

# **READYLIFT**<sup>®</sup>

**SUSPENSIONS**

**42-25640 2015-20 Ford F-150 6.0" PREMIUM LIFT**

**IF your ReadyLIFT<sup>®</sup> product has a damaged or missing part, please contact customer service directly and a new replacement part will be sent to you immediately. For warranty issues, please return to the place of installation and contact ReadyLIFT.**

**(877) 759-9991**

**MON-FRI 7AM-4PM PST**

**OR**

**EMAIL: [support@readylift-ami.COM](mailto:support@readylift-ami.COM)**

**WEBSITE: [ReadyLIFT.COM](http://ReadyLIFT.COM)**

**\*\*Please retain this document in your vehicle at all times.\*\***

## **Limited Lifetime Warranty**

This unique product warranty proves our commitment to the quality and reliability of every product that ReadyLIFT manufactures. The ReadyLIFT product warranty only extends to the original purchaser of any ReadyLIFT product, if it breaks, we will give you a new part. Warranty does not apply to discontinued parts.

Our Limited Lifetime Warranty excludes the following ReadyLIFT items; bushings, bump stops, ball joints, tie rod ends, heim joints and shock absorbers. These parts are subject to wear and are not considered defective when worn. They are warranted for 12 months from the date of purchase for defects in workmanship.

**This product warranty is voided if the vehicle is not aligned after kit installation and proper maintenance is routinely done.**

Product purchased directly from ReadyLIFT has a 90 day return policy on uninstalled products from the date of purchase (may be subject to restocking fee). Uninstalled product returns must be in the original ReadyLIFT packaging. Please call **(877) 759-9991** to get an RGA# for any return. Customer is responsible for shipping costs back to ReadyLIFT. **Returns without RGA# will be refused.** Contact ReadyLIFT directly about any potentially defective parts prior to removal from vehicle.

ReadyLIFT products are **NOT** intended for off-road abuse. Any damage or failure as a result from off-road abuse voids the warranty of the ReadyLIFT product. ReadyLIFT is **NOT** responsible for any subsequent damages to any related vehicle parts due to misuse, abuse, improper installation, or lack of maintenance. Furthermore, ReadyLIFT reserves the right to change, modify or cancel this warranty without prior notice.



**READ INSTRUCTIONS THOROUGHLY AND COMPLETELY BEFORE BEGINNING INSTALLATION.**

**INSTALLATION BY A CERTIFIED PROFESSIONAL MECHANIC IS HIGHLY RECOMMENDED.**

**READYLIFT® IS NOT RESPONSIBLE FOR ANY DAMAGE OR FAILURE RESULTING FROM IMPROPER INSTALLATION.**

### **Safety Warning**

MISUSE OF THIS PRODUCT COULD LEAD TO INJURY OR DEATH.

Suspension systems or components that enhance the on and off-road performance of your vehicle may cause it to handle differently than it did from the factory. Extreme care must be used to prevent loss of control or vehicle rollover during abrupt maneuvers.

Always operate your vehicle at reduced speeds to ensure your ability to control your vehicle under all driving conditions. Failure to drive safely may result in serious injury or death to driver and passengers.

Driver and passengers must ALWAYS wear your seat belts, avoid quick sharp turns and other sudden maneuvers. ReadyLIFT Suspension does not recommend the combined use of suspension lifts, body lifts, or other lifting devices.

You should never operate your vehicle under the influence of alcohol or drugs.

Constant maintenance is required to keep your vehicle safe. Thoroughly inspect your vehicle before and after every off-road use.

It is the responsibility of the retailer and/or the installer to review all state and local laws, with the end user of this product, related to bumper height laws and the lifting of their vehicle before the purchase and installation of any ReadyLIFT products.

It is the responsibility of the driver/s to check their surrounding area for obstructions, people, and animals before moving the vehicle.

All raised vehicles have increased blind spots; damage, injury and/or death can occur if these instructions are not followed.

### **Installation Warning**

All steps and procedures described in these instructions were performed while the vehicle was properly supported on a two post vehicle lift with safety jacks.

Use caution during all disassembly and assembly steps to insure suspension components are not over extended causing damage to any vehicle components and parts included in this kit.

Included instructions are guidelines only for recommended procedures and are not meant to be definitive. Installer is responsible to insure a safe and controllable vehicle after performing modifications.

ReadyLIFT Suspension recommends the use of an OE Service Manual for model/year of vehicle when disassembly and assembly of factory and related components.

Unless otherwise specified, tighten all bolts and fasteners to standard torque specifications listed within the OE Service Manual.

Suspension components that use rubber or urethane bushings should be tightened with the vehicle at normal ride height. This will prevent premature wear or failure of the bushing and maintain ride comfort.

Larger tire and wheel combinations may increase leverage on suspension, steering, and related components.

Due to payload options and initial ride height variances, the amount of lift is a base figure. Final ride height dimensions may vary in accordance to original vehicle ride height. Always measure the vehicle ride height prior to beginning installation.

### **SAEJ2492 Warning**

By installing this product, you acknowledge that the suspension of this vehicle has been modified. As a result, this vehicle may handle differently than that of factory-equipped vehicles. As with any vehicle, extreme care must be used to prevent loss of control or roll-over during sharp turns or abrupt maneuvers. Always wear seat belts, and drive safely, recognizing that reduced speeds and specialized driving techniques may be required. Failure to drive this vehicle safely may result in serious injury or death. Do not drive this vehicle unless you are familiar with its unique handling characteristics and are confident of your ability to maintain control under all driving conditions. Some modifications (and combinations of modifications) are not recommended and may not be permitted in your state. Consult your owner's manual, the instructions accompanying this product, and state laws before undertaking these modifications. You are responsible for the legality and safety of the vehicle you modify using these components.

Due to payload options and initial ride height variances, the amount of lift is a base figure. Final ride height dimensions may vary in accordance to original vehicle ride height. Always measure the vehicle ride height prior to beginning installation.

*A lifted vehicle may have different headlight aim performance. ReadyLIFT recommends marking and recording the headlight beam position before kit installation and then adjusting, if necessary, the headlamps to the same height settings after kit installation. Set the vehicle on a level surface 10' to 15' from a solid wall or garage door. (This is a general distance with some manufacturers requiring different distances.) Note the top height of the low beam's bright spot, the top of the most intense part of the beam, for driver and passenger side. Height may vary from side to side. Repeat this procedure and adjust after lift kit is installed. Adjust if the aim is off by turning the adjusters gradually (a quarter of a turn) and looking to see where the new alignment falls. It may be easier to block one headlamp while adjusting the other. Consult the owner operation manual for procedures to adjust headlights - many automakers offer headlight aiming specs. Some states have their own specifications when it comes to headlight aim, so it's best to follow those rules when alighting headlights.*

This suspension system was developed using a 295-65R20 tire with 20" x 9" wheel and a offset of +0. If wider tires are used, offset wheels may be necessary and trimming may be required. Factory wheels can be used but are not recommended with tires over 11.5" wide.

The stock spare rim can be run in an emergency - exercise extreme caution under stock spare tire operating conditions. Please note that, if running the spare factory tire, it is done for short distances and a speed not to exceed 45mph or damage to differentials may occur.

## **IMPORTANT NOTE:**

Due to the nature of Ford's lane keeping/lane departure features, it may be necessary to have the vehicles camera and sensors recalibrated to ensure these systems functions as they did prior to install. Please contact your local Ford dealership to set up an appointment.

# **PRE-INSTALLATION MEASUREMENTS:**

It is imperative that you record the following measurements and factory components in the tables below. ReadyLIFT tests and records as much data from each application as available at the time of product development. Vehicle manufacturers may change components or add models with different options. Recording and not exceeding the fender-to-hub-center ReadyLIFT calls out will ensure the lift on the vehicle is correct.

These measurements will affect the performance of this lift kit. Failure to ensure proper stock conditions may result in over lifting, causing premature failure of axles, CV boots and drivetrain. Over lifting a vehicle will also result in an incorrect wheel alignment. This will wear tires incorrectly. Incorrect alignment will cause poor vehicle handling issues including but not limited to under steer. Over lifting will also cause a shock top off condition resulting in poor ride quality accompanied by pops and clunks which are symptoms of prematurely wearing components.

Failure to adjust head lamps may cause dangerous driving conditions for you and other drivers on the road. Record the head lamp position before the installation of this lift or leveling kit and adjust to original factory position after the completion to ensure a safe and enjoyable experience.

## **VEHICLE HEIGHT MEASUREMENTS**

	<b>Left Before</b>	<b>Left After</b>	<b>Right Before</b>	<b>Right After</b>
<b>Front</b>				
<b>Rear</b>				

**\*\*MEASUREMENT IS TO BE PERFORMED FROM CENTER OF HUB TO FENDER EDGE STRAIGHT UP FROM HUB.\*\***

## **RECORD HEAD LAMP MEASUREMENTS**

<b>Left Before</b>	<b>Left After</b>	<b>Right Before</b>	<b>Right After</b>

# BILL OF MATERIALS

DESCRIPTION	QTY
CROSSMEMBER, FRONT	1
CROSSMEMBER, REAR	1
SKID PLATE	1
UPPER CONTROL ARM, LEFT	1
UPPER CONTROL ARM, RIGHT	1
FRONT BRAKELINE DROP BRACKET	2
DIFFERENTIAL DROP, DRIVER	1
DRIVER DIFFERENTIAL SUPPORT BRACKET	1
DIFFERENTIAL DROP, PASSENGER	1
PASSENGER DIFFERENTIAL SUPPORT BRACKET	1
SWAY BAR DROP BRACKETS - LEFT (DRIVER)	1
SWAY BAR DROP BRACKETS - RIGHT (PASSENGER)	1
MACHINED FRONT DRIVE LINE SPACER	1
2015-2020 F-150 CAST KNUCKLE, DRIVER	1
2015-2020 F-150 CAST KNUCKLE, PASSENGER	1
REAR BRAKELINE DROP BRACKET	1
EMERGENCY BRAKE CABLE DROP BRACKET	1
5" TAPERED BLOCK, LEFT	1
5" TAPERED BLOCK, RIGHT	1
CARRIER BEARING DROP	1
ALIGNMENT CAM BOLT KIT	1
U-BOLT	4
M14-1.5 BARREL NUT	8
M14 HEAVY DUTY WASHER	8
DIFF BREATHER VENT HARDWARE PACK	1
FRONT COILOVER, LEFT	1
FRONT COILOVER, RIGHT	1
REAR SHOCK	2

DESCRIPTION	QTY
<b>CROSSMEMBERS/ REAR DIFF</b>	
M18-2.5 x 150mm Hex Head Bolt Gr 10.9 YZ	2
M18-2.5 C-Lock Nut Gr 10.9	2
M18 Flat Washer	4
M14-2.0 x 100mm Hex Head Bolt Gr 10.9 YZ	1
M14-2.0 C-Lock Nut Gr 10.9	1
M14 Flat Washer	2
<b>SKID PLATE</b>	
M10-1.50 x 30mm Hex Head Bolt Gr 10.9 YZ	6
M10 Flat Washer	6
<b>DIFFERENTIAL DROP/ SUPPORT BRACKET</b>	
M14-2.0 x 100mm Hex Head Bolt Gr 10.9 YZ	2
M14-2.0 x 35mm Hex Head Bolt Gr 10.9 YZ	2
M14-2.0 C-Lock Nut Gr 10.9	4
M14 Flat Washer	8
M12-1.75 x 35mm Hex Head Bolt Gr 10.9 YZ	2
M12-1.75 Lock Nut Gr 10.9	2
M12 Flat Washer	4
<b>SWAY BAR BRACKET</b>	
M10-1.5 x 35mm Hex Head Bolt Gr 10.9 YZ	4
M10-1.5 C-Lock Nut Gr 10.9	4
M10 Flat Washer	8
<b>FRONT STRUT SPACER</b>	
M10-1.25 Serrated Flange Nut	6
M10-1.5 Serrated Flange Nut	6
<b>BRAKE LINE BRACKET</b>	
M8 - 1.25 x 25mm Hex Head Bolt Gr 10.9 YZ	4
M8 - 1.25 C-Lock Nut Gr 10.9	4
M8 Flat Washer	8
M8 - 1.25 x 16mm Hex Head Bolt Gr 10.9 YZ	2
M6 - 1.0 x 16mm HHB Full Thread	2
M6 Flat Washer	2
8" Black Zip Tie	6
<b>FRONT DRIVELINE SPACER</b>	
M10-1.5 x 100mm Socket Head Bolt	6
<b>CARRIER BEARING DROP</b>	
7/16"-14 x 2 1/4" Hex Head Bolt (GR 8)	2
7/16" Flat washers (GR 8)	2

## WARNING

**Before starting installation:** ReadyLIFT Suspension highly recommends that the installation of this product be performed by a professional mechanic with experience working on and installing suspension products. Professional knowledge and skill will typically yield the best installation results. If you need an installer in your area, please contact ReadyLIFT Suspension Customer Service or check out the dealers tab on our Website for authorized installers .

**INSTALLATION BY A PROFESSIONAL IS HIGHLY RECOMMENDED.**

- A Factory Service Manual for your specific Year / Make / Model is highly recommended for reference during installation.
- All lifted vehicles may require additional driveline modifications and / or balancing.
- A vehicle alignment is REQUIRED after installation of this product.
- Speedometer / Computer recalibration is required if changing +/- 10% from factory tire diameter.
- A vehicle lift or hoist greatly reduces installation time. Installation time estimates are based on an available vehicle hoist.
- Vehicle must be in excellent operating condition. Repair or replace any and all worn or damaged components prior to installation.

ReadyLIFT recommends all steps and procedures described in these instructions be performed while the vehicle is properly supported on a two post vehicle lift with safety jacks.

Otherwise, park vehicle on a clean flat surface and block the rear wheels for safety. Engage the parking brake.

Disconnect the vehicle power source at the ground terminal on the battery.

Lock the steering wheel in the straight forward position with the column lock or steering wheel locking device.

Raise the front of the vehicle and support with safety jack stands at each frame rail behind the lower control arms.

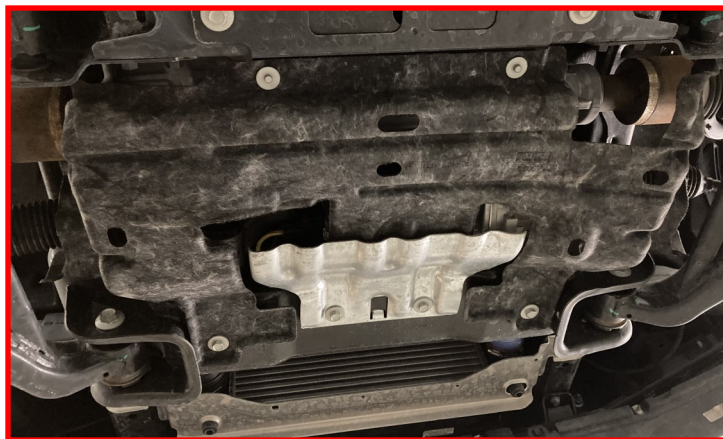
Remove the front wheels.

Using an appropriate jack, support the vehicle.



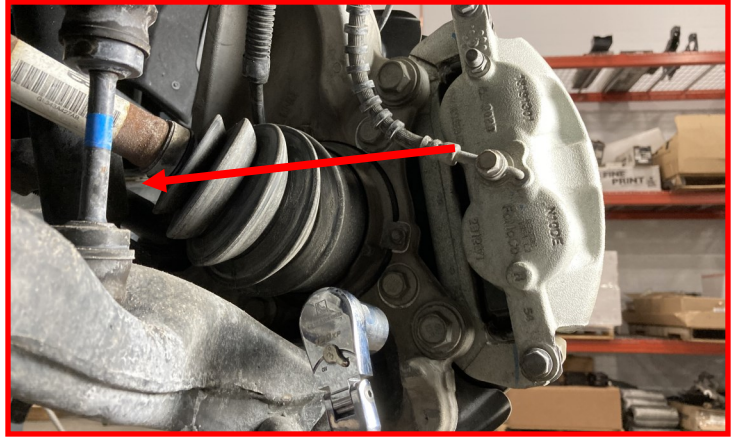
Remove the factory skid plate.

**Discard the factory skid plate and hardware.**



Remove the **sway bar end link** from the control arm.

**Retain the factory mounting hardware.**



Remove the **tie rod end** on the knuckle.

**Retain the factory nut.**

Using a dead blow hammer or similar tool, strike the knuckle on the side to dislodge the ball joint taper.



Loosen but do not remove the **(3) top strut nuts**.

NOTE: Supporting the lower control arm will aid in this step.



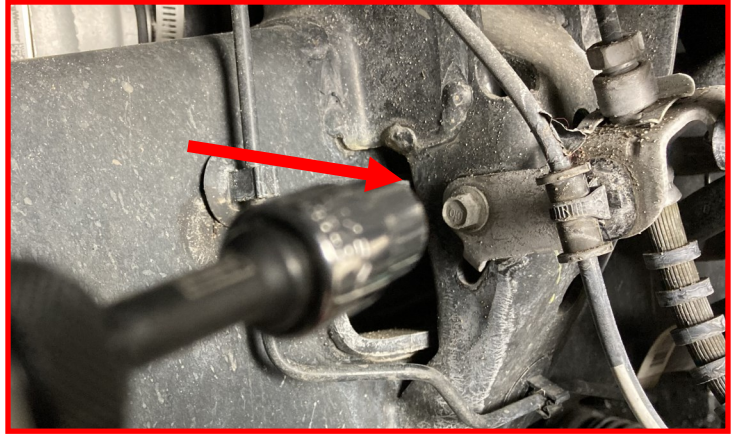
Remove the **lower strut nuts**.

**Retain the factory mounting hardware.**



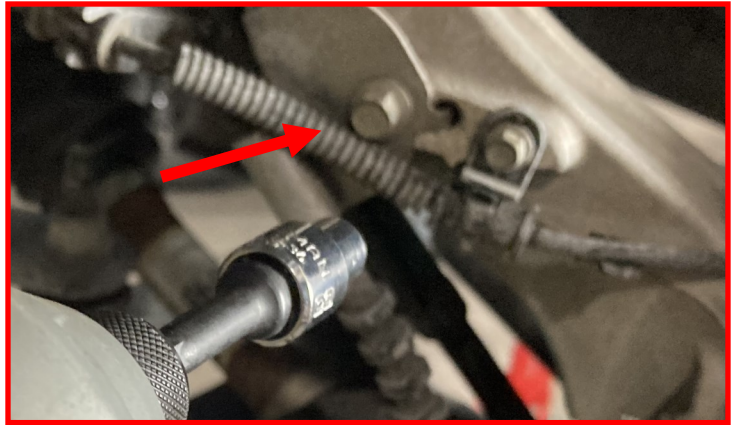
Remove the **factory front brake line bracket** from the frame.

**Retain the factory mounting hardware.**



Remove the **brake line bracket** from the knuckle.

**Retain the factory mounting hardware.**

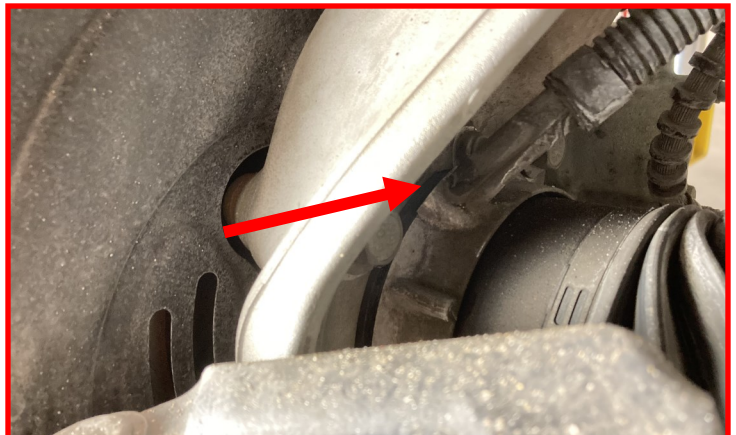


Remove the **ABS sensor wire** from the brake line bracket.

**Retain the factory mounting hardware.**



Remove the **IWE vacuum lines** from the IWE on the backside of the knuckle.





While supporting the sway bar, remove the frame side mounting nuts.

Carefully remove the sway bar from vehicle.

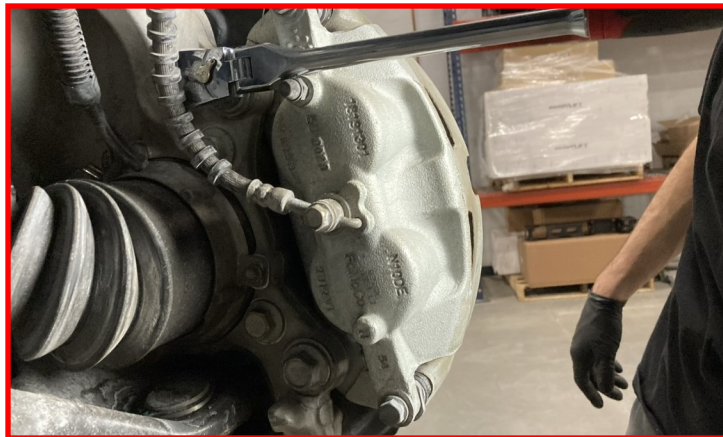
**Retain factory mounting hardware.**



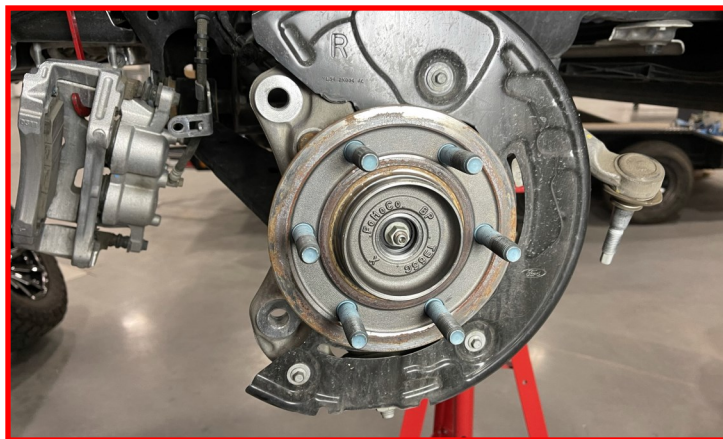
Remove the brake caliper mounting bolts from brake caliper.

**NOTE: CAREFULLY HANG CALIPER FROM FRAME, ENSURE THE CALIPER IS NOT HANGING FROM BRAKE LINE NOR ARE THE BRAKE LINES BEING STRETCHED.**

**Retain factory mounting bolts.**

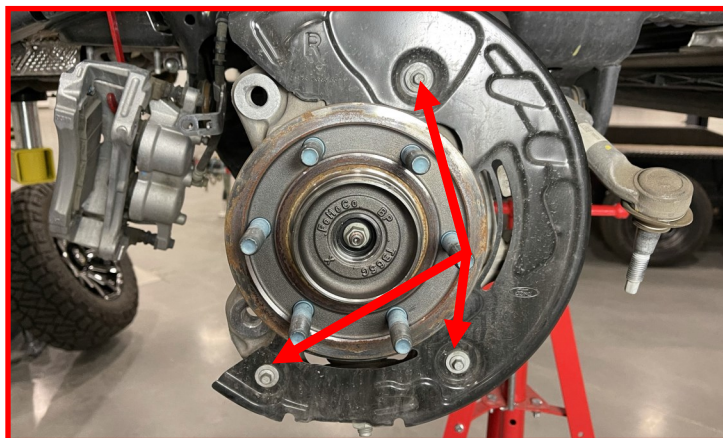


Carefully remove the brake rotor.



Next, remove the (3) dust shield mounting bolts and dust shield.

**Retain the factory mounting hardware.**



Remove the **ABS sensor** from the hub assembly.

**Retain the factory mounting bolt.**

**NOTE: ENSURE THE AREA AROUND THE SENSOR IS CLEANED BEFORE REMOVAL AND INSTALLATION.**



Remove the **CV shaft retainer nut dust cover**.

**Do not discard, cap will be install in later steps.**



Remove the **CV shaft retainer nut**.

**Do not discard, nut will be install in later steps.**



Remove the **upper control arm ball joint nut**.

**Retain the factory nut.**

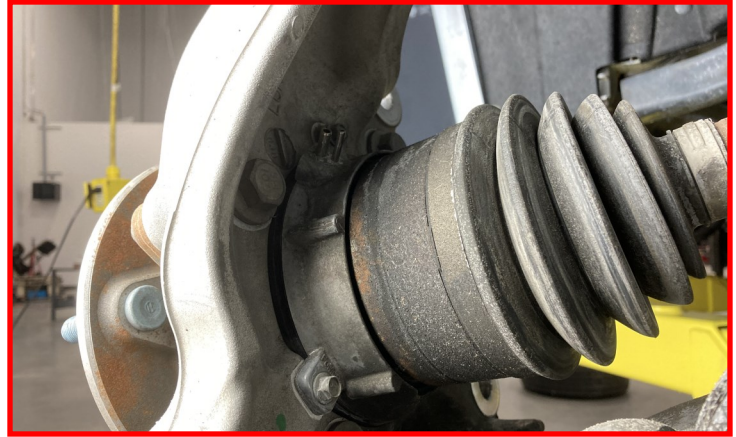
Using a dead blow hammer or similar tool, strike the knuckle on the side to dislodge the ball joint taper.



Remove the (3) bolts that attach the EIWE to the knuckle and pull both axle and the EIWE out of the factory knuckle.

**Retain the factory bolts.**

**NOTE: IF ALLOWING THE 4WD ACTUATOR HUB ASSEMBLY TO HANG MAKE SURE IT IS SECURED OUT OF THE WAY SO IT DOES NOT GET DAMAGED.**

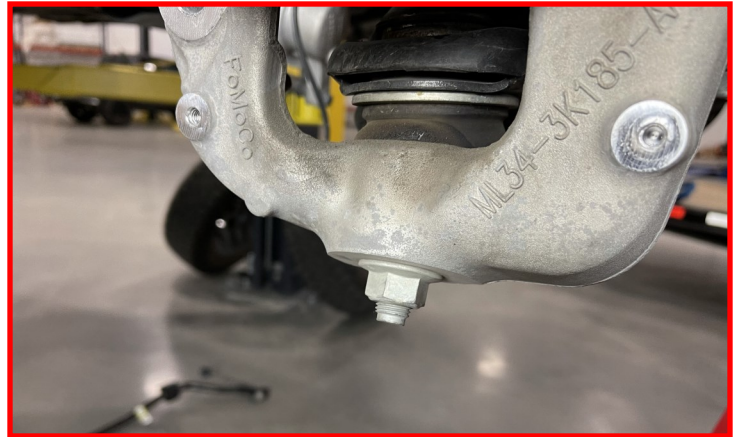


Remove the lower control arm ball joint nut.

**Retain the factory nut.**

Using a dead blow hammer or similar tool, strike the knuckle on the side to dislodge the ball joint taper.

Carefully remove the factory knuckle from the vehicle.

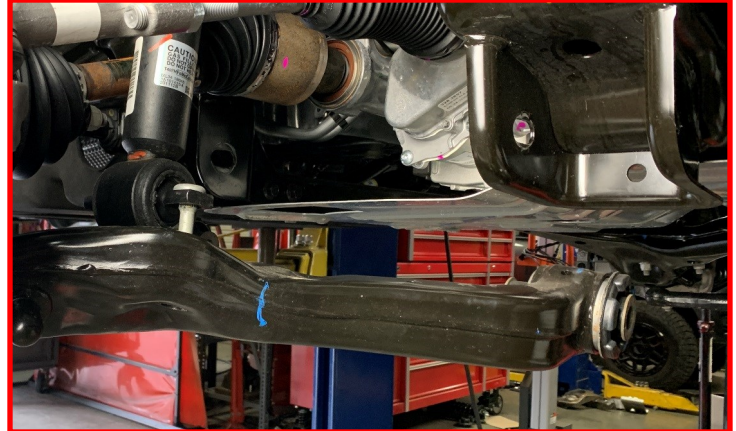


Remove the lower control arm pivot bolts.

Retain (2) of the (4) factory pivot bolts and nuts.

Remove Lower control arms.

Remove the (3) top strut nuts while holding the strut to ensure it doesn't fall out of the vehicle.



Remove the factory rear crossmember (4) mounting bolts and nuts and carefully remove the crossmember from the vehicle.

**Discard the cross member and hardware.**

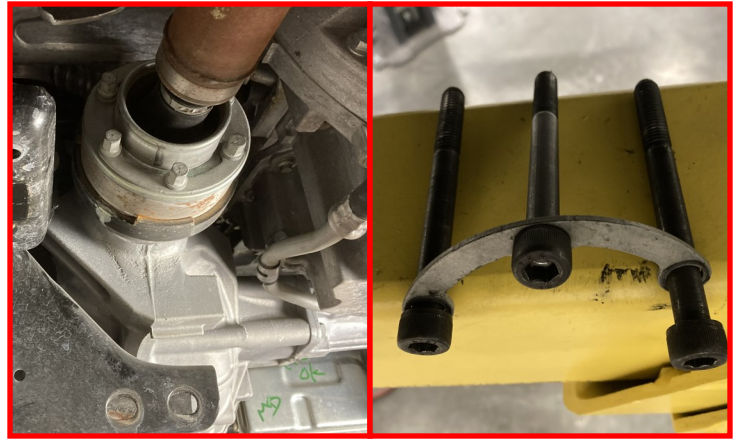
**NOTE: IT MAY BE NECESSARY TO USE A WIRE BRUSH TO REMOVE THE MATERIAL FROM THE THREADS OF THE FOUR BOLTS THAT ATTACH THE OE REAR CROSS MEMBER.**



Mark the driveshaft to pinion flange location. Remove the (6) drive shaft mounting bolts and disconnect the drive shaft from the differential. Allow the drive shaft to rest out of the way.

**Retain the factory three-hole washers for install.**

**Discard factory drive shaft mounting bolts.**



Remove the passengers side CV by striking the shaft with a hammer to dislodge it from the splines.

Only remove the passenger side CV shaft.

**NOTE: THIS STEP IS OPTIONAL BUT THIS WILL MAKE HANDLING THE DIFFERENTIAL MUCH EASIER.**



Remove the mounting bolts and oil drip tray that is located on the driver side over the steering rack.

**NOTE: THIS STEP IS OPTIONAL BUT THIS WILL MAKE HANDLING THE DIFFERENTIAL MUCH EASIER.**



Using an appropriate jack, support the differential.

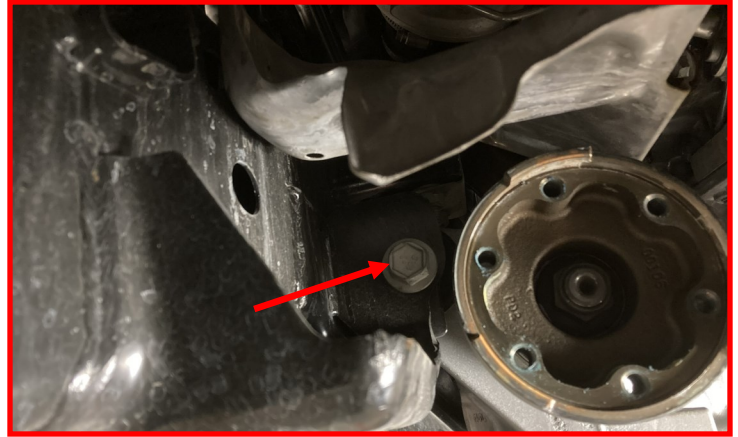
With the diff supported, remove the driver side diff mounting bolt.

**Retain the factory mounting hardware.**



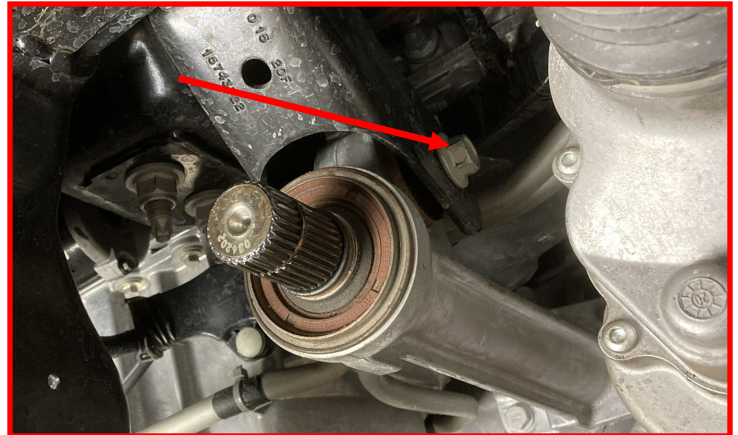
Remove the **rear diff mounting bolt**.

**Discard the factory mounting hardware.**



Remove the **passenger side diff mounting bolt**.

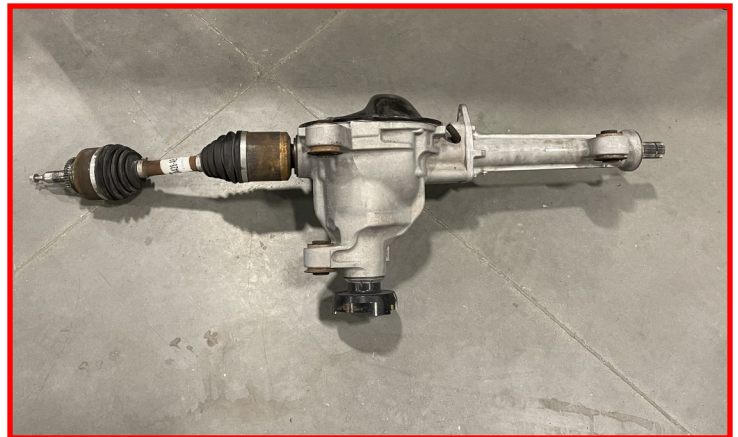
**Retain the factory mounting hardware.**



Disconnect the differential breather hose from the differential housing.

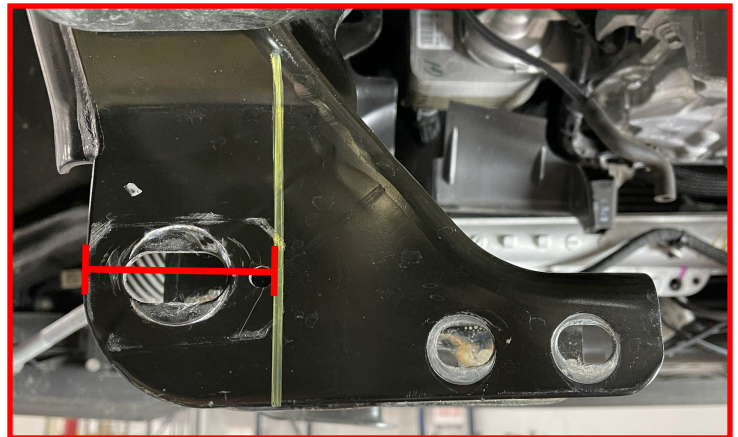
Once the **(3)** differential mounting bolts have been removed from the frame, carefully lower the differential out of the vehicle.

**NOTE: IT IS BEST TO GET A HELPER TO ASSIST IN THE REMOVAL PROCESS.**



Measure from the outside edge of the driver side rear control arm pocket **2 5/8"**.

Mark a vertical line on both the front and rear of the control arm pocket.

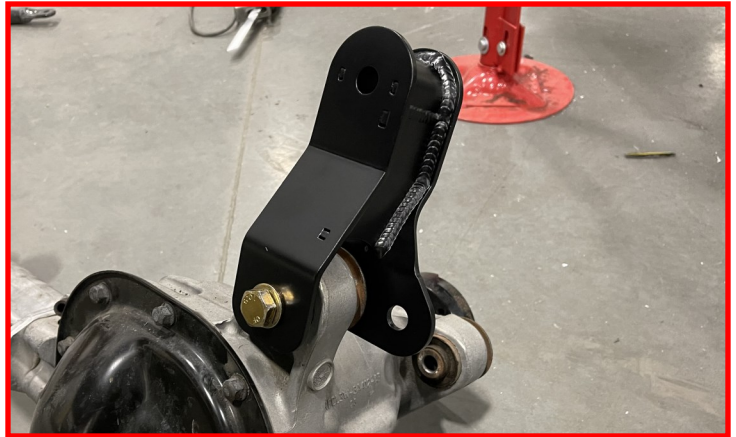


Connect the 2 lines across the top of the pocket.

Using a suitable cutting tool, cut this section off the frame. Sand and paint exposed metal with quality rust preventative paint.



Install the **driver side differential drops** onto driver differential mounting point using the **supplied M14 x 100mm bolt and washer**. Do not install the back side M14 washer and nut at this time.



Install the **passenger side differential drops** onto passenger differential mounting point using the **supplied M14 x 100mm bolt and washer**. Do not install the backside M14 washer and nut at this time.

Ensure the diff drop is oriented so the window on the diff drop is point forward.



Attach the differential breather tube extension to the differential breather elbow.



Raise differential into place. Be sure to use a helper to aid in the installation process. With the differential in place, install the factory **bolt and nut** through the **factory driver side differential mount and the driver diff drop bracket**.

Do not tighten at this time.

Attach the differential breather tube extension to the plastic line.



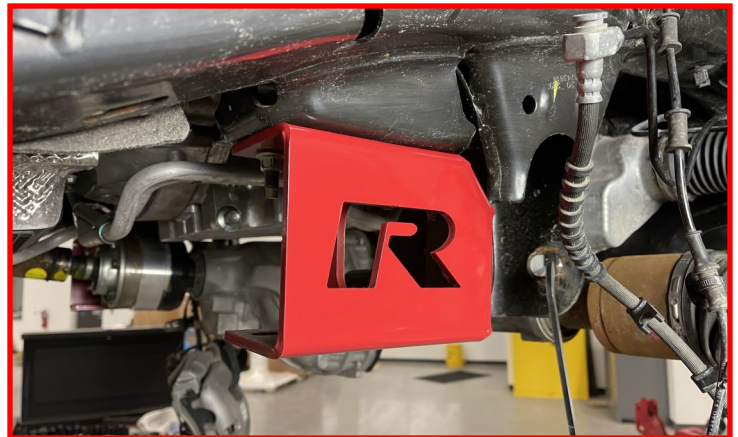
With the differential in place, install the factory **bolt and nut** through the **factory passenger side differential mount and the passenger diff drop bracket**.

Do not tighten at this time.



Install the **sway bar brackets** to frame using the factory hardware.

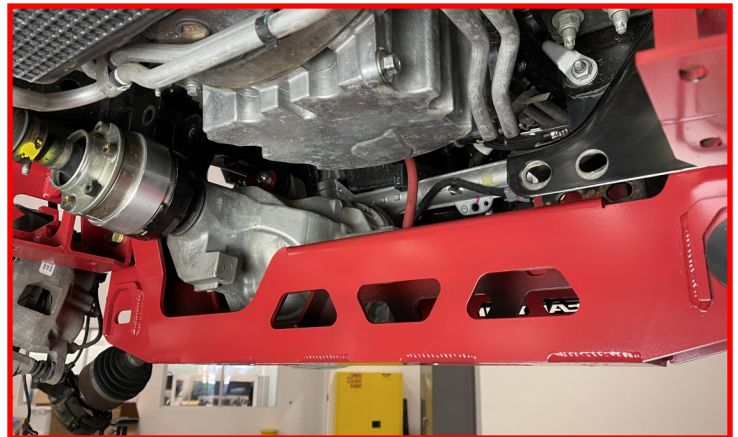
Do not tighten at this time.



Install the **rear cross member** into the factory control arm frame pockets using **M18 x 150mm bolts, flat washers, and lock nuts**.

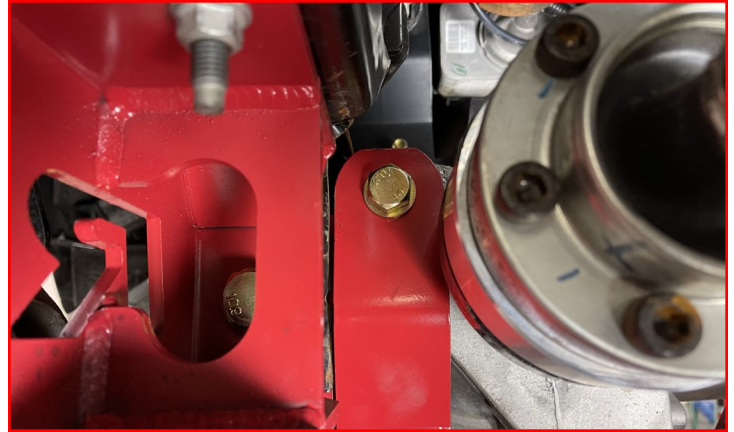
**NOTE: THE BOLT WILL BE INSTALLED FROM REAR TO FRONT PASSING THROUGH THE SWAY BAR DROP BRACKET, CONTROL ARM POCKET, REAR CROSSMEMBER AND FINAL THROUGH THE CONTROL ARM POCKET AGAIN.**

**NOTE: LEAVE DRIVER SIDE WASHER AND NUT OFF OF THE FRONT SIDE. ADDITIONAL STEPS TO COME.**



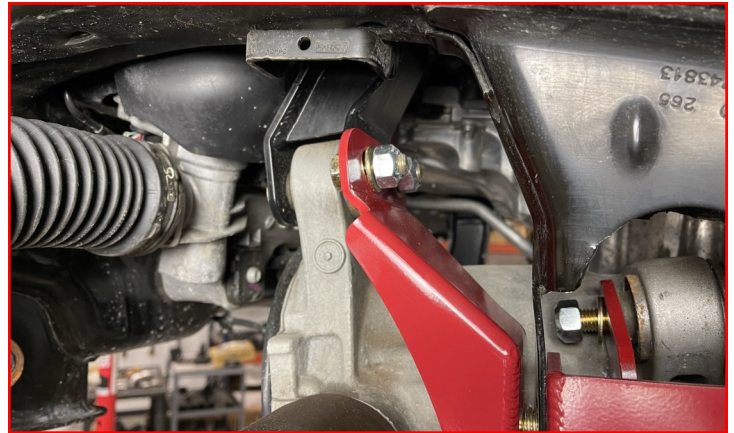
Install the rear diff mount into the rear crossmember using the supplied **M14 x 100mm bolt, washers and lock nut**.

**Do not tighten at this time.**



Install the driver differential support bracket on the driver side differential drop bracket using **M14 washer and lock nut** on the **M14 x 100mm bolt** already installed, as well as the supplied **M14 x 35mm bolt, washer and lock nut**.

**Do not tighten at this time.**



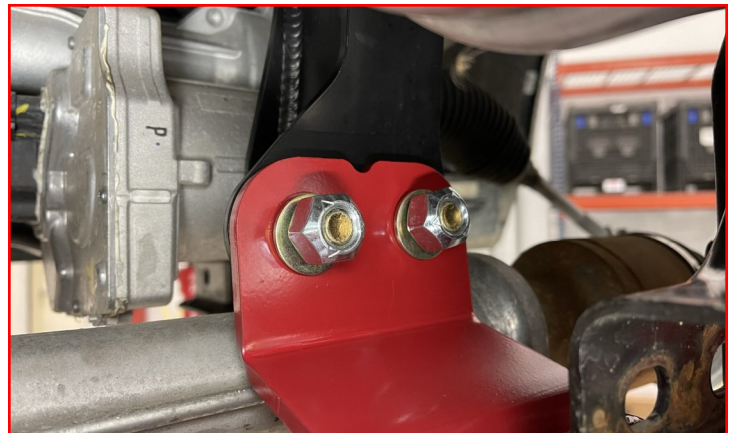
The other end of the driver diff support bracket will install over the rear crossmember M18 bolt. Install the provided M18 washer and lock nut at this time.

**Do not tighten at this time.**



Install the passenger differential support bracket on the passenger side differential drop bracket using **M14 washer and lock nut** on the **M14 x 100mm bolt** already installed, as well as the supplied **M14 x 35mm bolt, washer and lock nut**.

**Do not tighten at this time.**

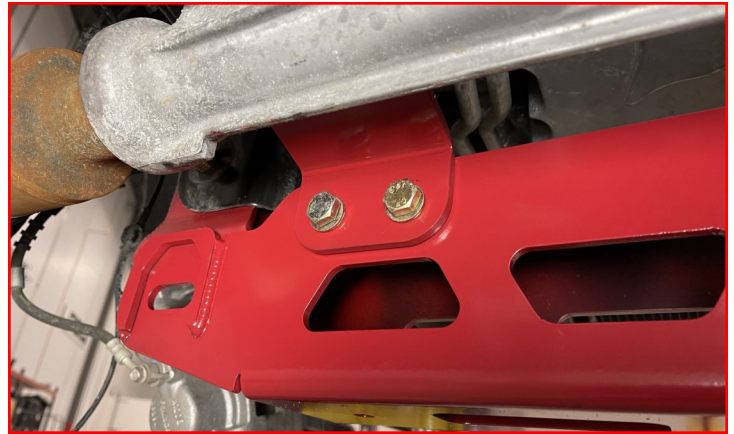


**NOTE: ENSURE THE BRACKET IS INSTALLED WITH THE NOTCH UP.**



The other end of the passenger diff support bracket will install onto the rear crossmember using the provided **M12 x 35mm bolt, washer and lock nut.**

**Do not tighten at this time.**

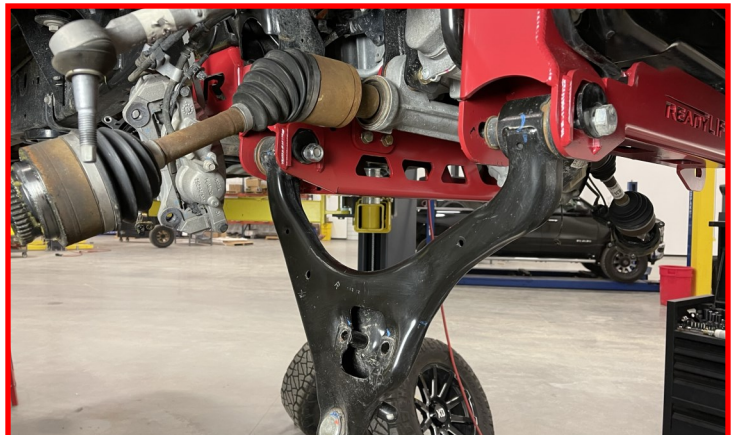


Install the **front cross member** using the **factory hardware** from the front of the vehicle facing rearward.

**Do not tighten at this time.**



Install driver and passenger side lower control arms into the cross members using the supplied **M18 x 150mm cam bolt, eccentric plates and lock nut.**  
**NOTE: Do not fully tighten these bolts until the weight of the vehicle is resting upon the suspension.**



With the differential tight and crossmember torqued to spec, install the skid plate using the M10 x 30mm bolts, washers and thread locker.

**NOTE: TIGHTEN THE FOLLOWING IN ORDER.**

Torque the M10 hardware to **45 ft-lbs**

Torque the sway bar hardware to **45 ft-lbs**

Torque all M14 diff hardware to **95 ft-lbs**

Torque all M12 diff hardware to **65 ft-lbs**

Torque the crossmember hardware to **200 ft-lbs**



Install the driveshaft spacer and driveshaft in the same orientation with the marks previously made using the **10mm x 100mm Allen head bolts and Factory Three-Hole Washers**. Add a drop of thread locker to all bolts.

Torque the hardware to **50 ft-lbs.**



Remove the factory upper control arm and discard.

**Retain the factory pivot bolts.**



Install the supplied upper control arm in the factory orientation.

Torque the factory hardware to **120 ft/lbs.**



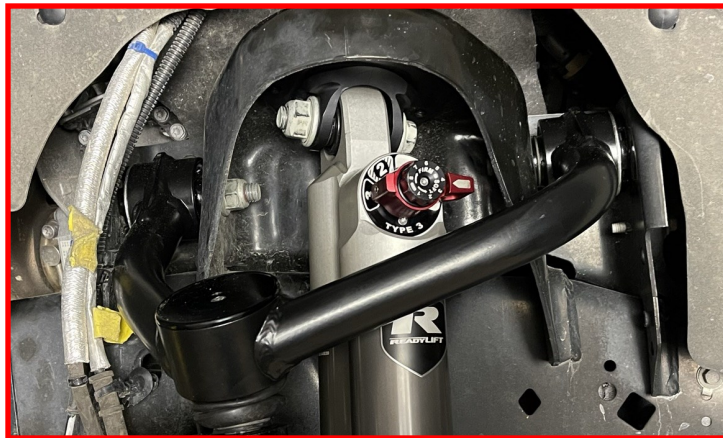
Install the coilover into the top hat using the supplied M16 Flange bolt and M16 locking flange nut.

Torque the M16 hardware to **180 ft/lbs.**



Install the completed coilover assembly into the vehicle. Be sure the lower mount is offset away from the cv axle.

**NOTE: THE RESERVOIR WILL ALSO BE ORIENTED TO THE REAR**



Install the **coilover top hat adaptor plate**, using the supplied thread locker and M10 flanged head bolts.

Torque the M10 bolts to **45 ft/lbs.**



Raise the lower control arm and install the lower shock mount using the supplied hardware.

Torque the hardware to **85 ft/lbs.**



Install the passengers side CV shaft **(If removed).**

Install the oil drip tray that is located on the driver side over the steering rack. **(If removed).**



Install the IWE onto the CV shaft. Ensure the gears are lined up and engaged properly.



Install the knuckle onto the lower ball joints using **factory ball joint nut**. Run the nut tight at this time.

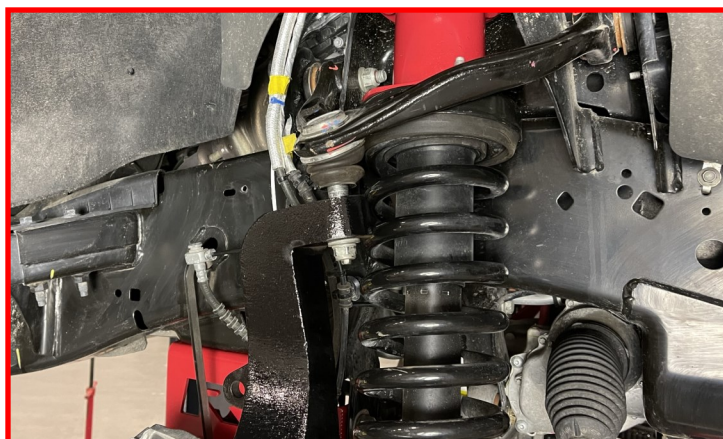
Torque the lower ball joint nut to **98 ft-lbs**.



Install upper ball joint to knuckle using **factory hardware**.

Torque the factory hardware to **65 ft-lbs**.

**NOTE: ENSURE YOU GUIDE CV SHAFT THROUGH AXLE BORE AS THE KNUCKLE IS RAISED INTO PLACE.**



With the knuckle in place install the EIWE actuator onto knuckle using **factory hardware**.

Torque the factory hardware to **132 in-lbs**

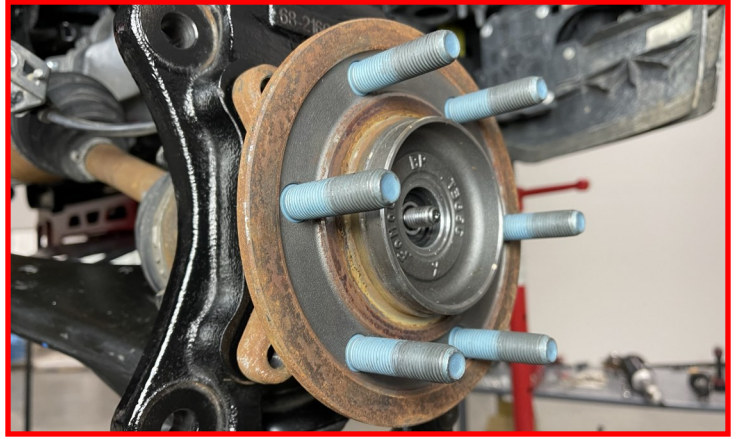
**NOTE: BE SURE THE GEARS ARE LINED AND ENGAGED PROPERLY.**



Carefully install the hub assembly over the axle shaft and into the knuckle bore. Make sure the ABS wire is located at the top of the hub.

Use the factory mounting bolts and thread locker to secure.

Torque the factory hardware to **148 ft-lbs.**



Install the **ABS sensor** into the hub assembly.

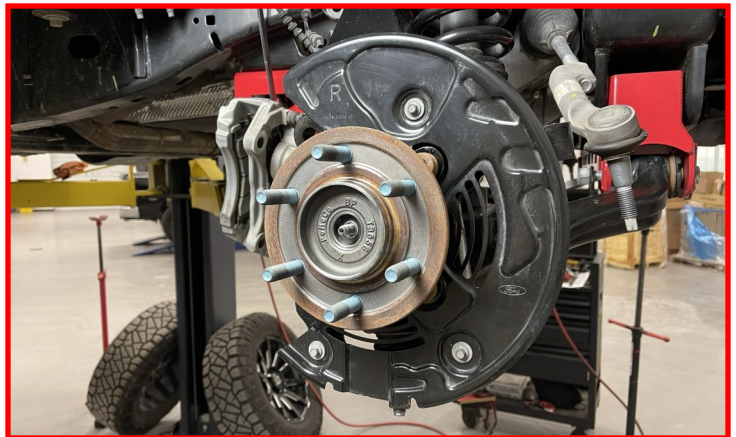
Torque the factory hardware to **5 ft-lbs.**

**NOTE: ENSURE THE AREA AROUND THE SENSOR IS CLEANED BEFORE INSTALLATION.**



Install dust shield to knuckle using **factory hardware.**

Torque the factory hardware to **5 ft-lbs.**



Carefully install the brake rotor onto the hub assembly.



Install the brake caliper assembly to rotor and knuckle using the **factory hardware** and thread locker.

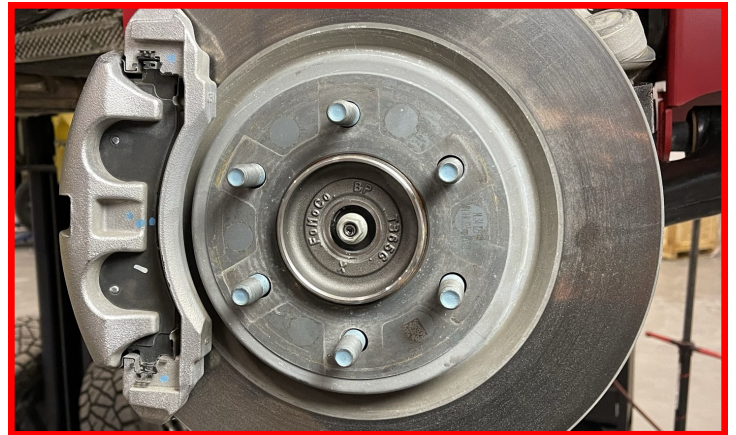
Torque the factory hardware to **148 ft-lbs.**



Fasten the CV shaft to the hub with the factory nut.

**NOTE: MAKE SURE THE SPLINES ARE ENGAGED PROPERLY IN THE 4WD ACTUATOR HUB ASSEMBLY SECTION OF THE HUB. THE HUB SHOULD HAVE A VERY MINOR AMOUNT OF ROTATIONAL PLAY WITH THE CV SHAFT IF INSTALLED PROPERLY.**

Torque the factory nut to **18 ft-lbs.**



Install the **CV shaft retainer nut dust cover.**



Install the **brake line relocation bracket** at the frame using the factory bolt.

Torque the factory hardware to **15 ft-lbs.**

**NOTE: IT WILL BE NECESSARY TO GENTLY BEND THE STEEL BRAKE LINES DOWN TO REACH THE RELOCATION BRACKET.**

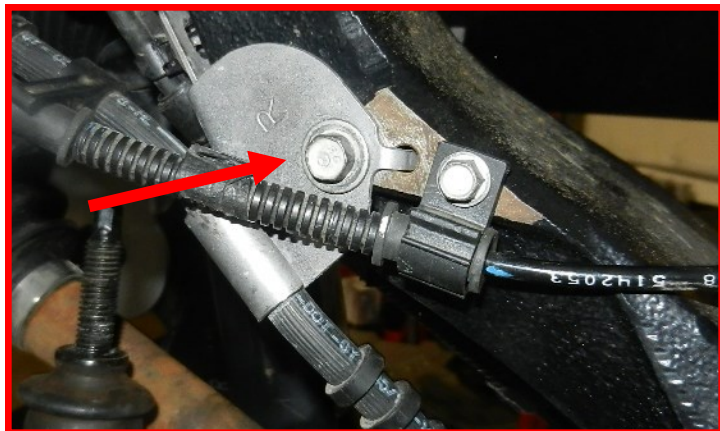


Attach the brake line to the relocation bracket using the supplied M8 x 25mm bolt, washers, and lock nut.



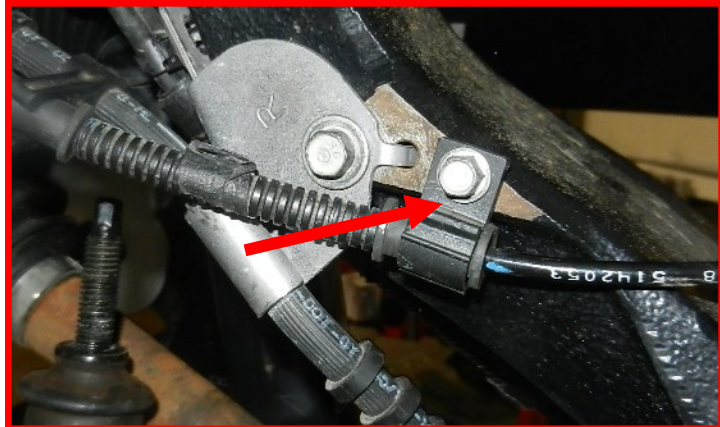
Install the factory brake line bracket to knuckle using the factory hardware.

Torque to 5 ft-lbs.

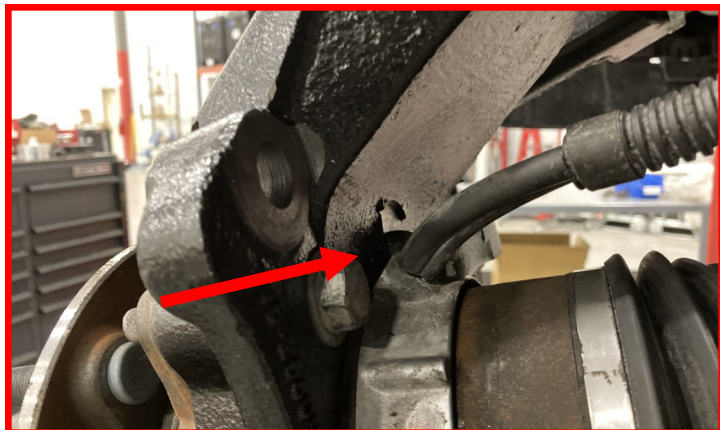


Attach the ABS bracket to the knuckle.

Torque to 5 ft-lbs.

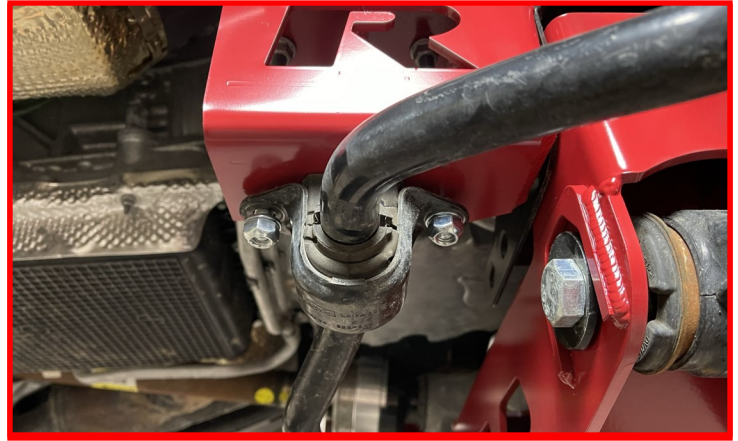


Attach the IWE Vacuum lines to the IWE.



Install the sway bar onto the sway bar drop brackets using the supplied M10 x 30mm bolts, washers and lock nuts.

Torque the sway bar hardware to **45 ft-lbs.**



Install the sway bar end links to the control arm with the factory hardware.

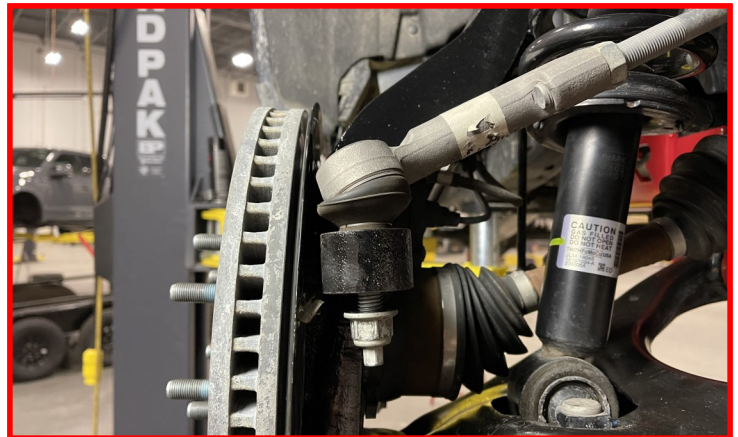
Torque the sway bar link nut to **111 ft-lbs.**

**NOTE: DO NOT USE POWER TOOLS TO ATTACH THE STABILIZER BAR LINK NUT. DAMAGE TO THE STABILIZER BAR LINK BALL JOINT OR BOOT MAY OCCUR.**



Install the tie rod end into the knuckle using the **factory hardware.**

Torque the factory nut to **60 ft-lbs.**



With everything tightened and torque to the specified specifications, install front tires and lower vehicle.

With the steering wheel centered, turn the tie rod ends until the tires are straight. If the steering wheel is not centered properly, the ABS/traction control lights may activate. Turn the wheels from lock to lock and make sure the brake lines and ABS routing clears all suspension components adequately. Reposition if necessary.



## **Rear Install**

Block the front wheels and raise the rear of the vehicle. Place jack stands under the frame rails ahead of the spring hangers.

Remove the rear wheels.

Remove the rear emergency brake line bracket from the frame ahead of the driver side spring.



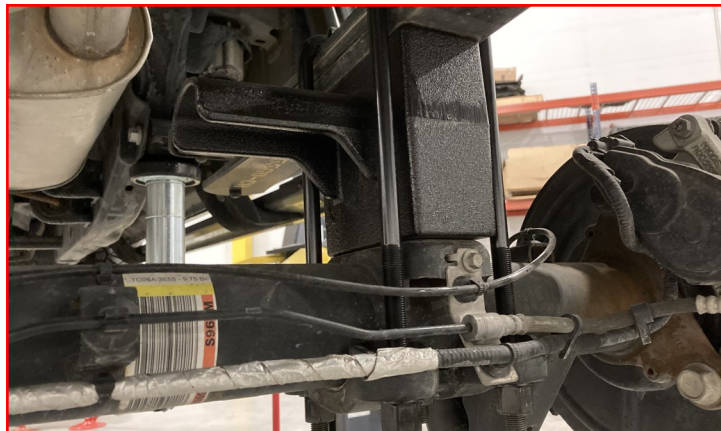
Remove the brake line bracket from the frame. Support rear axle with a suitable jack and remove the shocks.



Slightly loosen but do not remove the driver side u-bolts. Remove the passenger side u-bolts completely. Lower the axle just enough to remove the factory block and install the lift block.



Locate the passenger side lift block, making sure the tapered end points to the front of the vehicle. Install the lift block on the axle pad aligning the pins. Raise the axle and the block up to the spring while aligning the center pins. Install the provided **u-bolts, washers and nuts**. Snug the u-bolt nuts but do not fully tighten at this time. Repeat steps for driver side.



Install the rear brake line drop bracket to the frame using **factory hardware**. Gently pull the rear hard lines down and attach the rear brake line bracket to the drop bracket using **M8 x 25mm bolt, washers, and lock nut**. Torque all to **10 ft-lbs**.



Install the rear brake line drop bracket to the frame using **factory hardware**.

Gently pull the rear hard lines down and attach the rear brake line bracket to the drop bracket using **M8 x 20mm bolt, washer and lock nut**.

Torque all the rear brake line hardware to **10 ft-lbs**.



**NOTE: WHEN UNBOXING THE FALCON REAR SHOCK, YOU'LL NOTICE THE LOWER ROD ENDS MAY BE ORIENTATED DIFFERENTLY. IT IS EXTREMELY INPORTANT THAT ROD END IS ORIENTED TO THE (3) MOUNTING HOLES FACE THE OPPOSITE DIRECTION OF THE RESERVOIR.**

SHOCKS SHOWN ARE **NOT** CORRECT.



Install the roost guard using the (3) provided button head screws and thread locker.



Install the provided rear shock into the factory frame mounting location using the factory hardware.

Do not tighten at this point.



Install the rear emergency brake line drop bracket to the frame using the **factory hardware**, the emergency brake line bracket to the drop bracket using **M8 x 25mm bolt, washers and lock nut**. Torque to **10 ft-lbs**.



Prior to installing wheels, complete all installation steps on the opposite side. Install the wheels and lower the vehicle to the ground. Install rear wheels and lower vehicle to the ground. Torque lug nuts to wheel manufacturers specifications. Jounce vehicle to settle suspension. Torque rear u-bolts to **110 ft-lbs**, and shock hardware to **60 ft-lbs**. Install the vehicles power source at the ground terminal.

Have a reputable alignment shop set alignment to the recommended specs on the bottom of the last page of this instruction booklet. If driving vehicle to an alignment shop, adjust toe prior to vehicle operation.

Recheck that all hardware is of proper torque values and all electrical connections are hooked up. Start vehicle and verify that all dash warning lights are off. Cycle the steering wheel from lock to lock to check for any interference of wheels, tires, brake lines, hoses, wires, etc. and ensure adequate clearance through out the suspension cycle. Adjust as necessary.



**FAILURE TO PERFORM THE POST INSPECTION CHECKS MAY RESULT IN VEHICLE COMPONENT DAMAGE AND/OR PERSONAL INJURY OR DEATH TO THE DRIVER AND/OR OTHERS.**

### **Final Checks & Adjustments**

Once the vehicle is lowered to the ground, check all parts which have rubber or urethane components to ensure proper torque. Torque lug nuts to the wheel manufacturer specs. Move vehicle backwards and forwards a short distance to allow suspension components to adjust. Turn the front wheels completely left then right and verify adequate tire, wheel, brake line, and ABS wire clearance. Test and inspect steering, brake and suspension components for tightness and proper operation. Inspect brakes hoses and ABS lines for adequate slack at full extension, adjust as necessary.

**RECHECK ALL HARDWARE FOR PROPER TORQUE VALUES AFTER 500 MILES, AND THEN PERIODICALLY AT EACH SERVICE INTERVAL THERAFTER.**

### **Vehicle Handling Warning**

Increasing the height of your vehicle raises the center of gravity and can affect stability and control. Use caution on turns and when making steering corrections.

Vehicles with larger tires and wheels will handle differently than stock vehicles. Take time to familiarize yourself with the handling of your vehicle.

### **Wheel Alignment/Headlamp Adjustment**

It is necessary to have a proper and professional wheel alignment performed by a certified alignment technician. Align the vehicle to factory specifications. It is recommended that your vehicle alignment be checked after any off-road driving.

In addition to your vehicle alignment, for your safety and others, it is necessary to check and adjust your vehicle headlamps for proper aim and alignment. If the vehicle is equipped with active or passive safety/collision monitoring and/or avoidance systems including, but not limited to, camera- or radar-based systems, check and adjust your vehicle's systems for proper aim and function.

## **RECOMMENDED ALIGNMENT SPECS**

Front	Driver	Passenger	Tolerance	Total / Split
Camber	-0.2	-0.2	+/- 0.5	+0.0
Caster	+4.0	+4.0	+/- 0.5	+0.0
Toe	+0.08	+0.08	+/-0.05	+0.14