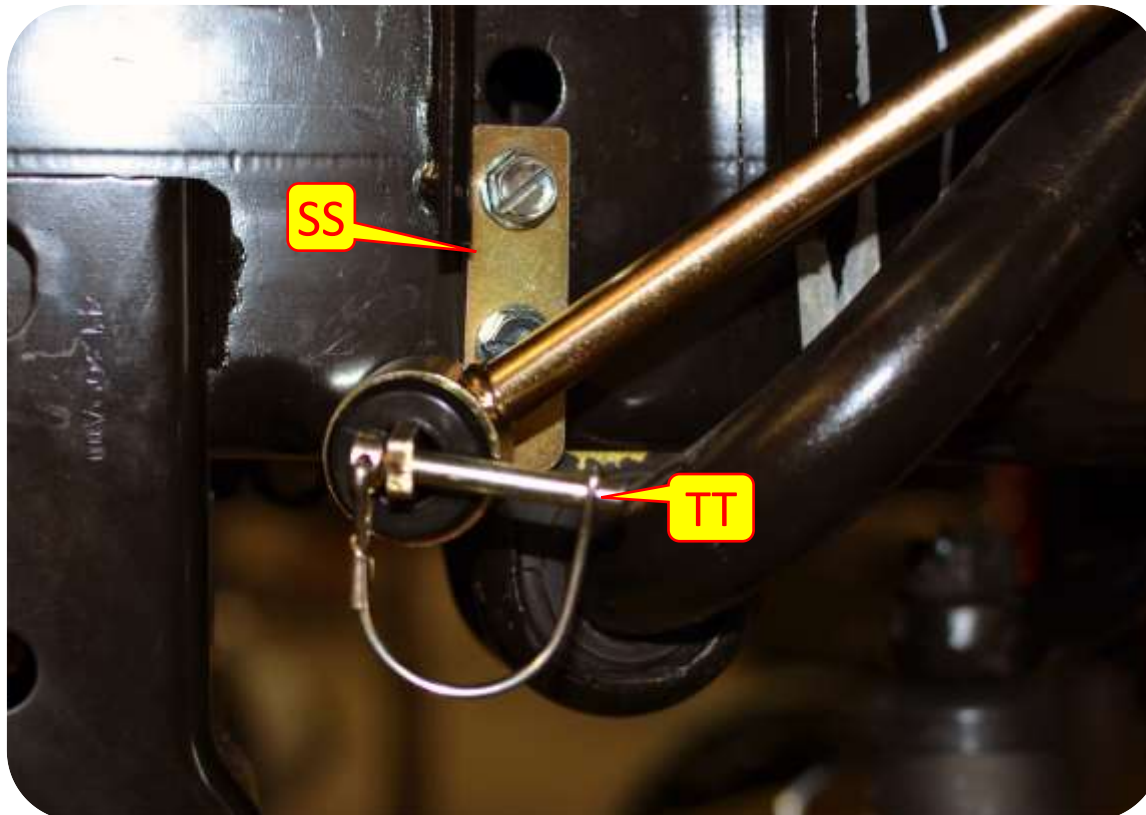


Section 3: Installation Instructions



Step 6: Install Sway Bar Quick Disconnects (Option 1)

- SS. Disconnect the links and align the provided brackets in the desired location. There is no exact location; the goal is simply to keep the sway bar clear of the tires when stowed. Mark the locations and drill with a 9/32" drill bit. Install the self-tapping screws through the bracket using a 1/2" wrench.
- TT. Re-attach the links to the lower pins and install the hitch pins. These may be snug against the rubber bushing, so don't be surprised if you need to use a little muscle to push them through.



Section 3: Installation Instructions

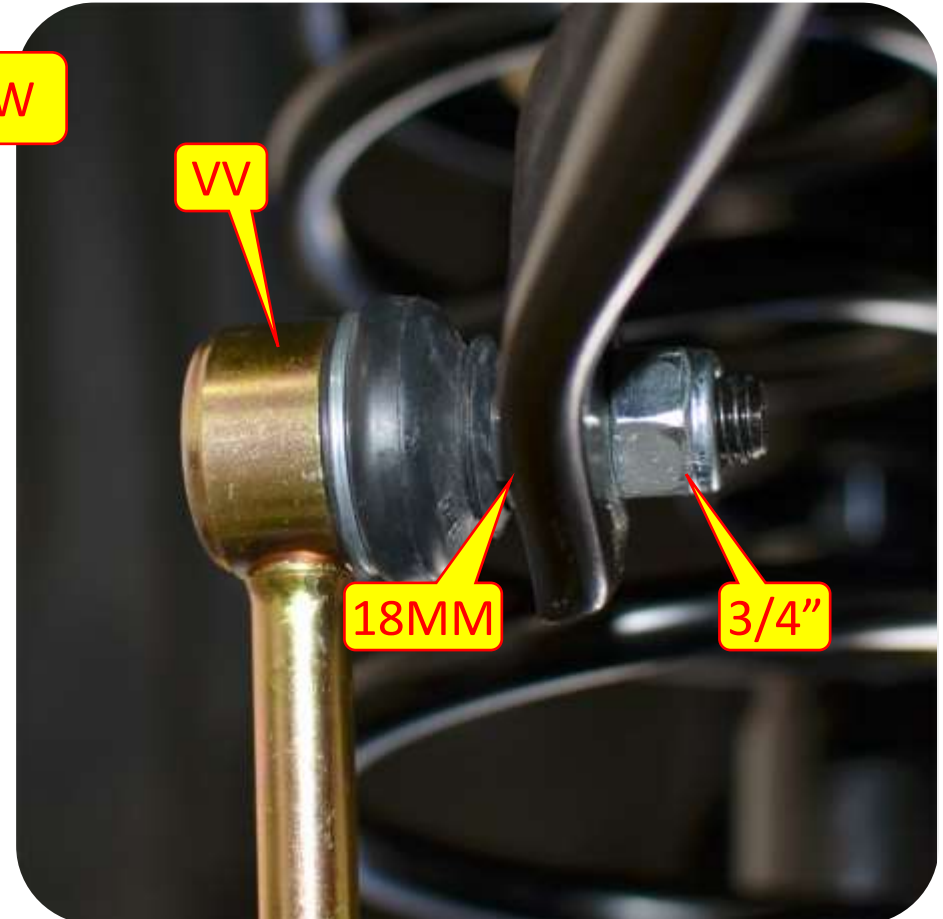
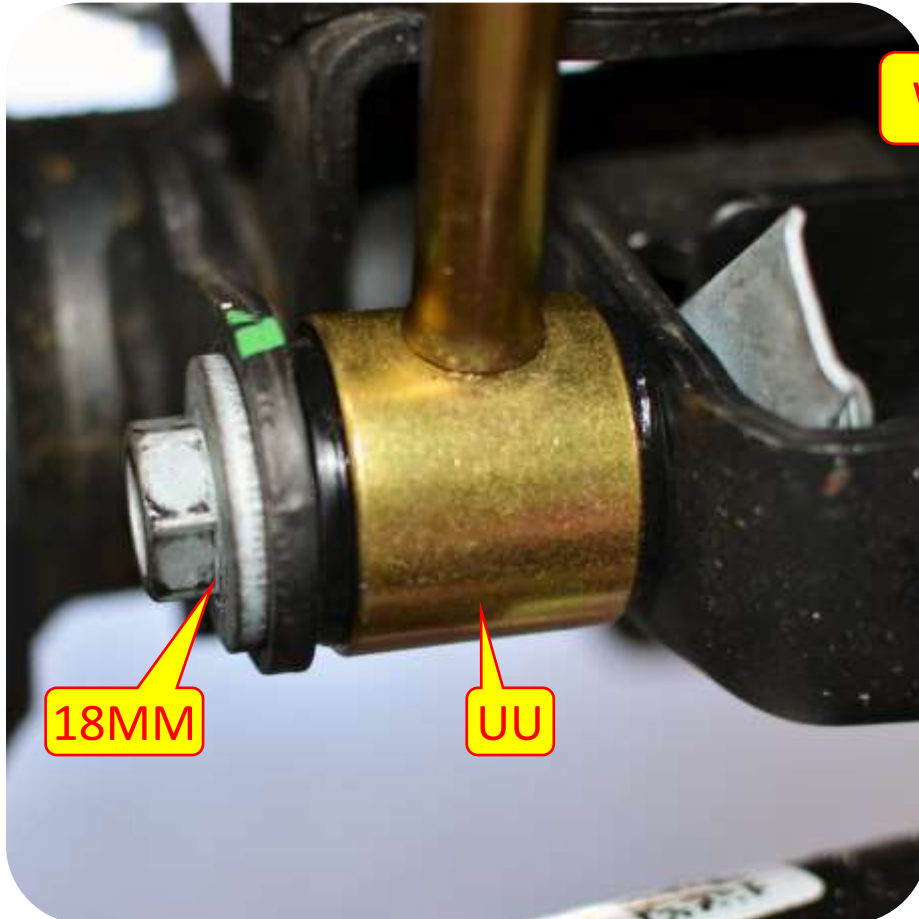


Step 6: Install Sway Bar Disconnects (Option 2)

UU. Using the factory hardware install the bottom of the MetalCloak extended sway bar links.

VV. Using the supplied hardware install the top of the MetalCloak extended sway bar links

WW. Tighten sway bar end links with an 18MM Wrench for the factory hardware and a 3/4" & 18MM wrench for the supplied hardware.



Section 3: Installation Instructions



Step 7: Install Front Track Bar

XX. Install the front track bar. Making sure the adjustable end of the track bar goes into the stock bracket on the axle. Re use the stock hardware.

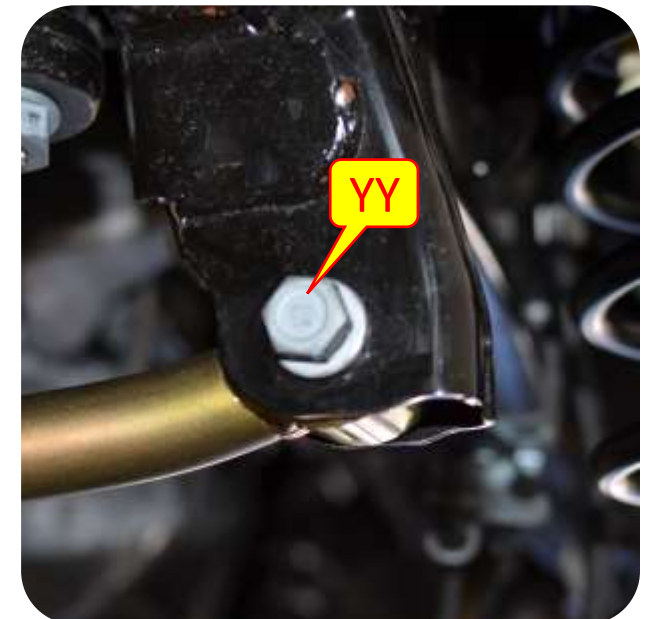
YY. Install the fixed end of the track bar into the stock frame bracket. The clearance bends should point towards the front bumper, up and away from the differential cover. Re use the stock hardware.

ZZ. Fully tighten the stock hardware on both ends of the Track Bar using a 21MM socket and wrench, and then tighten the Jam Nut on the Track Bar.

AAA. MetalCloak **STRONGLY RECOMMENDS** having your alignment checked by a professional after changing any suspension components.

BBB. Tighten ALL Hardware.

Note: It is helpful to have someone push the vehicle to the driver or passenger side to help align the hole; if you don't have an extra pair of hands you can use a ratchet strap on the frame/axle to pull the frame in the desired direction. Lower the Jeep to the ground to ensure the axle is centered once the bolt is in place. If not then remove the bolt, adjust the Track Bar length, replace the bolt, and re-check axle centeredness. Repeat until the axle is as close to center.



Section 3: Installation Instructions

Step 7: Install Front Track Bar

Note: MetalCloak uses an over-sized forged housing for additional strength; the factory window pocket may need additional clearance for optimal fitment. Use a die grinder and cutting bit to enlarge the existing window in the factory track bar bracket.

