## Quadratec® 1.75" Coil Suspension Lift Kit

**Installation Manual: for 2018 - Current Wrangler (JL)** #16400.0010



Rear Coil Spacers - QTY 2
Front Swaybar Links - QTY 2
Front Bump Stops - QTY 2
Rear Bump Stops - QTY 2
Front Shock Brackets - QTY 2
Rear Shock Brackets - QTY 2
Full Kit Component & Hardware

Full Kit Component & Hardware Listed Inside Booklet Cockpit Warning Sticker - QTY 1

**AWARNING A** 

TO REDUCE RISK OF SERIOUS INJURY OR PROPERTY DAMAGE: READ ALL SAFETY MESSAGES AND UNDERSTAND ALL INSTRUCTIONS AND PROCEDURE NOTICES BEFORE ATTEMPTING TO INSTALL OR USE THIS PRODUCT. FOLLOW ALL INSTRUCTIONS AND WARNINGS WITH PRODUCT & VEHICLE OWNERS MANUAL.

**▲ WARNING ②** 

THIS KIT INCLUDES A COCKPIT SAFETY WARNING STICKER REGARDING INCREASED ROLLOVER RISK. THIS STICKER MUST BE AFFIXED IN THE COCKPIT, VISIBLE TO ALL VEHICLE OCCUPANTS AT ALL TIMES.

**ACAUTION A** 

RISK OF EYE INJURY! SAFETY GLASSES MUST BE WORN AT ALL TIMES WHILE INSTALLING OR MAINTAINING THIS PRODUCT. TORQUE AND RECHECK FASTENERS AFTER 250 MILES AND FREQUENTLY THEREAFTER. DO NOT USE IF DAMAGED.



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#### **A Few Words About Product Safety:**

Your Quadratec Suspension product is intended to enhance the utility and enjoyment of your off road capable vehicle. Following safety information and installation recommendations.

Throughout these instructions important safety information is generally preceded by one of three signal words indicating the relative risk of injury, property damage or adverse consequence. The signal words mean:

**AWARNING A** 

a hazardous situation which, if not avoided, could result in death or serious injury. You CAN be KILLED or SERIOUSLY HURT if you don't follow instructions.

**ACAUTION A** 

a hazardous situation which, if not avoided, could result in minor or moderate injury. You CAN be moderately HURT and also may suffer property damage if you don't follow instructions.

NOTICE

Careful attention is required to this instruction or operation but does generally not relate to personal injury. Damage to your Quadratec® product or other property may result if you don't follow instructions.

#### **Before You Begin Installation:**

Congratulations on your purchase of the Quadratec 1.75" Coil Spacer Lift Kit for 018-Current JL Wrangler Vehicles. When unpacking, check to make sure all parts are included and not damaged due to shipping. If any part is missing or broken, please call Customer Service at 800-745-6037 as soon as possible.

#### **IMPORTANT PRODUCT SAFETY TIPS**

**AWARNING ♦** 

INSTALLATION OF THIS PRODUCT ON YOUR JEEP® WILL MODIFY AND ENHANCE ITS SUSPENSION AND OFF-ROAD PERFORMANCE. IT MAY HANDLE DIFFERENTLY THAN AS FACTORY-EQUIPPED INCLUDING; INCREASED RIDE-HEIGHT; REDUCED LATERAL STABILITY; AND HIGHER RISK OF ROLL-OVER OR OTHER ACCIDENT. ALSO, OWNER'S CHOICE OF LARGER TIRE/WHEEL COMBINATIONS MAY REQUIRE ADDITIONAL PEDAL PRESSURE OR INCREASED DISTANCE TO STOP; CAUSE SPEEDOMETER TO READ SLOW AND MAY REDUCE VISIBILITY AROUND THE VEHICLE. CHOICE OF TIRE/WHEEL COMBINATIONS OTHER THAN AS TESTED OR RECOMMENDED MAY COMPROMISE FMVSS 126 COMPATIBILITY.

**▲ WARNING ②** 

FAMILIARIZE YOURSELF WITH VEHICLE HANDLING AND REVIEW ALL VEHICLE MANUFACTURERS AND QUADRATEC® WARNINGS, INSTRUCTIONS AND LIMITED WARRANTIES BEFORE DRIVING A MODIFIED SUSPENSION JEEP®. FOLLOW ALL RECOMMENDED MAINTENANCE PROCEDURES AND ROUTINELY INSPECT YOUR VEHICLE COMPONENTS FOR UNUSUAL WEAR OR OFF-ROAD DAMAGE.

**▲ WARNING** 

DO NOT DRIVE UNDER ANY SPEED OR MANEUVERING CONDITIONS WHICH MAY CAUSE THE VEHICLE TO TRIP, ROLL, LOSE TRACTION OR COMPROMISE YOUR ABILITY TO SAFELY BRAKE IN AN EMERGENCY. QUADRATEC® DOES NOT RECOMMEND COMBINED USE OF SUSPENSION KITS, BODY LIFTS, OTHER LIFTING DEVICES OR COMPONENTS ALTERING THE INTENDED RIDE-HEIGHT OR FUNCTION OF ITS PRODUCTS. MANY STATES HAVE LAWS RESTRICTING THE EXTENT OF VEHICLE MODIFICATIONS. OWNER/DRIVER IS RESPONSIBLE FOR MODIFICATIONS CONSISTENT WITH STATE LAWS AND GOOD SENSE.



#### **IMPORTANT PRODUCT SAFETY TIPS**

**ACAUTION A** 

 ${\bf QUADRATEC}^{\odot}$  RECOMMENDS PROFESSIONAL INSTALLATION OF THIS PRODUCT.



1.75"	COIL	<b>SPACER</b>	<b>KIT</b>	<b>PARTS</b>	LIST:
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Front Coil Spacer	- QTY 2
Rear Coil Spacer	- QTY 2
Cockpit Warning Sticker	- QTY 1

#### Front Sway Bar Link - QTY 2

- OTY 2
- QTY 2
- QTY 3
- QTY 4
- QTY 4

#### Front Bump Stop 2" Tall - QTY 2 %"- 16 x 2.5" Hex Head Bolt

%"- 16 x 2.5" Hex Head Bolt	- QTY 2
%" SAE Flat Washer	- QTY 2
%" Flange Nut	- QTY 2

#### Front Shock Brackets - QTY 2

½"- 13 x 3.5" Hex Head Bolt	- QTY 2
%" USS Flat Washer	- QTY 6
½"- 13 Lock Nut	- QTY 2
1.50"Spacer	- QTY 2
M8 x 1.25 x 30 Flange Head Bolt	- QTY 2
M8 Flange Lock Nut	- QTY 2

#### Rear Bump Stop 2" Tall - QTY 2

%"- 16 x 3" Hex Flat Head Screw	- QTY 4
%" Flange Nut	- QTY 4

#### Rear Shock Brackets - QTY 2

½"- 13 x 3.5" Hex Head Bolt	- QTY 2
¼° USS Flat Washer	- QTY 6
½"- 13 Lock Nut	- QTY 2
1.50"Spacer	- QTY 2
M8 x 1.25 x 30 Flange Head Bolt	- QTY 2
M8 Fender Washer	- QTY 2
M8 Flange Lock Nut	- QTY 2

#### **REQUIRED TOOLS:**

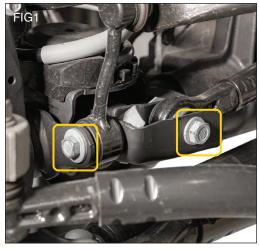
Safety Glasses 5.5mm, 6mm Hex Key Wrench 10, 12, 15, 16, 17, 18, 21, 24mm Sockets %", %", 5%", 34" Open End Wrench Locking Pliers (I.E. Vise Grips) Diagonal Wire Cutters Torque Wrench

**ACAUTION A** 

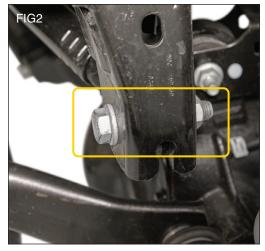
ALWAYS SUPPORT FRAME RAILS USING JACK STANDS.



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**Caution:** Park the vehicle on flat, level ground and set emergency brake. Put on safety glasses. Raise the front of the vehicle and support frame rails using jack stands. Do not lower the axle at



this time. Remove front wheels/tires. Loosen the front track bar at both the frame and axle using a 21mm socket and wrench. (FIGs 1 & 2) Remove bolt from the axle end and save hardware.

**ACAUTION A** 

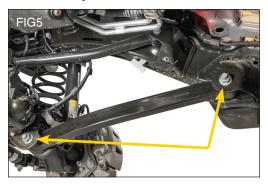
PARK THE VEHICLE ON FLAT, LEVEL GROUND AND SET EMERGENCY BRAK E. ALWAYS SUPPORT FRAME RAILS USING JACK STANDS.



Remove the upper control arm bushing heat shields on the frame using a 10mm socket and or wrench. (FIGs 3 & 4)







Loosen the lower control arms at both the frame and axle using 21mm & 24mm sockets and wrenches. (FIG 5)



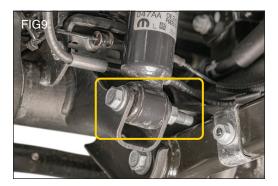
Loosen the upper control arms at both the frame and axle using a 18mm socket and wrench. (FIG 6)



Disconnect the front sway bar end links at the axle using a 18mm socket and open end wrench. Save hardware. (FIG 7)



Remove the sway bar link from the sway bar using a 18mm wrench and 6mm allen wrench. (FIG 8)



Disconnect the shocks from the axle using a 18mm socket and open end wrench. Save hardware. (FIG 9)



Remove the shocks from the frame using a 18mm socket. (FIG 10) Save hardware.





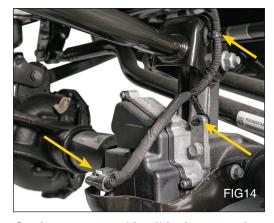
Disconnect the brake line brackets from the lower control arm using a 15mm socket. (FIG 11) Save hardware.



Disconnect the brake line bracket from the coil spring mount using a 10mm wrench. (FIG 12) Save hardware.



Using pliers, squeeze the clamp and remove the axle vent hose. On Rubicon models, slide the gray tab, squeeze and remove the axle locker harness plug. Remove the harness from the upper control arm using a trim removal tool. (FIG 13)



On the passenger side, slide the gray tab, squeeze and remove the axle disconnect harness plug. Remove the harness from the axle housing and upper control arm using a trim removal tool. (FIG 14)



Remove factory coil spring isolator and replace it with provided coil spacer.

Make sure both posts are properly indexed in the frame holes on the spacer. (FIG 15)



With axle in drop position, place bump stop in coil spring, and re-install coil springs. Attach bump stop to axle using the 3/8" hex head bolts, washer and flange nut, tighten until there is slight deformation of bump stop using a 9/16" socket. Repeat this on other side of the vehicle. Raise axle just enough to keep the springs in place. Make sure the spring are properly indexed on the lower isolators. (FIG 16)



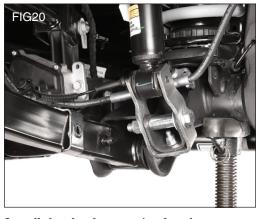
Assemble the sway bar links as shown using the hourglass bushings and sleeves. Glass cleaner and a vice helps with the assembly.



Loosely attach the sway bar links to the sway bar with the 3" long ½" bolts, 7/16" washers and nuts as shown using ¾" tools. (FIG 18)



Loosely re-attach the sway bar links to the axle using factory hardware. Only the driver's side will get a large 7/16" washer on the nut side. (FIG 19)



Install the shock mounting brackets as shown with the 3.5" long 1/2" bolt, 7/16" washers, spacer and nut as shown through the original mounting hole. (FIG 20)

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On the lower side use the M8 hardware. ½" hardware uses ¾" tools and the M8 bolt is 12mm and nut is 13mm. Tighten all hardware evenly.

Carefully raise the axle using a floor jack so the full weight of the vehicle is on the coil springs. Install the wheels/tires and torque to the vehicles owners manual specifications.

Torque all front end control arm and track bar hardware once the rear installation is complete.

Only once the vehicle is on the ground with all weight on the tires you may now fully torque all hardware to specifications.

#### **Front Torque Specs:**

Upper control arms: 80ft-lbs.

Upper control arm heat shields: 40in-lbs.

Lower control arms: 190ft-lbs.

Brake hose to lower control arms: 15ft-lbs. Brake hose to coil spring mounts: 40in-lbs.

Track bar: 110ft-lbs. Sway bar links: 60ft-lbs.

Lower shock mount to axle: 75ft-lbs Upper shock mount to frame: 80ft-lbs Remove the jack stands and lower vehicle onto the tires. Reconnect the locker harness if present, vent line, axle vacuum disconnect, brake lines to coil buckets and to the lower control arms.

This completes the installation work on the front of the vehicle.



Moving to the rear of the vehicle; use a wheel chock on the front tires to prevent the vehicle from rolling forward and release the emergency brake. Raise the rear of the vehicle and support frame rails using jack stands. Do not lower the axle at this time. Remove wheels/tires.

#### **ACAUTION A**

ALWAYS SUPPORT FRAME RAILS USING JACK STANDS.



Loosen the rear track bar at both the frame and axle using a 21mm socket and wrench. (FIG 21) Remove bolt from the axle end and save hardware.



Loosen the lower control arms at both the frame and axle using a 21mm socket and wrench. (FIG 22)

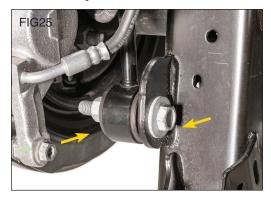


Loosen the upper control arms at both the frame and axle using a 21mm socket and wrench. (FIG 23)



Disconnect the shocks from the axle using a 18mm socket and open end wrench. Save hardware. (FIG 24)





Disconnect the rear sway bar end links at the axle using a 18mm socket and wrench. (FIG 25) Save hardware.



Install new bump stop with the provided 3/8" flat socket head bolts and flange nuts as shown and tighten until there is slight deformation of bump stop. (FIG 26)



Install the shock mounting brackets as shown with the 3.5" long 1/2" bolt, 7/16" washers, spacer and nut as shown through the original mounting hole. On the lower side use the M8 hardware and fender washers. ½" hardware uses ¾" tools and the M8 bolt is 12mm and nut is 13mm. Tighten all hardware evenly. (FIG 27)



Properly index and Position the new coil spacers into the frame mounts and re-install the coil springs. Raise the axle slowly making sure the spacers are still properly indexed in the mounting holes. Help from a friend is advised for this step. (FIG 28)

Carefully raise the axle using a floor jack so the full weight of the vehicle is on the new coil springs. Re-attach the brake lines to the upper control arm mounts, torque the sway bar link to sway bar hardware. Install the wheels/tires and torque to the vehicles owners manual specifications. Remove the jack stands and lower vehicle onto the tires. Reconnect the locker harness if present, e-brake cables and track bar.

This completes the installation work on the rear of the vehicle.



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Only once the vehicle is on the ground with all weight on both axles and all four

Front:

Upper control arms: 80ft-lbs.

Upper control arm heat shields: 40in-lbs.

Lower control arms: 190ft-lbs.

Brake hose to lower control arms: 15ft-lbs. Brake hose to coil spring mounts: 40in-lbs.

Track bar: 110ft-lbs. Sway bar links: 60ft-lbs.

Lower shock mount to axle: 75ft-lbs Upper shock mount to frame: 80ft-lbs

A professional alignment is recommended after lift kit installation but you will need to get the steering wheel close to center to prevent ESP warnings until you do so.



the tires may you now fully torque all front and rear hardware to specifications.

#### Rear:

Upper control arm to axle: 95ft-lbs. Upper control arm to frame: 120ft-lbs.

Lower control arms: 90ft-lbs. Brake hose to axle: 15ft-lbs.

Track bar: 90ft-lbs.

Sway bar links to axle: 60ft-lbs. Lower shock mount to axle: 75ft-lbs Upper shock mount to frame: 80ft-lbs.

Slowly Drive the vehicle a few feet in a straight line so you know the tires are straight. The steering wheel should be off-center.

Loosen the drag links turnbuckle bolt using a 15mm socket. Adjust the turnbuckle until the steering wheel is back on center best as possible. Tighten the 15mm nut to 50ft-lbs. (FIG 29)

Installation is now complete.



COMPLETE INSTALLATION BY CAREFULLY INSPECTING AND CONFIRMING CLEARANCE OF CHOSEN TIRE/WHEELS THROUGH FULL STEERING SWEEP AND SUSPENSION TRAVEL. ASSURE BRAKE LINES CLEAR AND NOT RUBBING AGAINST ANY SURFACE, ABS FITTING AND OTHER FASTENERS SECURED. CHECK SPEEDOMETER READINGS AND IF NECESSARY RECALIBRATE. HAVE ALIGNMENT SETTINGS CHECKED AND IF INDICATED, RE-ALIGN AT SHOP WITH EQUIPMENT SUITED FOR MODIFIED SUSPENSION JEEP VEHICLES.



INSTALL COCKPIT WARNING STICKER ON VISOR OR OTHERLOCATION VISIBLE TO ALL DRIVERS.



This keep' has been modified to enhance its suspension and off-coad performance. It manufact differently than as factory-equipped including, increased richesight reduced altert stability; and higher risk of roll-over or other accident. Also, owner's choice of larger tracking the risk of roll-over additional pedal pressure or increased distance to the roll-over additional pedal pressure or increased distance to the roll-over additional pedal produce visibility around the white. On the read above and may reduce visibility around the white. On the read above and may reduce visibility around the white. On the read above and may reduce visibility around the white. On the read above and may reduce visibility around the white. The read above are reduced to recommended may compromise PRMS 128 compatibility.

Do not drive under any speed or maneuvering conditions which may cause the vehicle trip, roll, lose traction or compromise your ability to safely brake in an emergenc Quadratce\* does not recommend combined use of suspension kits, body lifts, other liftlin devices or components altering the intended ride-height or function of its products. Man states have laws restricting the extent of vehicle modifications. Owner/Driver is responsibl for modifications consistent with state laws and good sense.

Familiarize yourself with vehicle handling and review all vehicle manufacturers and Quadratec® warnings, instructions and limited warranties before driving this modified suspension Jeep®. Folior necommended maintenance procedures and routinely inspect you vehicle components for unusual wear or off-road damage.

PLEASE DRIVE SAFELY AND ALWAYS FASTEN SEAT BELTS.

Install cockpit warning sticker on visor or other location visible to all drivers and occupants.



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# Quadratec® Exclusive Limited Lifetime Warranty

Your Quadratec® branded accessories arecovered by the following **Limited Warranty** provided exclusively by Quadratec, Inc., 1028 Saunders Lane, West Chester PA 19380.

This Limited Warranty is the only warranty made in connection with your purchase. Quadratec neither assumes nor authorizes any vendor, retailer or other person or entity to assume for it any other obligation or liability in connection with thisproduct or Limited Warranty. This Limited Warranty does not apply and is not cumulative toany accessory or part distributed by Quadratecfor which the Manufacturer provides a separatewritten warranty.

What is Covered: Subject to the terms, exclusions and limitations herein and with respect only to Ouadratec branded accessories first sold in the United States, Quadratec warrants to the initialretail purchaser only that your Quadratec accessory shall be free of defects in material and workmanship: for as long as the original purchaser owns the vehicle. The Warranty on bushings and other serviceable wear items (including shockabsorbers) is limited to 1 year from date of retail purchase. This Limited Warranty is not assignable and shall terminate upon sale of the vehicle upon which the Ouadratec accessory is installed or other transfer third persons.

All other warranties are hereby disclaimed, except to the extent prohibited by applicable law in which case any implied warranty of merchantability or fitness for a particular purpose on thislimited to for as long as the original purchaser owns the vehicle. Ouadratec reserves the rights to: (a.) require invoice or other proof your accessoryis within the terms of this Limited Warranty as a condition of warranty service and, (b.) makefuture revisions to this product and Limited Warranty without prior notice or obligation to upgrade your product.

#### What is Not Covered:

Your Quadratec Limited Warranty does not cover products or parts Quadratec determines to have been damaged by or subjected to: (a.) installation damage, alteration, modification, combination with other parts, failure to maintain or improper repair or service, (b.) defects or use whichpre-dates installation of Quadratec® accessory or suspension kit by authorized dealer or shop,(c.) normal wear & tear or gradual reduction inexpected performance of vehicle or components, (d.) emissions control or electronic stability systems or components, (e.) cosmetic damage or damage from moisture or water immersion, (f.) fleet, rental or commercial use, (g.) Acts of God, accidents, misuse, negligence, inadequate mounting or impact with vehicle(s), obstacles or other aspects of the environment, (h.) theft, vandalism or other intentional damage.(i.) use in competition or racing. Other Exclusions: Surface finish of exposedsuspension components is not covered underthis Limited Warranty.

#### Remedy Limited to Repair/Replacement:

The exclusive remedy provided hereunder shall, upon Quadratec inspection and at Quadratec's option, be either repair or replacement of product or parts (new or refurbished) covered under this Limited Warranty. Customers requesting warranty consideration should first contact Quadratec to obtain a RGA number (610-701-3336). All labor, removal, shipping and installation costs arecustomer's responsibility.

### Other Limitations - Exclusion of Damages - Your Rights Under State Law:

In consideration of the purchase price paid, neither Quadratec nor any independent Quadratec distributor/licensee are responsible for any time loss, rental costs, or for any incidental, consequential, punitive or other damages you may have or incur in connection with any part or productpurchased. Your exclusive remedy hereunder for covered parts is repair/replacement as described above. This Limited Warranty gives you specific rights. You may also have other rights that vary from state to state. For example, some states do not allow limitations of how long an implied warranty lasts and /or do not allow the exclusion or limitation of incidental or consequential damages, so the limitations and exclusions herein may not apply to you.

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