Installation Manual

REAR BLOCK KIT

1.5" Rear Block Kit	2004-2020 Ford F-150*+
3.0" Rear Block Kit	2004-2020 Ford F-150*+

+***Will not fit*** *Raptor models*

Greatly improve your truck's weight distribution and improve vehicle control while towing and hauling heavy loads.

* *See application guide for proper fitment.*

Thank you and congratulations on the purchase of a Rear Block Kit. Please read the entire manual prior to starting the installation to ensure you can complete it once started.

IMPORTANT LEGAL NOTICE

Rear blocks may not be permitted on certain vehicles in your state. Consult your owner's manual, the instructions accompanying this product, and state laws before installing this product.

SAFETY WARNINGS!

Please read and abide the instructions found in this manual, paying close attention to the helpful, cautionary or dangerous warning icons highlighting important safety recommendations and maintenance suggestions throughout this manual.

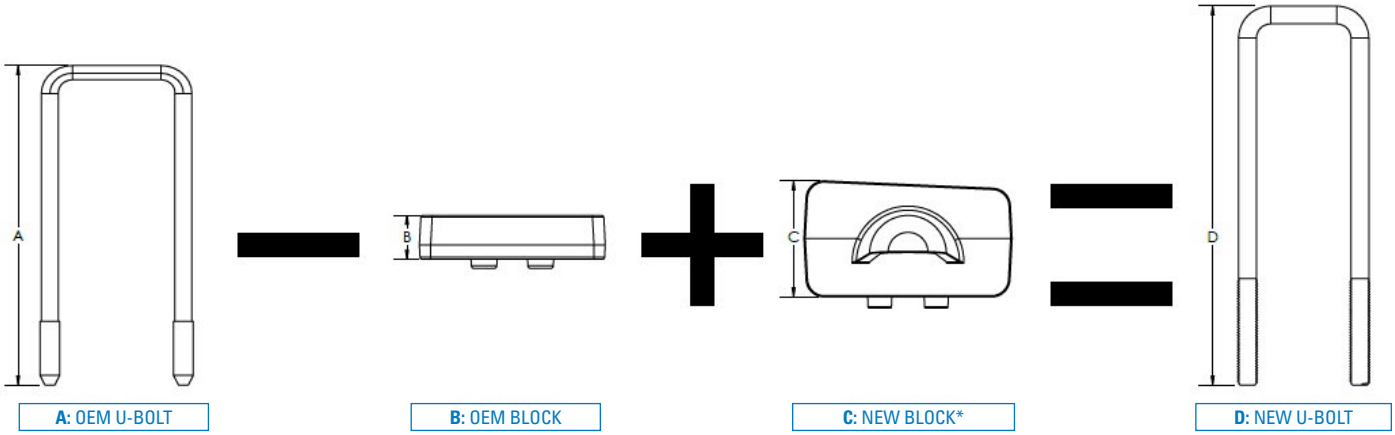
- Use caution when disassembling and reassembling the vehicle. The proceeding instructions are guidelines only, the installer is responsible for ensuring that the vehicle is safe for use after performing the installation. It is recommended to use the factory service manual for the model/year of the vehicle when disassembling and assembling factory-related components.
- 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. Prevent the suspension components from overextension by supporting them with a jack.
- It is not recommended to combine the use of suspension lifts, body lifts, or other lifting methods.
- **DO NOT** install a Rear Block on top of factory block.
- Altering the suspension system of your vehicle may cause it to handle differently than it did from the factory. Larger wheel and tire combinations may increase the leverage on the suspension and steering components. This changes the way your vehicle handles and responds to abrupt maneuvers. Operate your vehicle at reduced speeds in all conditions to prevent loss of control. Failure to do so may result in serious injury.

BEFORE STARTING THE INSTALLATION

Ensure the application information is correct for the make, model and year of the vehicle you are installing the kit on.

PRE-MEASUREMENTS TO ENSURE FITMENT ON VEHICLE

In order to ensure the kit fits properly, you should measure the length of your vehicle's existing U-bolts and compare them to the new U-bolts included in this kit, before removing the old U-bolts, using the math shown below:



A: OEM U-BOLT | **B:** OEM BLOCK | **C:** NEW BLOCK* | **D:** NEW U-BOLT

If the sum of measurement **A** and **C**, minus measurement **B**, is equal or less than to the length of the new U-bolts (**A**-**B**+**C**=**D**), then you can proceed with the installation.

DO NOT install a Rear Block on top of factory block. Trucks equipped with a factory block will have less lift then the stated block height as the factory block is removed during the installation.

PLEASE NOTE:

In some cases, vehicles may not have OEM Blocks, which means that **B** would be zero, and the equation would be simplified to **A**+**C**=**D**

Images used above are for reference purpose only and do not always reflect the "new block" included in this kit. Some "new blocks" (C**) are non-tapered versions. See **Kit Contents** for specific block details.*

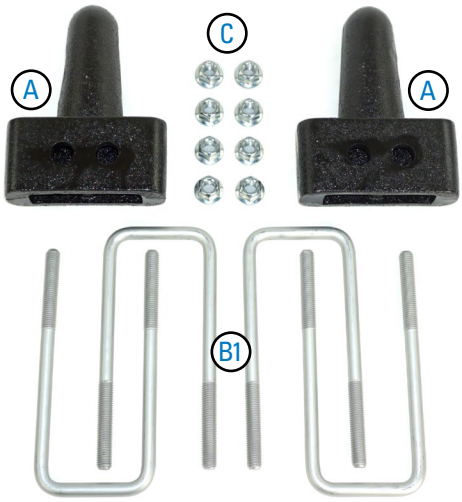
Thank you and congratulations on the purchase of a Rear Block Kit. Please read the entire manual prior to starting the installation to ensure you can complete it once started.

KIT CONTENTS

Please make sure all the items shown in the kit layout are provided in your kit before starting the installation.

1.5"≈ REAR BLOCK KIT CONTENTS		QTY	PART #
A	1.5" Rear Block, Non-Tapered	2	HP1847
B1	U-Bolt	4	HP1873-5
C	Nut, M14 Top Lock Flange	8	HP1872

≈ ***PLEASE NOTE:*** *Trucks equipped with a factory block will have less lift then the stated block height as the factory block is removed during the installation.*



3.0"≈ REAR BLOCK KIT CONTENTS		QTY	PART #
A1	3.0" Rear Block, Driver Side (L), Tapered	1	HP1848
A2	3.0" Rear Block, Passenger Side (R), Tapered	1	HP1871
B2	U-Bolt	4	HP1873-6
C	Nut, M14 Top Lock Flange	8	HP1872

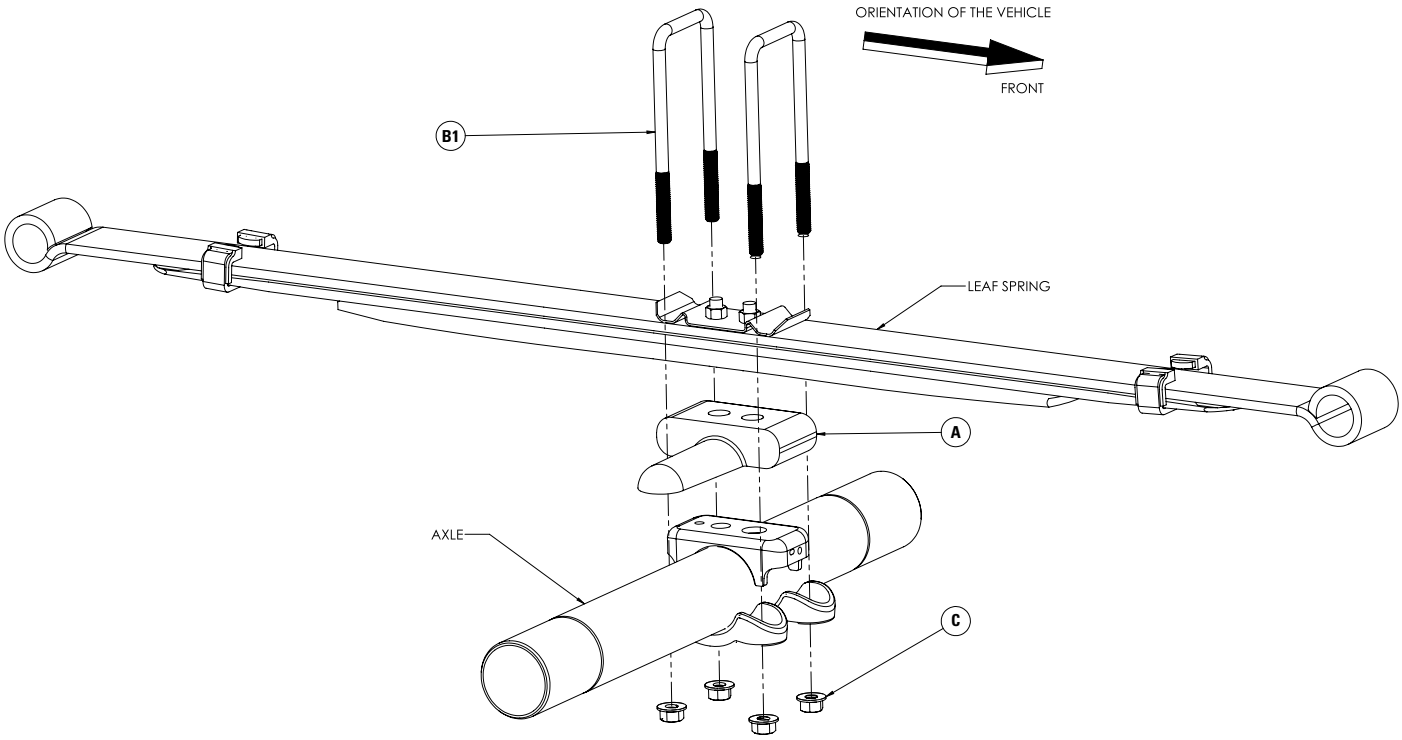
≈ ***PLEASE NOTE:*** *Trucks equipped with a factory block will have less lift then the stated block height as the factory block is removed during the installation.*

REQUIRED TOOLS

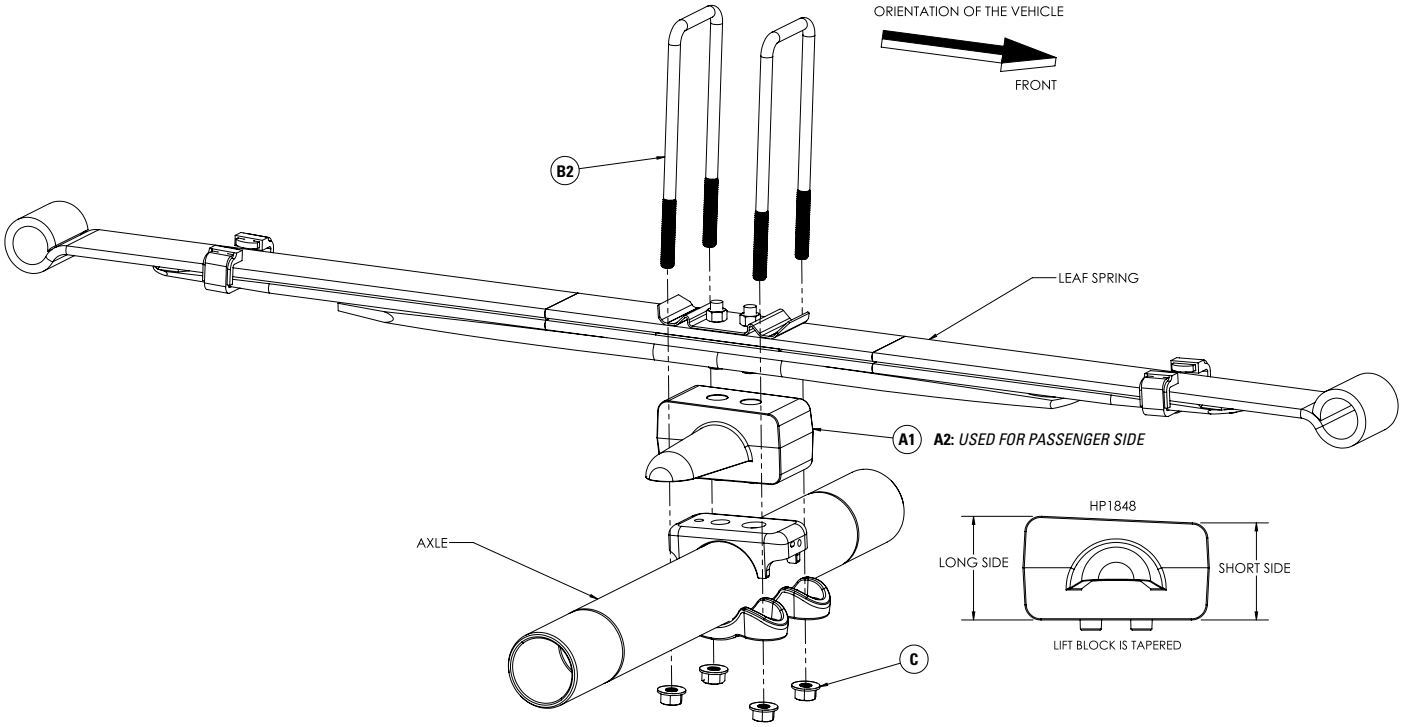
- Hoist or Floor Jack
- Safety Stands
- Safety Glasses
- Metric sockets & combination wrenches
- 20-150 N•m Range Torque Wrenches
- Ratchet

Please make sure all the items shown in this explosion diagram are provided in your kit before starting the installation.

DRIVER SIDE ASSEMBLY SHOWN FOR 1.5" REAR BLOCK KIT:



DRIVER SIDE ASSEMBLY SHOWN FOR 3.0" REAR BLOCK KIT:



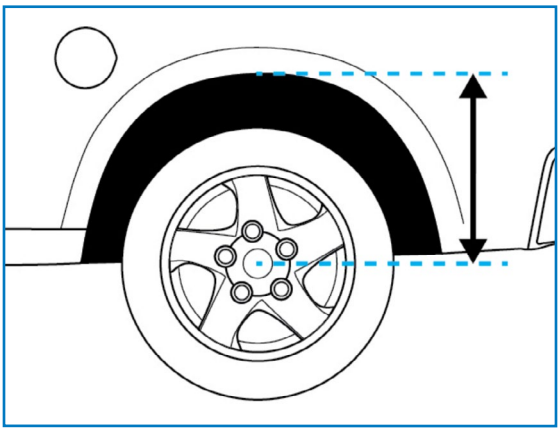
INSTALLATION INSTRUCTIONS

1 MEASURE STOCK RIDE HEIGHT

After ensuring the kit will fit properly using the measurement system on the previous page, park the vehicle on a level surface.

Using a measuring tape, measure the distance between the center of the wheel hub and the bottom of the fender well (shown in Figure 1). This will give you your ride height.

Note the ride height for all four corners.



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2 RAISE VEHICLE

Place wheel chocks in front of and behind both front wheels.

Raise the rear of the truck high enough to allow full extension of the suspension.

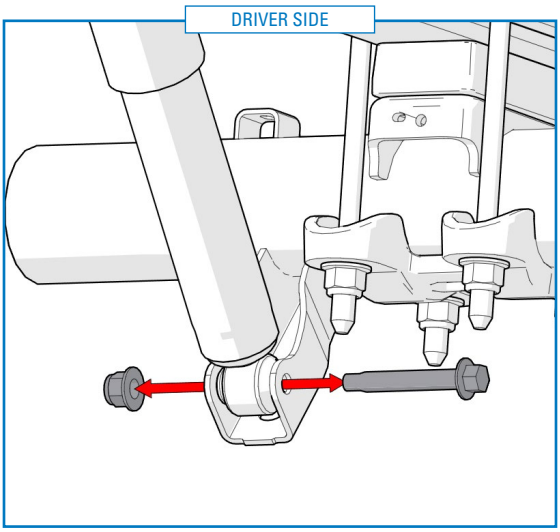
Place two jack stands under the frame and support the axle with a jack.

COMPLETE THE BELOW INSTALLATION PROCESS ON ONE SIDE OF THE VEHICLE AT A TIME

3 REMOVE THE LOWER SHOCK BOLT

Remove the nut and bolt securing the shock absorber to the axle (as shown in Figure 3).

Retain the nut and bolt for reuse later in the installation (Step 8).



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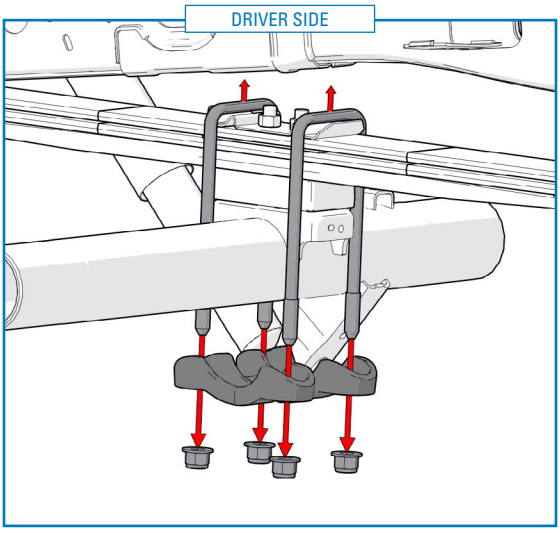
4 REMOVE THE AXLE U-BOLT PLATE

Remove the 4 leaf spring U-bolt nuts to remove the axle U-bolt plate from the axle (as shown in Figure 4).

Remove the leaf spring U-bolts.

Discard the factory U-bolts and nuts as they will not be reused.



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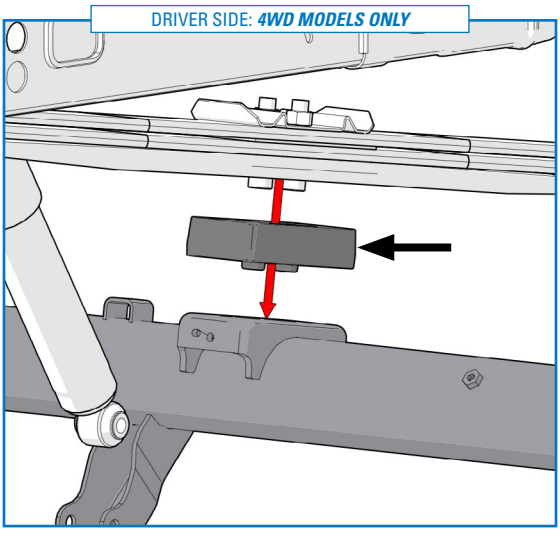
5 LOWER AXLE

Lower the axle enough to allow space for the rear block to be placed between the leaf springs and the spring perch on the axle.

4WD Models Only: 4WD models have a factory block installed in the vehicle (highlighted with a black arrow in Figure 5). Remove this block if equipped.

⚠ ***WARNING:* Do NOT install the rear block on top of OEM or other aftermarket lift blocks. Damage to the vehicle will occur.**



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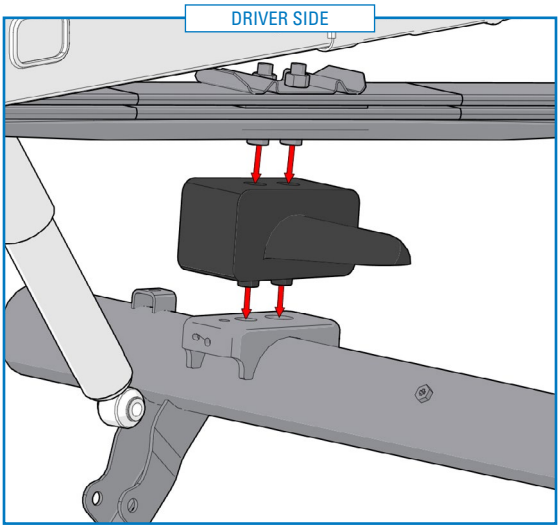
6 INSTALL REAR BLOCK

Place the rear block on the leaf spring perch with the extended portion pointing inwards, towards the center of the vehicle, away from the tire. Ensure alignment pins on block are seated in holes on leaf spring perch.

IMPORTANT INSTALLATION NOTE:
3" Blocks are marked with L (LEFT for Driver side) and R (RIGHT for Passenger side), as well as an engraved arrow meant to point towards the FRONT of the vehicle. Ensure the blocks are being installed on the correct side of the vehicle.

Raise the axle until the block is flat against the bottom of the leaf spring. Ensure the alignment pins in the leaf spring are seated in the holes on the block*.

***PLEASE NOTE:** The block pin must not touch the axle. If the alignment pin is too long in length or the alignment hole is not deep enough, it is recommended to either grind off some of the pin, or drill out some of the hole, so the block sits flush against the bottom of the leaf spring. There should be no gap between the blocks and the leaf spring.*



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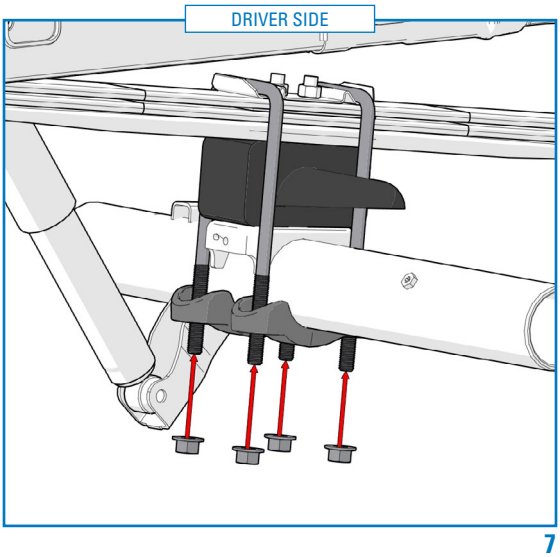
7 INSTALL U-BOLTS

Place the provided U-bolts over the leaf springs onto the leaf spring retainer plate.

Place the axle U-bolt plate (as shown in Figure 7) and secure using the provided M14 flange nuts.

Tighten the nuts evenly until they are snug, but DO NOT fully torque at this stage.



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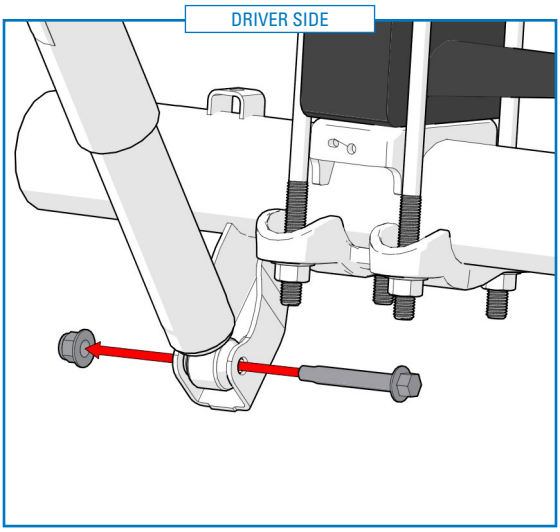
8 RE-ATTACH THE LOWER SHOCK MOUNT

Re-install the lower shock mount using the previously removed hardware (from Step 3).

Do not torque hardware at this stage.



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9 TORQUE HARDWARE

Lower the truck, so it is resting on its tires at normal ride height.

Torque the lower shock mount bolt to 90 N•m [66 ft-lbs].

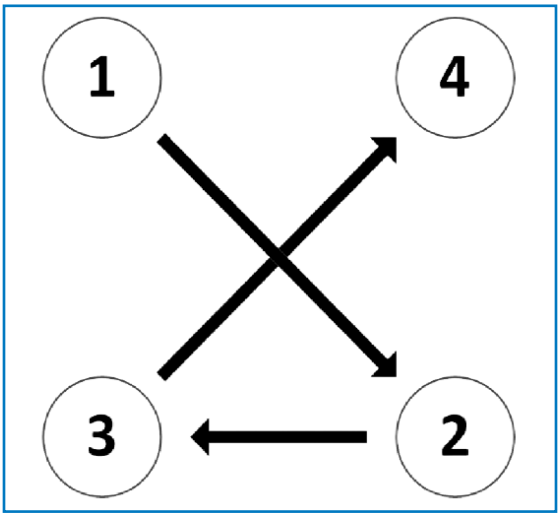
Torque the four M14 U-bolt nuts in a cross pattern (shown in Figure 9) in four stages:

Step 1: Torque all nuts to 35 N•m [26 ft-lbs]

Step 2: Then torque all nuts to 70 N•m [52 ft-lbs]

Step 3: Then torque all nuts to 100 N•m [74 ft-lbs]

Step 4: Finally, torque all nuts to 133 N•m [98 ft-lbs]



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Congratulations!
You have completed the installation

POST INSTALLATION REQUIREMENTS

Vehicle damage may result if the post installation checks are not performed.

SETTLE SUSPENSION

After the kit installation is complete and the vehicle is on the ground at its normal ride height, roll the vehicle backward and forward to settle the suspension.

TIGHTEN COMPONENTS

Tighten all components containing rubber bushings to the specified torque values.

FINAL CHECK & TEST

Verify adequate tire, wheel, brake line and ABS wire clearance by turning the front wheels completely to the left and then to the right. Ensure brake/ABS lines are not stretched when the suspension is at full droop. Test and inspect steering, brake and suspension components.

WHEEL ALIGNMENT & HEADLIGHT ADJUSTMENT

After the kit installation is complete, a professional wheel alignment must be performed by a certified alignment technician to re-align the vehicle to within factory specifications. Additionally, ensure that the vehicles headlights are aimed properly. If not, a headlight alignment is required as well. If not properly aligned it can cause increased tire and suspension component wear.

RIDE HEIGHT SENSOR CALIBRATION

Factory ride height calibration routine must be performed for rear shock absorber suspension height sensor if vehicle is equipped with dynamic rear suspension.

VEHICLE RE-TORQUE & SAFETY INSPECTION

After the kit installation and adjustments have been completed and within 50 miles of driving, perform a check over of all applicable fasteners and hardware to ensure they are adequately tightened to the specifications given (or as noted in the vehicle's factory service manual).

WARRANTY

To be eligible for warranty, the owner must submit their warranty card or register online within 30 days of the purchase date.