INSTALLATION INSTRUCTION RS89167

Rev A

RS66167B Rear Lower Adjustable Control Arm Upgrade

Fits: 2021-2020 Jeep Gladiator JT

⚠ WARNING: Carefully read, understand and follow the instructions provided in this manual, and keep it in a safe place for future reference. If you have any doubt whatsoever regarding the installation or maintenance of your Rancho suspension system, please see your retailer for assistance or advice. Failure to follow the warnings and instructions provided herein can result in the failure of the suspension system, or can cause you to lose control of your vehicle, resulting in an accident, severe personal injury or death.

These instructions should remain in the vehicle glove box for future reference.

Rancho Adjustable Control Arms may increase articulation and wheel travel.

Do not install without appropriate extended length shocks, brake lines, brake line brackets, bump stop extensions, sway bar end links, track bars, and drive shafts.

Failure to install these Rancho Adjustable Control Arms along with appropriate components can result in the failure of the suspension system, or can cause you to lose control of your vehicle, resulting in an accident, severe personal injury or death.

This suspension system will enhance the off-road performance of your vehicle. It will handle differently; both on and off-road, from a factory equipped passenger car or truck. Failure to drive this vehicle safely may result in serious injury or death to the driver and passengers. ALWAYS WEAR your seat belts, REDUCE your speed, and AVOID sharp turns and other abrupt maneuvers.

Parts List

P/N	DESCRIPTION	QTY.
RS881042BL	Left Rear Lower Control Arm - JT	1
RS881042BR	Right Rear Lower Control Arm - JT	1
RS89167	Instructions	1

Control arms can be replaced with the vehicle at ride height on the ground, or with vehicle raised on jack stands or vehicle hoist. To perform installation with vehicle on the ground, skip to next section "CONTROL ARM REPLACEMENT"

COIL SPRING REMOVAL

1) ☐ Park vehicle on a level surface. Set the parking brake and chock rear wheels.

2) ☐ Measure and record the distance from the center of each wheel to the top of the fender opening. See Illustration 1.

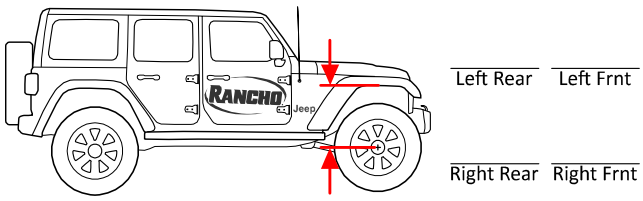

Illustration 1

3) ☐ With vehicle on the ground, remove track bar bolt at axle. See Illustration 2.

4) ☐ Raise the rear of the vehicle and support the frame with jack stands. Remove the rear wheels.

5) ☐ Loosen, but do not remove, upper and lower control arm bolts at frame and axle. See Illustration 2.

6) ☐ Remove bolts and separate the ABS wire brackets from the axle. Unclip ABS wire from brake line and brake line bracket.

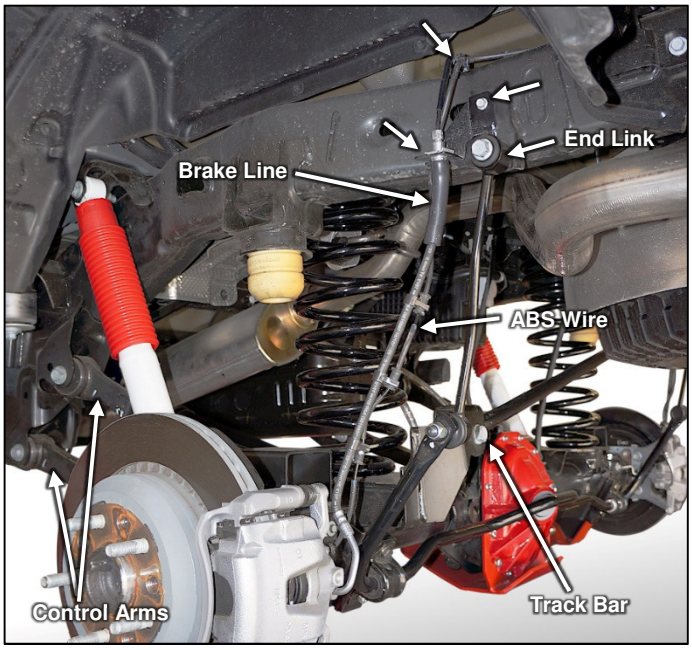

Illustration 2

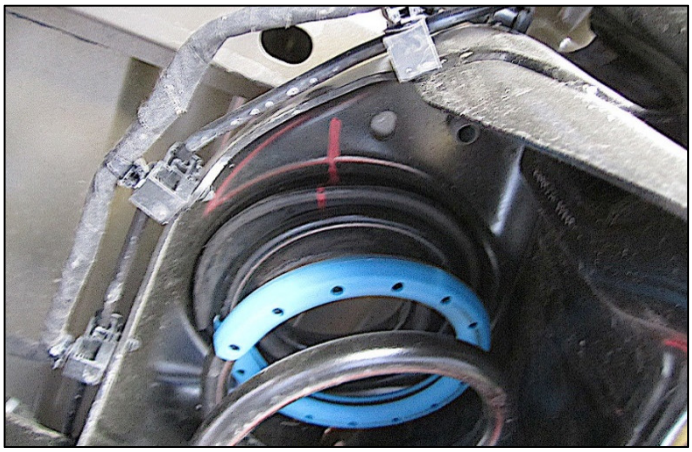

Illustration 3

8) ☐ Remove the sway bar end links from frame mount.

9) ☐ Mark location of upper coil isolators to frame mount. See Illustration 3.

10) ☐ Support the rear axle with a floor jack.

11) ☐ Remove the shock absorbers at axle.

12) ☐ Carefully lower the rear axle until the coil springs are free from the upper mount seat.

Check any wires or hoses to make sure they are not pulled tight and damaged.

Take care not to over stretch and damage drive shaft boot.

⚠ **WARNING: Do not allow the rear axle to hang by any hoses or cables. You could damage the hose or cable, without this damage being visible to you, resulting in sudden and unexpected failure and an accident.**

13) ☐ Remove the coil springs

CONTROL ARM REPLACEMENT

1) ☐ Adjust Rancho lower control arms RS881042BL and RS881042BR to desired length.

TIP: a good starting point is the length of the arm on the vehicle. Adjust from there to achieve desired pinion angle. Lower control arm can also be used to center axle in wheel well when used with Rancho adjustable upper control arms RS66167B. See Illustration 4.

CAUTION: Do not exceed maximum length of 25.375" Exposed thread must be 1-3/16" (1.188") or less.

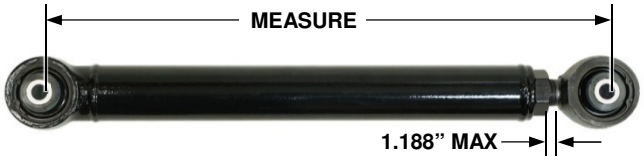

Illustration 4

2) ☐ Remove the driver side lower control arm bolts and remove the lower control arm.

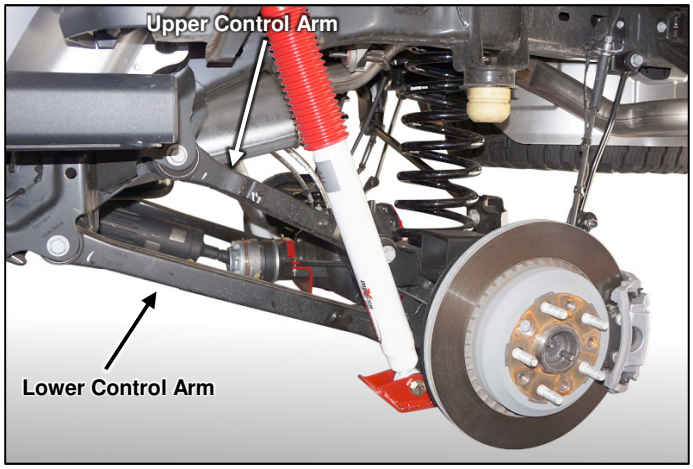

Illustration 5

3) ☐ Attach adjustable end of lower control arm RS881042BL to the frame bracket with the original hardware. See Illustration 6.

4) ☐ Attach lower control arm to the axle bracket with the original hardware.

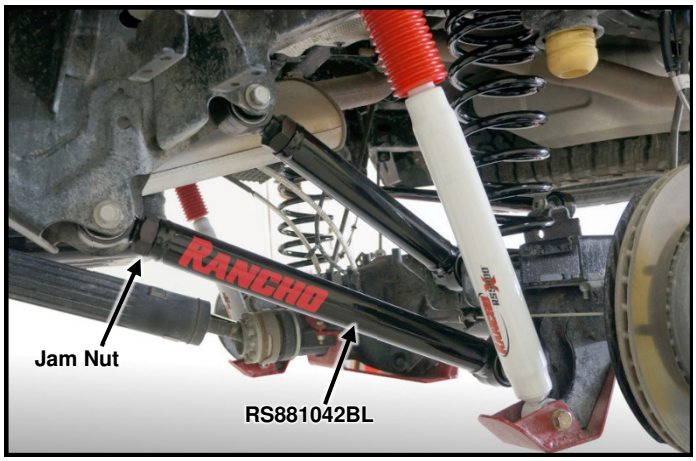

Illustration 6

If control arms do not align with mounting holes, use a jack under the axle pinion housing or under the differential to slightly rotate axle the desired direction.

If vehicle is on stands, raising axle to ride height will help to align holes.

Do not lift vehicle off of jack stands.

5) ☐ Repeat steps 2 through 5 for the passenger side using RS881042BR.

6) ☐ Torque the control arm bolts to 190 lb-ft. Tighten jam nuts to 200 lb-ft.

COIL SPRING INSTALLATION

1) ☐ Lower axle if needed and install coils using OE isolators.

Check any wires or hoses to make sure they are not pull tight and damaged.
Take care not to over stretch and damage drive shaft boot.

⚠ **WARNING: Do not allow the rear axle to hang by any hoses or cables. You could damage the hose or cable, without this damage being visible to you, resulting in sudden and unexpected failure and an accident.**

2) Raise rear axle and make sure coils and isolators are seated properly.

Make sure locating pin of upper isolator in hole of upper mount and coil pigtail is seated in isolator. Use marks to help align isolators.

3) ☐ Attach shocks to axle mount using OE hardware. Torque to 100 lb-ft

4) ☐ Install other required components following manufacturer's warnings and instructions.

5) ☐ Torque all fasteners to manufacturers recommended torque. If re-using OE track bar and control arms, torque on the ground at ride height.

6) ☐ With the suspension at maximum extension (full droop), inspect and rotate all axles and drive shafts. Check for binding and proper slip yoke insertion. Check for adequate length of any wires, hoses and links. Verify adequate tire, wheel, brake hose and ABS wire clearance. Inspect steering and suspension for tightness and proper operation.

7) ☐ Install wheels and lower vehicle to ground.

8) ☐ Torque track bar to 100 lb-ft on the ground at ride height.

9) ☐ Repeat step 6 with suspension at ride height and full articulation

10) ☐ Ensure that the vehicle brake system operates correctly. Verify that each hose and wire allows for full suspension movement.

11) ☐ Readjust headlamps.

12) ☐ Park the vehicle on a level surface. Measure and record the distance from the center of each wheel to the top of the fender opening. See Illustration 7.

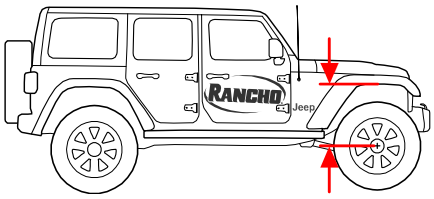

Illustration 7

OE Torque Specs

Upper Control Arm to Axle (torque at ride height)	190 lb-ft
Lower Control Arm (torque at ride height)	190 lb-ft
Shock Absorber	100 lb-ft

Track Bar (torque at ride height)	100 lb-ft
Sway Bar End Link (upper)	55 lb-ft
Wheels (Lug Nuts)	130 lb-ft

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