

RUBICON EXPRESS. 1017 W 600 N. Oqden. UT. 84404. 1-800-776-0767. www.Rubiconexpress.com

INSTALLATION INSTRUCTIONS FOR: JL435M 2018 & Up 4 DOOR JL WRANGLER 3.5" STANDARD 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.

ESP WARNING NOTE: 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.

REOUIRED TOOLS:

Basic mechanics' hand tools Vehicle Hoist Jack Stands Floor Jacks

JL435M Up 4 DOOR JL WRANGLER 3.5" STANDARD KIT:

| 1 | | RE1674 JL Adjustable Track Bar RE1152 Front Sway Bar End Link Kit |
|---------------------------------|--------|--|
| 1 | JL7099 | Universal Kit: |
| 1 1 2 2 1 3 2 | | RM43013 Front Coil Shim RM43014 Rear Coil Shim RM60164 3.5" Front Coil Spring RM60166 3.5" Rear Coil Spring RE1151 Rear Sway Bar End Link Kit RE1301 2" Front Lower Bump Stop Kit 70-0374501800 3/8" x 4 1/2" Hex Bolt Gr. 8 |
| 1 1 1 | | RE1303 2" Rear Bump Stop Pad RE1479 Block Off Plates RE1612 Rear Track bar Bracket |

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 **RM60166** and factory isolators on drvr side and Reinstall both factory isolators and rear coil shim **RM43014** between the upper isolator and the coil bucket on the passenger side only. Be sure to realign upper isolator tabs with holes in the upper coil bucket.
- 4. Raise the axle into place and install the new rear shocks.

NOTE: you will need to install shocks on the vehicle with the body down.

- 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

- 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. With the track bar removed from the factory track bar bracket, install **RE1612** with supplied hardware. Do not to tighten 1/2" bolt at this time. Insert the 9/16" X 3 1/2" bolt and long spacer in the top hole. Insert the 9/16" X 3 1/2" bolt and short spacer in the bottom hole. The track bar will be mounted toward the rear of the vehicle. **PHOTO #4**









(Photo #1A) (Photo #1B) (Photo #2) (Photo #3)

- 8. Reinstall the emergency brake cable clamp to original position.
- 9. Reinstall the rear wheels and check the torque on all nuts and bolts.
- 10. Re-connect the track bar with vehicle on the ground and at ride height.
- 11. Adjust the position of the brake lines, breather hoses, and ABS lines as required.

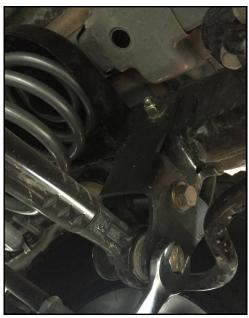


Photo #4

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.

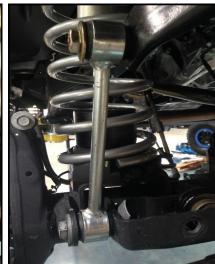
NOTE: It may be necessary to disconnect brake line brackets from front control arms to prevent over extending the front brake lines.

3. With the lower bump stops, **RE1301**, placed inside Install the replacement front coil springs **RM60164** and factory isolators on drvr side and Reinstall both factory isolators and rear coil shim **RM43013** between the upper isolator and the coil bucket on the passenger side only. 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 #5 and #6**

NOTE: if installing 37" tires on JL sport edition, and do not want to trim install (RE1301) on top of (RE1303) with provided hardware.







(Photo #5) (Photo #6) (Photo #7)

NOTE: 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.
- 6. 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 #7**

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

RE1674 Adjustable Track Bar Installation:

- 1. remove **OE** front track bar from the front axle mount and the frame mount. Save the **OE** hardware for reinstallation.
- 2. Measure the adjustable front track bar, 88-RM31160, center hole to center hole and adjust to 34.13". Use that measurement as a starting point for adjustment when centering axle. **(Photo 8)**
- 3. Apply grease to the bushing of the fixed end of the adjustable front track bar, 88-RM31160, and install into the frame mount using the previously removed **OE** hardware. **(Photo 9)**
- 4. Apply grease to the bushing on the adjustable end of the adjustable front track bar, 88-RM31160 and install into the front axle mount using the previously removed **OE** hardware. **(Photo 10)**







(Photo #8) (Photo #9) (Photo #10)

- 6. With the adjustable front track bar, 88-RM31160 installed and the vehicle at ride height, measure to make sure the front axle is centered in the chassis as follows:
 - a. Measure from the inside of the driver and passenger side front tires to the frame rail.
 - b. If the driver side measurement is smaller than the passenger side measurement, remove the adjustable front track bar, 88-RM31160, from the axle mount and adjust the length longer or shorter as necessary. **(Photo 11)**
 - c. Once the front axle is properly centered under the vehicle, reinstall the adjustable front track bar, 88-RM31160, to axle mount per step 5. Tighten the jam nut and pivot bolts, to factory specs.



(Photo #4)

7. It is very important to re-center the steering wheel before driving; this will affect ESP system if steering is not centered before driving. Loosen the **OE** adjuster hardware on the draglink and adjust it until the steering wheel is back to center.

NOTE: Centering of the steering wheel should only take 1 or 2 full turns of the drag link.

Cycle the suspension and steering and make sure the front adjustable track bar clears all other components

Installation review:

- 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.
- 6. 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 #12**, **#13**, **and #14**.



1.5 degree less (negative) caster



1.5 degree more (positive) caster



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

(Photo #12)

(Photo #13)

(Photo #14)

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.

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



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 non-related 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.