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# INSTALLATION INSTRUCTIONS FOR: JL7141 2018 2.5" JEEP WRANGLER JL SPORT COIL SPRING LIFT KIT 2018 2.5" JEEP WRANGLER JL SAHARA COIL SPRING LIFT KIT 2018 1.5" JEEP WRANGLER JL RUBICON COIL SPRING LIFT KIT

### Safety Warning:

Suspension systems or components that enhance the off-road performance of your vehicle may cause it to handle differently, on and off-road, than it did from the factory. Care must be taken to prevent loss of control or vehicle rollover during sudden maneuvers. Failure to drive the vehicle safely may result in serious injury or death to driver and passengers. We recommend you always wear your seatbelt, drive safely and avoid quick turns and other sudden maneuvers. Constant maintenance is required to keep your vehicle safe. Thoroughly inspect your vehicle before and after every off-road use.

### **Installation Warning:**

We recommend that certified technicians perform the installations of our products. Attempts to install these products without knowledge or experience may jeopardize the safety of the vehicle. These instructions only cover the installation of our products and may not include factory procedures for disassembly and reassembly of factory components. Read instructions from start to finish and be sure all parts are present before disassembling the vehicle. Included instructions are guidelines only for recommended procedures and in no way are meant to be definitive. Installer is responsible to insure a safe and controllable vehicle after performing modifications. Do not perform test drives on public roads with partially completed installations. Always double and triple check your work before use.

<u>ESP WARNING NOTE</u>: The 2018 Jeep Wrangler JL is equipped with an Electric Stability Program (ESP). This system is designed to help control the vehicle in times of uncertain traction conditions and roll stability. Due to the complex nature of this program Rubicon Express strongly suggest that after lifting the vehicle it is returned to the dealer for a computer "flash" to re address tire size and proper ESP control settings. Rubicon Express also recommends that you become familiar with the ESP controls and how the different level of settings can help you to keep better control of your vehicle. *NOTE: Net lift varies with use additional accessories.* 

### **REQUIRED TOOLS:**

Basic mechanics' hand tools Vehicle Hoist Jack Stands Floor Jacks

## JL7141 1.5"/2.5" 4 Door Standard Kit (w/o Shock):

1 1 1 2 4 4 1	RM60160 Front coil spring: Drvr RM60161 Front coil spring: Pass RM60162 Rear coil spring: Drvr RM60163 Rear coil spring: Pass RE1151 Rear Sway Bar End Link Kit 35-RM31150 Sway bar End Link RM40010 Urethane Bushing 51792 Sleeve: 5/8" X 1/2" X 1.37"
2	HWC15062 Hardware Pack, Rear Sway Bar 1/2"-13 X 2 1/4" Button Head Socket bolt Gr. 8
2	1/2"-13 Stover nut
2	1/2" Stainless steel flat washer: .531 I.D. X 1.25" O.D.
1	RE1152 Front Sway Bar End Link Kit
2	35-RM31147 Sway bar End Link
4	RM40010 Urethane Bushing
4	51792 Sleeve: 5/8" X 1/2" X 1.37"
1	HWC15025 Hardware Pack, Front Sway Bar
2	1/2"-13 X 2 1/2" Hex bolt Gr. 8
2	1/2"-13 Nylock nut
2	1/2" Hardened flat washer
1	RE1301 2" Front lower bump stop kit
2	90-RM42520 2" Front bump stop spacer
1	HWC15057 Hardware pack, Front bump stops
2	3/8"-16 X 2 1/2" hex bolt gr. 8
2	3/8"-16 Stover nut
4 1	3/8" Hardened flat washer
1	RE1303 2" Rear bump stop pad 90-6577 Hardware Pack, Bump Stops
4	3/8"-16 X 1" Hex bolt Gr. 8
4	3/8"-16 Stover nut
8	3/8" Hardened flat washer
2	86-RM24345 Bump stop
1	RE1479 JL Front alignment washers
1	HWC15060 Hardware Pack, Alignment cam
2	16mm-2.0 X 110mm Hex bolt Gr. 10.9
2	16mm-2.0 Prevailing torque nut
4	16mm Hardened flat washer
4	35-RM24348 Alignment cam plate

### **Rear Installation:**

- 1. Prepare for the rear installation by removing the following items from the rear of the vehicle: tires/wheels, shocks, sway bar end links, emergency brake cable clamp (under the body), and the track bar at the axle end.
- 2. With the items removed, carefully lower the rear axle assembly and remove the coil springs from the vehicle. Note the position and orientation of the upper coil spring isolators, they will be reinstalled with the new coil springs.

### NOTE: Be careful not to overextend the rear brake lines.

- 3. Install the replacement rear coil springs, **RM60162** drvr and **RM60163** pass, in place of the previously removed stock coil springs.
- 4. Raise the axle into place and install the new rear shocks.

NOTE: If the suspension kit was purchased with Rubicon Twin Tube shocks, you will need to install shocks on the vehicle with the body down.

NOTE: If the suspension kit was purchased with Rubicon 2 1/2'' shocks, be sure the Schrader valve is oriented toward the rear of the vehicle.

- 5. Install the replacement rear anti-sway bar end links, **RE1151**, in place of the previously removed factory anti-sway bar end links as follows:
  - A. For vehicles using factory 17" wheels, secure to the sway bar and rear axle using the supplied 1/2" X 2 1/4" button head bolts and hardware. Be sure the bend in sway bar end links is at the top and facing toward inside of vehicle and the bolt heads are facing in toward frame. PHOTO #1A
  - B. For vehicles using aftermarket wheels with 4.75" of backspacing, secure to the sway bar and rear axle using the supplied 1/2" X 2 1/4" button head bolts and hardware. Be sure the bend sway bar end links is at the top and facing toward outside of vehicle and the bolt heads are facing toward outside of vehicle. **PHOTO #1B**

NOTE: It may be necessary to drill sway bar mounting holes out to 1/2''. PHOTO #2

- 6. Install the 2" rear bump stop pads, RE1303, onto the axle pad with the orientation tab towards the rear of the vehicle, using the supplied **3/8" X 1"** bolt and hardware. **PHOTO #3**
- 7. Reinstall the emergency brake cable clamp to original position.
- 8. Reinstall the rear wheels and check the torgue on all nuts and bolts.
- 9. Re-connect the track bar with vehicle on the ground and at ride height.
- 10. Adjust the position of the brake lines, breather hoses, and ABS lines as required.





with aftermarket wheels

(Photo #1A)

(Photo #1B)





(Photo #2)

(Photo #3)

### Front Installation:

1. Prepare for the front installation by removing the following items from the front of the vehicle: tires/wheels, shocks, and sway bar end links. If necessary, support front axle with jack

### NOTE: Disconnecting the front track bar may assist in front coil removal/ installation.

2. With the items removed, carefully lower the front axle assembly and remove the front coil springs.

### NOTE: It may be necessary to disconnect brake line brackets from front control arms to prevent over extending the front brake lines.

- 3. With the lower bump stops, **RE1301**, placed inside the new front coil springs, **RM60160** drvr and **RM60161** pass, raise the small diameter end of the coils into the upper spring buckets and over the lower spring cups and bump stop pads. Rotate the coil springs so the end of the coil properly sits in the factory isolators. Secure lower bump stops using the supplied **3/8**" **X 2 1/2**" bolts and hardware. **PHOTOS #4 and #5**
- 4. If installing front arm kit, **RE3721**, do so at this time.

# NOTE: Do not install cam washers with front arm kit, RE3721, unless more caster angle is needed.

- 5. Install the replacement front shocks in place of the previously removed stock shocks.
- Raise the axle into place and install the front sway bar end links, **RE1152**, in place of the previously removed factory anti-sway bar end links and secure to the sway bar and front axle using the supplied 1/2" X 2 1/2" hex bolts and hardware.
  PHOTO #6

# NOTE: It may be necessary to drill sway bar mounting holes out to 1/2''. PHOTO #2

- 7. Re-connect track bar if disconnection was required.
- 8. Reinstall the front wheels and check the torque on all nuts and bolts.



(Photo #4)

(Photo #5)

(Photo #6)

- 1. Torque all the bolts to factory specifications. Be sure to double check your work.
- 2. Check steering and suspension in all positions to ensure that there is no bind and adequate clearance between all moving, fixed, and heated members.
- 3. Test drive and note the location of the steering wheel.
- 4. Adjust the drag link to center the steering wheel if necessary.
- 5. Align the vehicle as soon as possible. Set to minimum factory caster angle (5.5 5.7 degrees positive) and factory toe-in specifications.
- Alignment cam plate kit, RE1479, is provided, as an aid to your alignment technician, if needed to achieve proper caster adjustment. Install the alignment cam plates using supplied 16mm X 110mm bolts and hardware. Photos #7, #8, and #9

NOTE: Red arrow is front of vehicle. Red outlines are the location tabs in the factory bracket. Material must be removed from factory bracket to get a + or - caster change.

NOTE: If using stock control arms, adjustments shown in photo #8 will return caster angle to factory spec.

7. Recheck all bolts after 50 miles and again after every off road excursion.

## (Photo #7)



1.5 degree less (negative) caster

(Photo #8)



1.5 degree more (positive) caster

(Photo #9)



0 degree change from stock. Use like this to weld onto bracket as a repair to a worn out hole

# **Application information:**

- This kit is designed for the use of 35" diameter tires or smaller. If 35" tires are to be installed, it is recommended to use 35" x12.50" tires on an 8"-9" wide wheel with an offset of 0 to 12mm+.
- A wheel with a backspacing of 4.75" is suggested with installation of this kit.
- For Rubicon models, 37" diameter tire installation may require trimming to fit.
- For Sport models, 37" diameter tire installation will require extensive trimming to fit.







### **RUBICON EXPRESS ADVANTAGE LIFETIME WARRANTY**

#### Notice to Owner, Operator, Dealer and Installer:

Vehicles that have been enhanced for off-road performance often have unique handling characteristics due to the higher center of gravity and larger tires. This vehicle may handle, react and stop differently than many passenger cars or unmodified vehicles, both on and off-road. You must drive your vehicle safely! Extreme care should always be taken to prevent vehicle rollover or loss of control, which can result in serious injury or even death. Always avoid sudden sharp turns or abrupt maneuvers and allow more time and distance for braking! Rubicon Express reminds you to fasten your seat belts at all times and reduce speed! We will gladly answer any questions concerning the design, function, maintenance and correct use of our products.

Please make sure that the Dealer / Installer explains and delivers all warning notices, warranty forms and instruction sheets included with Rubicon Express product.

Application listings in this catalog have been carefully fit checked for each model and year denoted. However, Rubicon Express reserves the right to update as necessary, without notice, and will not be held responsible for misprints, changes or variations made by vehicle manufacturers. Please call when in question regarding new model year, vehicles not listed by specific body or chassis styles or vehicles not originally distributed in the USA.

Please note that certain mechanical aspects of any suspension lift product may accelerate ordinary wear of original equipment components. Further, installation of certain Rubicon Express products may void the vehicle's factory warranty as it pertains to certain covered parts; it is the consumer's responsibility to check with their local dealer for warranty coverage before installation of the lift.

### Warranty and Return Policy:

Rubicon Express warranties its full line of products to be free from defects in workmanship and materials for the life of the product. Rubicon Express's obligation under this warranty is limited to repair or replacement, at Rubicon Express's option, of the defective product. Any and all costs of removal, installation, freight or incidental or consequential damages are expressly excluded from this warranty. Rubicon Express is not responsible for damages and / or warranty of other vehicle parts related or nonrelated to the installation of Rubicon Express product. A consumer who makes the decision to modify his vehicle with aftermarket components of any kind will assume all risk and responsibility for potential damages incurred as a result of their chosen modifications.

Warranty coverage does not include consumer opinions regarding ride comfort, fitment and design. Warranty claims can be made directly with Rubicon Express or at any factory authorized Rubicon Express dealer.

### Claims not covered under warranty:

- Parts subject to normal wear; this includes bushings\*, shock absorbers, driveshafts, ball joints, tie rod ends and heim joints.
- Discontinued products at Rubicon Express's discretion.
- Finish after 90 days.

Rubicon Express accepts no responsibility for any altered product, improper installation, lack of or improper maintenance

or improper use of our products.

# \*Rubicon Express PT-MEG Super-Ride bushings are covered by the Rubicon Express Advantage Lifetime Warranty,

and will be replaced in the event of failure for the life of the product.