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# INSTALLATION INSTRUCTIONS FOR: RE7121 & RE7141 2007-2013 2.5" JEEP WRANGLER JK 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 2007 + Jeep Wrangler JK is equipped 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.

## RE7121 2 Door Standard Kit (w/o Shock):

- 2 RM60450 Front coil spring
- 2 RM60465 Rear coil spring
- 1 RE1380 Front bump stop kit
- 1 RE1387 Rear bump stop pad
- 1 RE1607 Rear Lower Track Bar Bracket
- 1 RE1478 JK Alignment plate set
- 2 HWC11083 Shock hardware: Bar Pin
- 2 RM40360 Lower Shock Sleeve
- 1 RE1158 Extended Rear Sway Bar End Link Kit

## RE7121T 2 Door Kit (w/ Twin Tube Shocks):

- 1 RE7121 2 Door Standard Kit
- 2 RXT2420 Twin Tube Shock
- 2 RXT2421 Twin Tube Shock

## RE7121M 2 Door Kit (w/ Mono Tube Shocks):

- 1 RE7121 2 Door Standard Kit
- 2 RXJ713 Mono Tube front Shock
- 2 RXJ714 Mono Tube Rear Shock

## RE7141 4 Door Standard Kit (w/o Shocks):

- 2 RM60450 Front coil spring
- 2 RM60470 Rear coil spring
- 1 RE1380 Front bump stop kit
- 1 RE1387 Rear bump stop pad
- 1 RE1607 Rear Lower Track Bar Bracket
- 1 RE1478 JK Alignment plate set
- 2 HWC11083 Shock hardware: Bar Pin
- 2 RM40360 Lower Shock Sleeve
- 1 RE1158 Extended Rear Sway Bar End Link Kit

## RE7141T 4 Door Kit (w/ Twin Tube Shocks):

- 1 RE7141 4 Door Standard Kit
- 2 RXT2420 Twin Tube Shock
- 2 RXT2421 Twin Tube Shock

## RE7141M 4 Door Kit (w/ Mono Tube Shocks):

- 1 RE7141 4 Door Standard Kit
- 2 RXJ713 Mono Tube front Shock
- 2 RXJ714 Mono Tube Rear Shock

## REQUIRED TOOLS:

Basic mechanics' hand tools Vehicle Hoist 5/16" drill bit Jack Stands Floor Jacks

#### 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, and the track bar at the axle end. Keep the rear sway bar links for reuse on the front of the vehicle.
- 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 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 was purchased with Rubicon Twin Tube shocks you will need to install the supplied bar pin thru the bushing on the rod end (top) of the shock prior to installing on the vehicle with shock body down.
- 5. Install the replacement RE1158 rear anti-sway bar end links in place of the previously removed factory anti-sway bar end links.
- 6. Install the rear bump stop extensions onto the axle pad with the offset towards the front of the vehicle, using the supplied hardware.
- 7. Install the rear lower track bar bracket over the factory axle bracket and attach with the supplied hardware. Use the supplied spacer in the factory track bar location to keep the bracket from collapsing when tightening. See Photo #1.
- 8. Reinstall the rear wheels and check the torque 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.



(Photo #1)

## 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.

### 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: Be careful not to overextend the front brake lines.

- 3. Place the front bump stop on the center of the lower spring mount on the axle tube. Insert a center punch through the center hole in the bump stop and mark the hole to be drilled. Drill the marked hole to **5/16**"
- 4. With the lower bump stop placed inside the new front coil spring, raise the small diameter end of the coil into the upper spring bucket and over the lower spring cup and bump stop pad. Rotate the coil spring so the end of the coil properly sits in the factory pocket and install the supplied **3/8**" self tapping bolt through the center of the bump stop. Secure it to the axle. See Photo #2.
- 5. Install the replacement front shocks in place of the previously removed stock shocks. NOTE: If the suspension was purchased with Rubicon Twin Tube shocks you will need to install the supplied sleeve thru the bushing on the body end of the shock prior to installing on the vehicle.
- 6. Raise the axle into place and install the previously removed stock rear anti-sway bar end links in place of stock front end-links. Re-connect track bar if disconnection was required.
- 7. Reinstall the front wheels and check the torque on all nuts and bolts.



## (Photo #2)

# Installation review:

- 1. Torque all the bolts to factory specifications. Be sure to double check your work.
- 2. Test drive and note the location of the steering wheel.
- 3. Adjust the drag link to center the steering wheel if necessary.
- 4. Align the vehicle as soon as possible. Set to minimum factory caster angle (3-4.5 degrees positive) and factory toe-in specifications.
- 5. Supplied Alignment plate kit is provided, as an aid to your alignment technician, if needed to achieve proper caster adjustment.

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.

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

(Photo #3)



1.5 degree less (negative) caster

(Photo #4)



1.5 degree more (positive) caster

(Photo #5)



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+.
- If **33**" tires or smaller are to be installed, the installation of the bump stops can be omitted to allow for more compression travel.

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#### 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.