JKS®

SIMPLY SUPERIOR.

INSTALLATION INSTRUCTIONS

REAR COIL-OVER CONVERSION
2018-2019 JEEP JL WRANGLER
4 DOOR MODELS

JKS2518

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RV. 012020

GETTING STARTED

Read all warnings, instructions, notes and cautions before you begin the installation.

WHO SHOULD INSTALL THIS?

We recommend that this system be installed by a professional mechanic. The installer will need professional knowledge of special tools required for installation as well as assembly and disassembly procedures.

STAYING SAFE AND LEGAL

- If you fail to drive your lifted and modified vehicle safely it may result in serious injury or death.
- Exercise caution: A lifted vehicle is at greater risk for rollovers or loss of control, especially during abrupt maneuvers.
- Always wear your seat belt, reduce your speed and avoid sharp turns.
- Never operate your vehicle under the influence of drugs or alcohol.
- Consult local and state laws for the legality of your ride height.

BEFORE YOU BEGIN INSTALLATION

- Needed items: OE service manual for your vehicle, safety glasses, and any special tools as indicated in these instructions as well as the following tools: assorted metric and standard wrenches, hammer, hydraulic floor jack and a set of jack stands.
- Ride Height: Measure the initial ride height of your vehicle prior to installation. Final ride height may vary depending on the factory height of your vehicle.
- Tires and rims: Larger tire and rim combinations can increase leverage and cause additional stress to suspension, steering, and related components. When installing larger than OE tires and rims, the following components should be inspected for wear every 2500-5000 miles: ball joints, tie rod ends, wheel bearings, track bar bushings, pitman arm.
- Drive line vibrations: Some vehicles may experience drive line vibration after installation of this suspension system. Possible remedies for this include: tuning angles, replacement of slider on shaft, lengthening or truing of shaft, and/or replacing u-joints.

THANK YOU FOR CHOOSING JKS

TIRE FITMENT

3-3.5" LIFT

35x12.50 on 17x8 with 3.5″ backspacing*

*Sport & Sahara - rubing under articulation will occur

37s May not rub under articulation depending on aftermarket bumpers, arms, or fenders

Maintain a 3.5″ backspacing for coilover clearances.

SPECIAL TOOLS REQUIRED

Metric/Standard Socket Wrench Set

3" cut-off wheel

4-½" angle grinder

Reciprocating Saw
Plasma Cutter (suggested)

½" Drill Bit

Rivet Gun (1/8" Head)

INSTALLATION TIME

Approximately 5-7 hours

PRE-INSTALLATION NOTES

a. This kit is designed as an upgrade to a Jspec lift. Additional components are necessary for installation on a stock vehicle. Additional components maybe nessasry if installed with another lift.

b. Install product with JKS's recommended Fox 2.5" coil overs only.

c. Requires cutting of the factory shock mounts. It is not designed to allow the vehicle to go back to a stock configuration.

d. Additional factory plastic liner rivets are availible if needed to reinstall fender liner.

e. Requires a minimum of 2" of additional bump stop height from factory. This is available from as part # JKS1149.

01. PRE-INSTALLATION

f. Measure from the center of the wheel up to the bottom edge of the wheel opening.

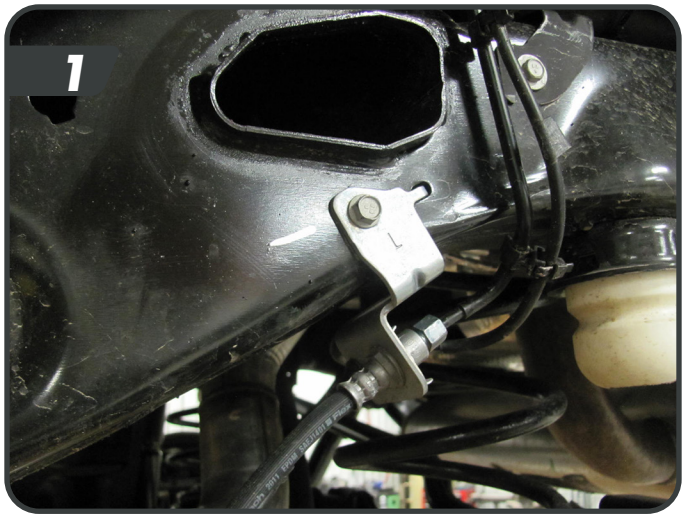
	Drv	Pass
Rear		

01. REAR DISASSEMBLY

a. Disconnect the track bar at the axle with the vehicle still on the ground using a 21mm socket. Save bolt and nut tab.

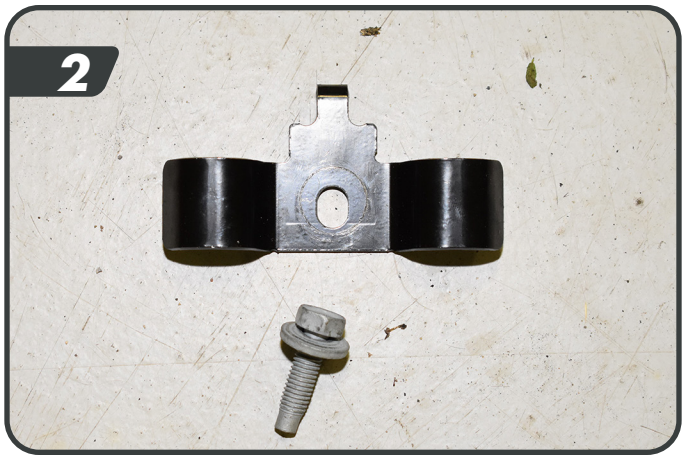
b. Raise and support the vehicle with jack stands positioned in front of the lower suspension arm brackets. Remove the tires.

c. Remove the bolts holding the brake lines to the frame (10mm) [1].

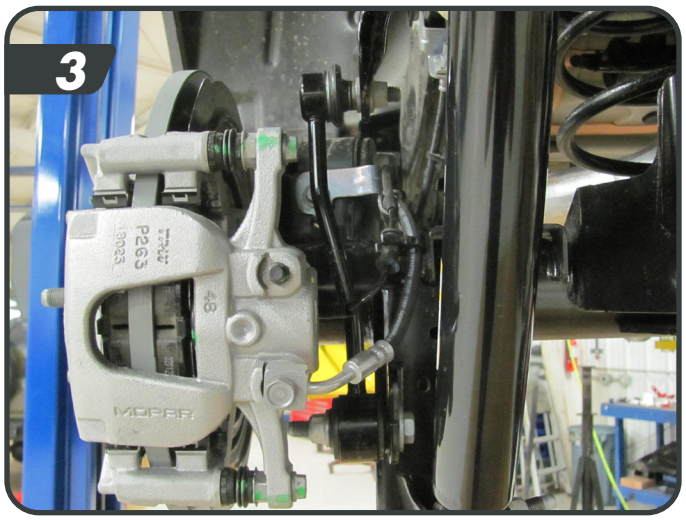


d. Rubicon models: Disconnect the locker wires from the differential.

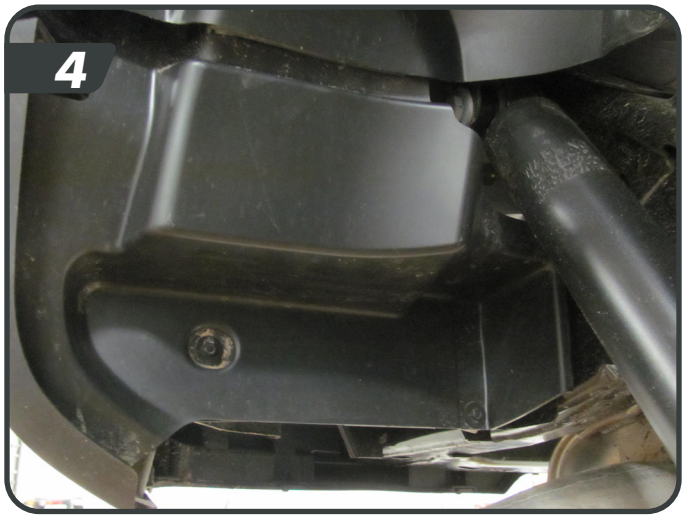
e. Remove “W” bracket securing both emergency cables (15mm). The bracket is located above the driveshaft and is not easily visible. The bracket will not be re-used.[2]



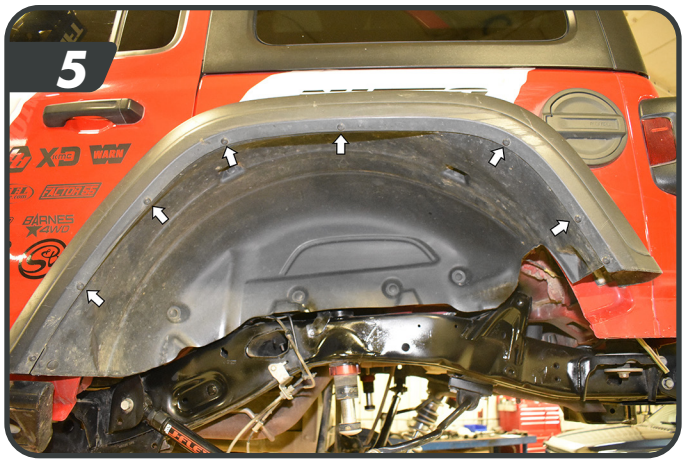
f. Remove the sway bar links from the axle and sway bar (18mm) [3]



g. Remove the rear inner fender liners by removing the 3 bolts (8mm) to gain access to the upper shock bolt [4]. Also remove the bracket behind it that attaches to the frame with 2 bolts (14mm)

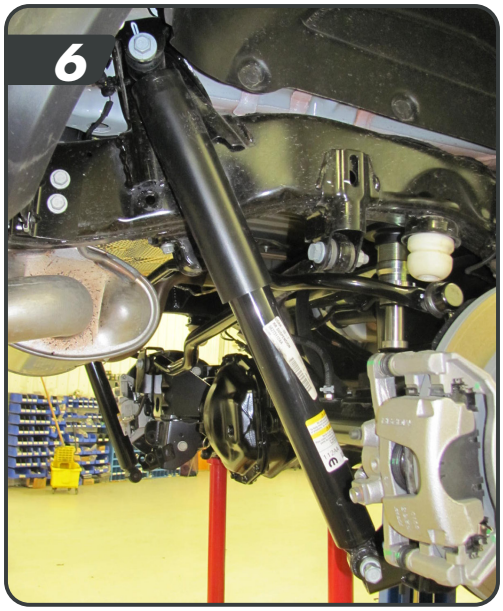


h. Remove the rest of the inner fender liner by removing six factory plastic rivets and the plastic body clips [5].



i. Support the axle with a jack under the center of the differential

j. Remove the shocks from the frame and axle (18mm) [6].



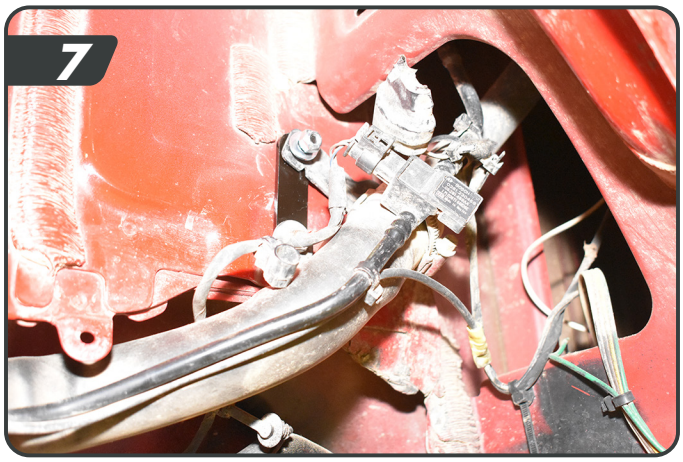
a. Remove the bolt holding the brake line to the axle (10mm) save hardware.

b. Lower the axle enough to remove the factory springs. Remove the upper and lower spring isolators. Make sure there is adequate slack on all brake lines and ABS wires.

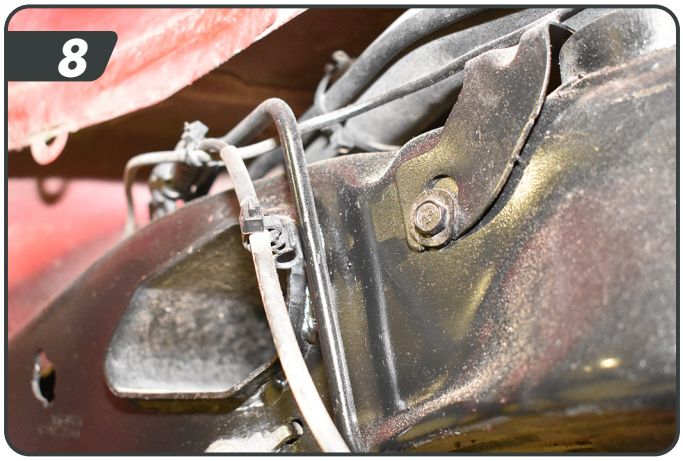
02. FRAME SHOCK MOUNT MODIFCIATION

a. Remove the wiring harness clip from the frame shock mount.

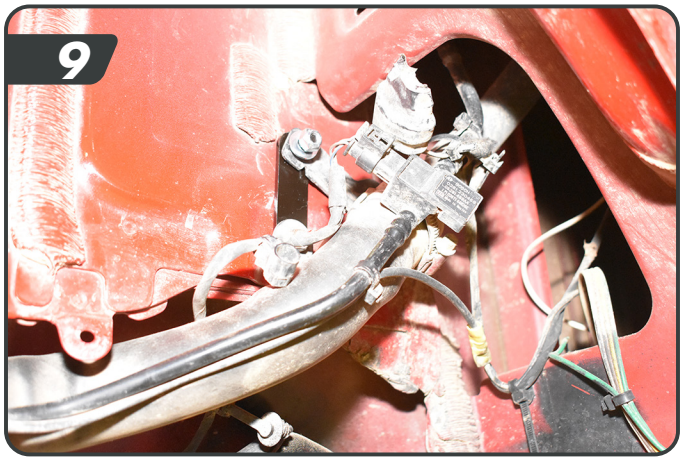
b. Remove the bolt (10mm) holding the fuel filler neck to the body. [7]



c. Loosen the forward filler neck mount and and lift filler neck and retighten hardware.

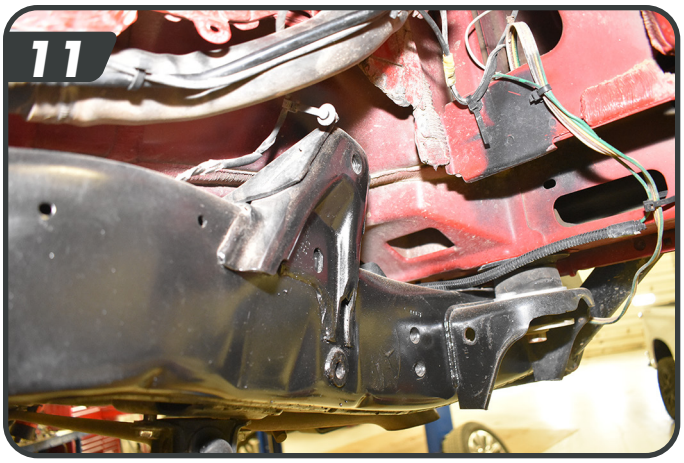


d. Install the Fuel filler neck relocation bracket to raise the neck up away from the shock mount. [9] Using the ¼" washer and nut in bolt pack J145. Torque OE bolt (10mm) to 53in-lbs and torque ¼" nut (7/16) to 86 in-lbs.



a. Using a cut off wheel and reciprocating saw (plasma cutter can be used too) cut off the outter shock tab flush with the inner shock mounting surface. [10, 11] Grind surface smooth with Shock mounting surface.

Note - Be careful of any wiring harnesses and on the driver side the fuel filler neck.



b. Grind the formed support rib at a taper. Starting at 3-¾" down from the top of the shock mount to the bottom of the rib being flushed with the frame. [12]

c. Repeat this procedure on the opposite side.

d. Paint all bare surfaces.

03. AXLE SHOCK MOUNT & LCA MOUNT MODIFICATION

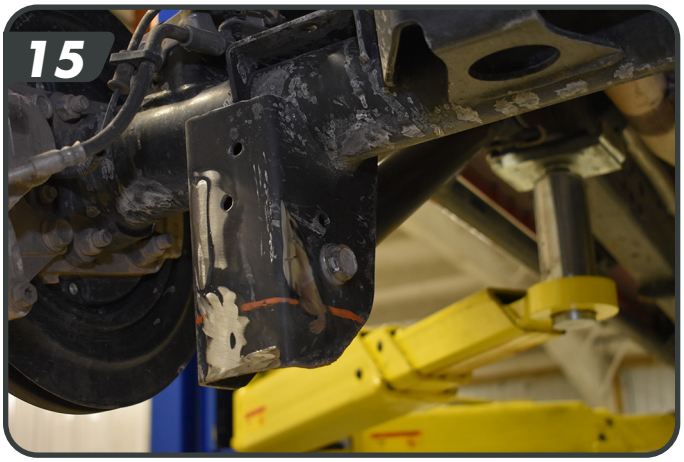
e. Support the axle well with some jack stands.

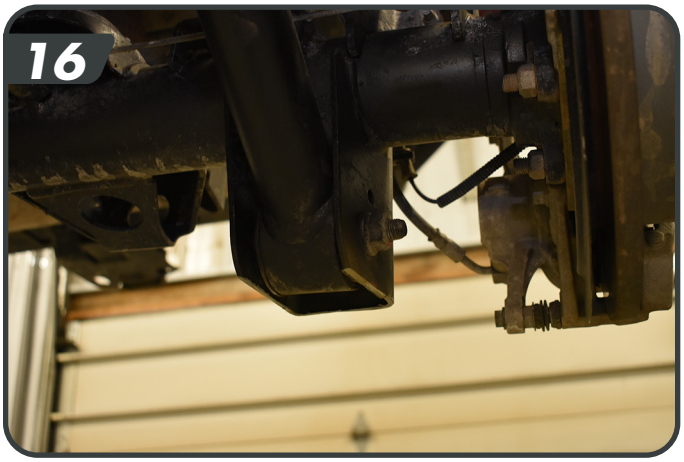
f. Remove the LCA axle bolt (21mm socket and wrench), then remove the LCA from the LCA mount location.

g. Using a cut off wheel or reciprocating saw remove the shock mount from the LCA mount. [13]

h. Use a cut off wheel or reciprocating saw Remove the Axle sway bar mount from the LCA mount. grind the LCA mount smooth. [14]

i. Using a cut off wheel or reciprocating saw remove 1-¾" from the bottom of the LCA mount measured from the rear bottom keeping the cut horizontal. [15, 16]





j. Drill out both holes in the rear of the lca bracket to½" [17].

k. Paint any bare surfaces

l. Repeat this procedure on the opposite side. It easiest to bolt the LCA back in the first sides mount to prevent the axle from rolling before doing the second side.

04. FRAME COIL-OVER MOUNT INSTALLATION

All Frame coil-over mount hardware is located in bolt pack J143

m. Secure the frame mount to the frame with the two 10mm x 30mm Bolts (17mm) and washers through the two holes ontop of each other. Than place the 10mm x 50mm bolt (17mm) with washer in the lower forward hole. Leave loose. [18]

Note: The threaded frame nuts can become carroded or fill with sand/dirt quickly. It may be nessassary to clean out the holes or use a 10mm-1.5 thread chaser on them.

a. Using the provided 12mm bolt (19m) and washer. Secure the frame mount to the frame through the old shock mount location. Leave loose. [18]

b. Mark the rear facing hole on the body mount and remove the bracket. Drill the hole to ½". Paint any Bare surfaces. [19]

c. Remount the frame mount as before. Use the provided 7/16" bolt, washer, and nut through the body mount hole just drilled. Torque all hardware to the following. [20] 12mm (19) 81ft-lbs, 10mm (17) 45 ft-lbs, 7/16" (5/8") 59 ft-lbs.

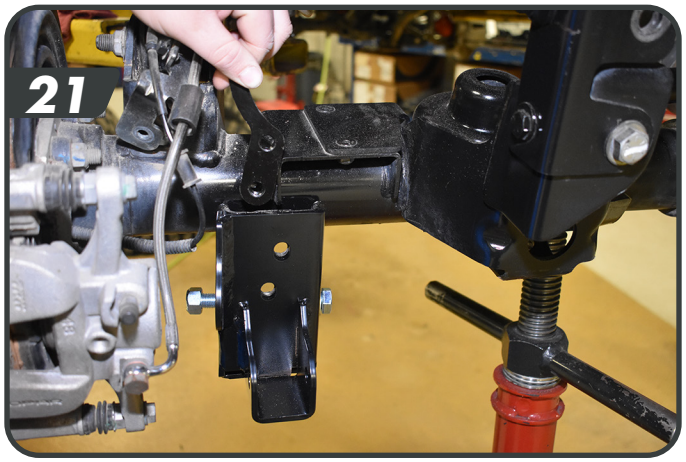
d. Repeat this procedure on the opposite side.

05. AXLE COIL-OVER MOUNT INSTALLATION

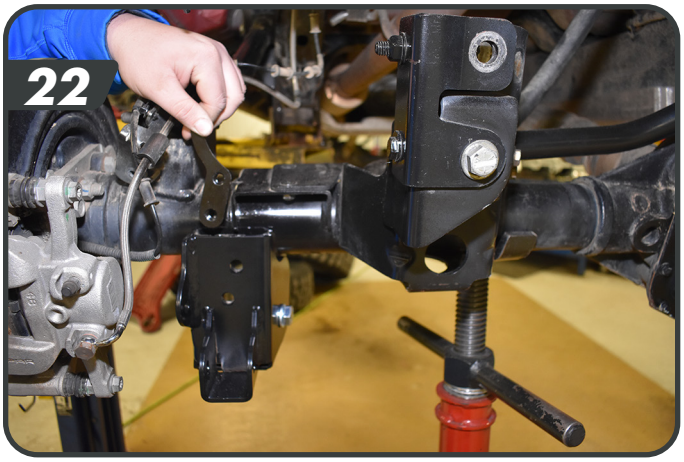
All Axle coil-over mount hardware is located in bolt pack J144

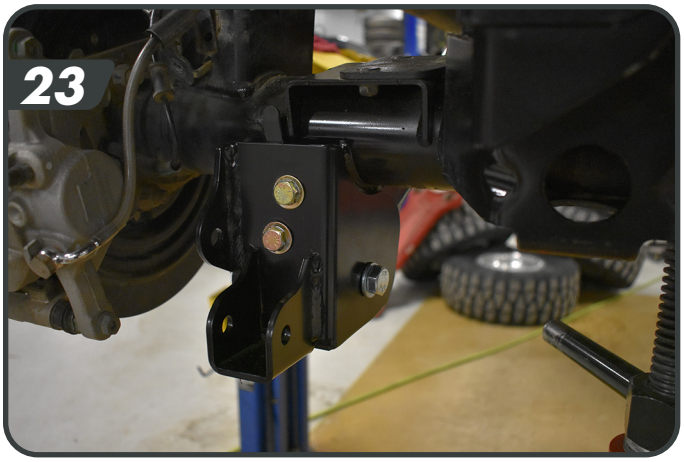
a. Remove the LCA bolt again if you reinserted it.

b. Place the axle mount over the LCA mount and using the provided 14mm bolt, washers, and nut mount it with the lca in place. Leave loose. [21]



c. Insert the nut tab [22] on the front side of the lca pocket and use the provided 7/16" bolts and washers to mount the axle mount through the holes you opened up previously to ½". [23] Torque the 7/16" bolt (5/8") to 59 ft-lbs





d. Repeat the procedure on the opposite side. All control arm bolts will be torqued when the full weight of the vehicle is on the ground.

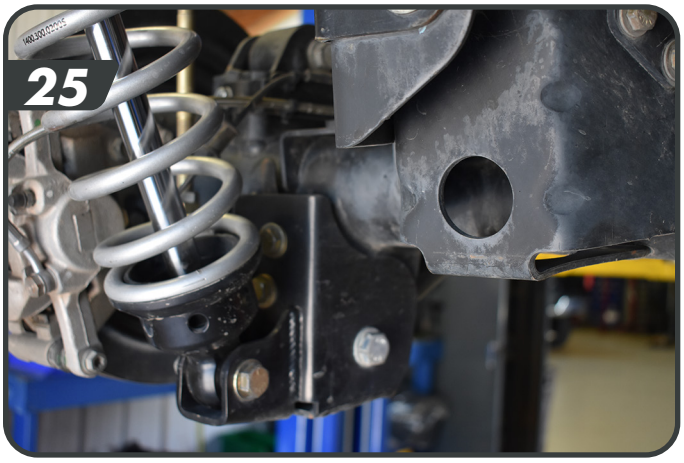
06. COIL-OVER INSTALLATION

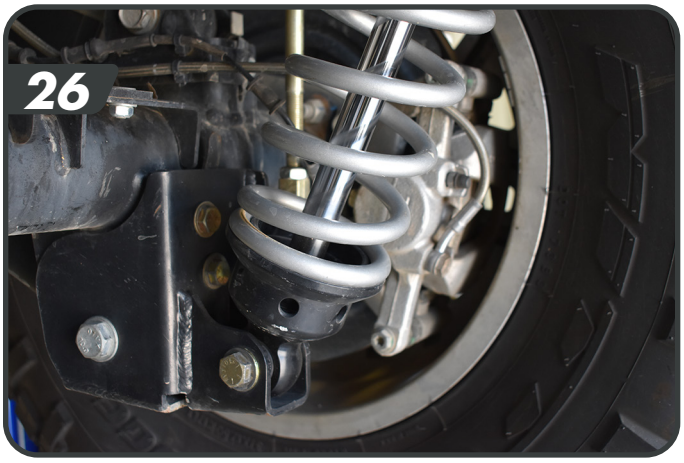
All coil-over mounting hardware is located in bolt pack J145

a. With the upper and lower brackets installed on both sides, install the coilovers to the upper mount using the ½" x 2-¾" bolt from the outside in. [24]

Tip: The coilover misalignment spacers may need to be compressed with a pair of channel lock pliers to fit into the bracket.

b. Raise the axle to mount the coilover into the lower mount. Fasten with the ½" x 2-¾" bolt, washers, and nut. [25, 26]



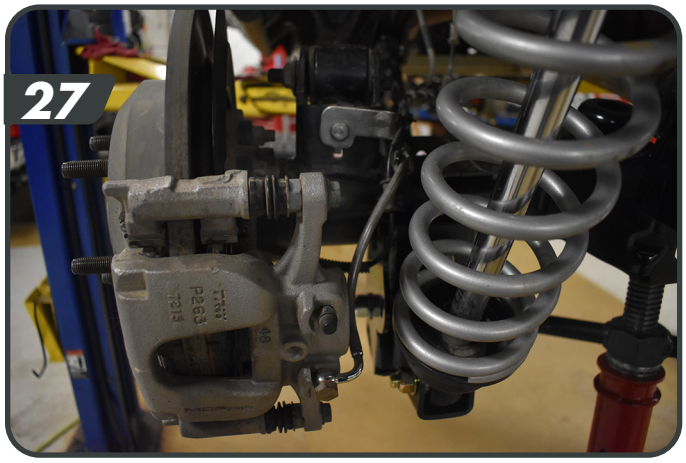


c. Repeat the procedure on the opposite side.

d. Torque both upper and lower coilover mounting ½" (¾" socket and wrench) hardware to 90 ft-lbs

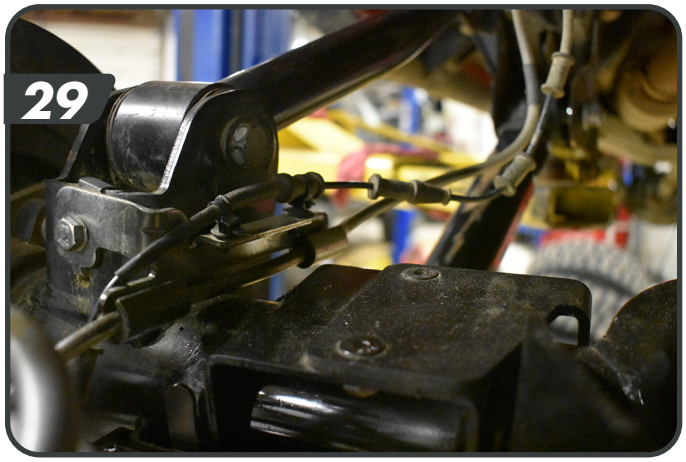
07. BRAKE LINES AND SWAY BAR

a. Discoonnec the flexible brake line from the hardline at the frame (12mm). Remove the retention clip.
b. Disconnect the flexible brake line from the caliper (15mm).
c. Route the supplied brake line as shown. [27, 28, 29]



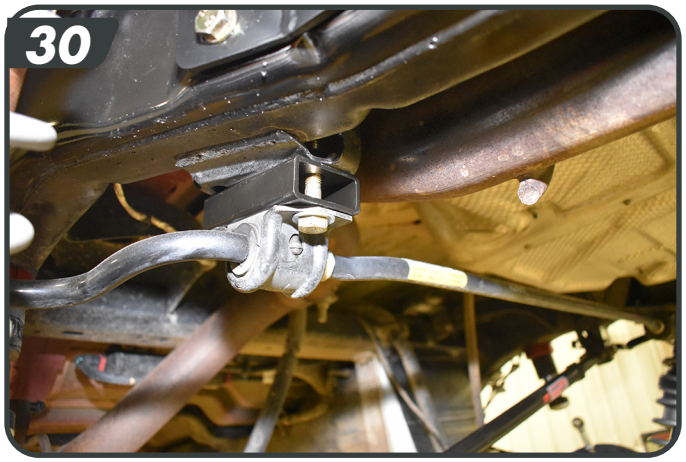
d. Reattach provided extended brake line to the hardline (12mm) torque to 15 ft-lbs
e. Reattach provided extended brake line to the caliper (15mm) torque to 21 ft-lbs
f. Reattach brake line braket to the frame using OE hardware (10mm) [28].

g. Reatach the brake line to the axle mount with OE hardware (10mm). Also use the provided cable ties and attach the brake line to the abs wire. [29]



h. Repeat procedure for the other side. Clean off any brake fluid and bleed brakes according to manufactuer manual.

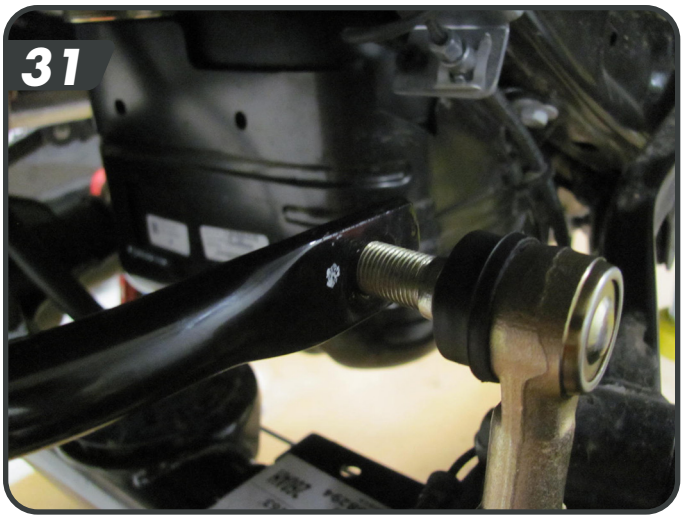
i. On one side at a time remove the 2 bolts (15mm) mounting the sway bar to the frame. Insert the sway bar drop bracket between the OE mount and Frame. Use the provided 10mm bolt and 3/8" washers and bolt the sway bar back to the frame in bolt pack J145. When both sides are complete Torque bolt to 46 ft/lbs [30]

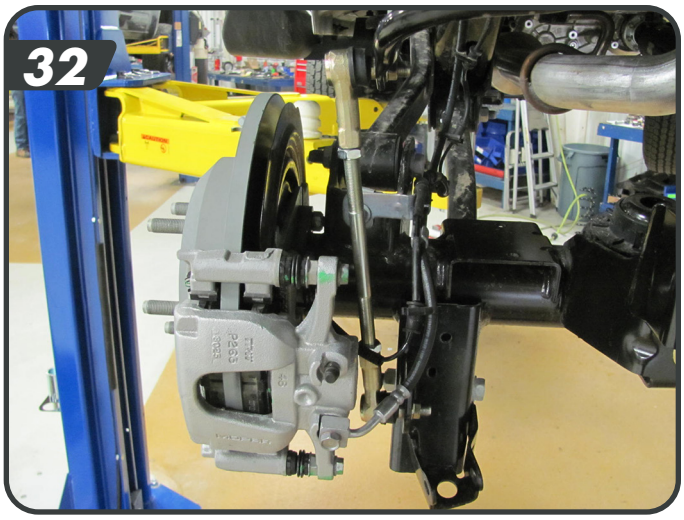


j. Set the length of the provided rear sway bar links with the booted joints to 11-¼" between the ball stud centers and install to the outside of the sway bar and axle mount [31, 32]. Torque to 72 ft-lbs.

Note: Sway bar hole willl be tight, it may require being enlarged just slightly to get the stud to push through. A round file or rotary bit can be used.

Note: While flexing the stud might rub against the frame, so cuttng the stud shorter once installed may be nessassary..





07. INNER FENDER TRIMMING

a. Trim inner fenders to clear the reservoir and coilover mount on both sides. [33]

b. Fasten the inner fenders to the body with the original hardware/clips and new plastic rivets.

08. FINAL INSTALLATION STEPS

c. Rubicon models: Reattach the locker wire harness to the differential.

a. Install the wheels and torque to the lug nuts to 125 ft-lbs.

b. Lower the vehicle to the ground and bounce the vehicle to settle the suspension. Torque the Rear lower control arm bolts at the axle to 126 ft-lbs.

c. Attach the Rear track bar to the axle with the OE hardware. Torque the axle track bar bolts to 74 ft-lbs Plus 60deg.

Note: To line up the track bar it sometimes easier to have an assistant push on the side of the body of the vehicle.

d. Check all hardware torque after 500 miles.

JKS2518 KIT COMPONENTS

JKS2518 JEEP JL WRANGLER REAR COILOVER CONVERSTION

Part No.	Qty	Description
03357	1	Frame Mount - Drv
03358	1	Frame Mount - Pass
03359	1	Axle Mount - Drv
03360	1	Axle Mount - Pass
01975B	2	Sway Bar Drop
03366	1	Axle Mount Nut Tab - Drv
03367	1	Axle Mount Nut Tab - Pass
03365	1	Filler Neck Tab
22544	1	Ext Brake Lines
J143	1	Bolt Pack Frame Mount Hardware
	2	12mm-15 x 35mm Bolt
	2	12mm Washer
	4	10mm-1.5 x 30mm Bolt
	2	10mm-1.5 x 50mm Bolt
	6	10mm Washer
	2	7/16-14 x 1" Bolt
	4	7/16" Washer
	2	7/16"-14 Lock Nut
J144	1	Bolt Pack Axle Mount Hardware
	2	14mm-1.25 x 120mm Bolt
	4	14mm Washer
	2	14mm-1.25 Lock Nut
	4	7/16"-14 x 1" Bolt
	4	7/16" Washer
J145	1	Bolt Pack Coilover Mounting Hardware
	4	½"-13 x 2.75" Bolt
	8	½" Washer
	4	½-13 Lock Nut
	4	10mm-1.50 x 50mm Bolt
	4	3/8" Washer
	1	¼" Washer
	1	¼"-20 Lock Nut
J155	1	Bolt Pack JL Fender rivets
	12	¼" Plastic Rivet