



Installation Instructions

AOR-1000-003

Rear Jeep JK Coilover Kit

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Warranty

No Warranty. There is no warranty, express or implied, other than as expressly set forth or referred to herein and, in particular, neither Party makes any warranties to each other or any other person or entity, whether express, implied or statutory, as to the description, quality, merchantability, completeness or fitness for any purpose of any services, products or information provided hereunder or described herein, or as to any other matter all of which warranties are hereby excluded and specifically disclaimed.. THE SAFETY, EFFECTIVENESS, AND PERFORMANCE OF THIS PRODUCT IS DIRECTLY RELATED TO THE MANNER IN WHICH IT IS INSTALLED, USED, AND/OR MAINTAINED. THE USER ASSUMES ALL RISK.

Notice

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! AccuTune Off-Road 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.

Tools Required

Proper Safety Equipment

Basic Hand Tools (Wrenches, Sockets, Ratchets, Etc)

Torque Wrench

Jack & Jack Stands

Grinder & Appropriate Consumables

Sawzall & Appropriate Consumables

Welder

Zip Ties

Parts List – Coilover Kit (AOR-1000-003)

P/N	Description	QTY
AOR-2000-007-1L	Shock Mount, Main, 07-17 Jeep JK, 2.5, Welded, Left	1
AOR-2000-007-1R	Shock Mount, Main, 07-17 Jeep JK, 2.5, Welded, Right	1
AOR-2000-008-1L	Shock Tab, 07-17 Jeep JK, Rear Lower, Left	1
AOR-2000-008-1R	Shock Tab, 07-17 Jeep JK, Rear Lower, Right	1
AOR-2000-011	Reservoir Mount, Universal Bracket	2
AOR-3000-009-036	Hose Clamp, SS, 0.50" W, Up To 2.75" ID	4
AOR-3000-008-038-100	Screw, Self Threading, Zinc Plated, 3/16-16 x 1.00	4
AOR-3000-001-050-0275	Screw, Hex Cap, Fine Thread, Grade 8, 1/2"-20 x 2.75 "	4
AOR-3000-007-050	Nut, Locking, Stover, Fine Thread, Grade C, 1/2-20	4
AOR-3000-010-050	Washer, SAE, Grade 8, Gold Zinc, 1/2"	8

Other Modifications or Parts Required & Not Included

Longer brake lines suitable for your lift height & wheel travel
Sway Bar links suitable for your lift height & wheel travel
Wheels with 4" backspacing minimum
Aftermarket driveshaft
Lift kit components for desired lift height (control arms, steering, etc)
Skid plate & exhaust modifications
Shocks require 1.50" wide spacers
2.5 shocks require 90 deg fittings
DOES NOT WORK WITH STOCK INNER FENDERS

These instructions cover installation of the AccuTune Off-Road JK Rear Coilover Kit (AOR-1000-003) on stock axles. This kit is designed to work with the stock lower control arm mount, shortened mounts may not work, we recommend replacing them with full length aftermarket replacements.

Take Before Measurements & Prepare Brackets

1. Install final wheel/tire combo with weight on the vehicle measure height of lower link bolts off the ground (both sides). This will be referenced later so you know where ride height is and can measure up travel.
2. Mask where the upper coilover brackets weld to the frame. Paint upper coilovers brackets.

Note: Jeep JK's have 1.25" to 1.50" rake from the factory, our kit removes the rake so the rear will receive less lift than the front. A 4" front lift equates to 2.75" rear lift.

Remove Lift Kit & OE Brackets

3. Jack up the vehicle and place chassis at new desired ride height. Ensure vehicle is stable.

For a 2.75" rear lift there should be 10.5" between the rear of the oem bump pad and the frame directly behind the bump stop. See Fig 1.
4. Remove wheels/tires. Remove coil springs and shocks. Remove Sway Bar Links from Axle. Remove the heat shield. Remove or cut exhaust as necessary.
5. Zip tie brake lines, wheel speed sensors, wiring, and other components away from oem brackets.



Fig 1: Rear Measurement at 1.75" of Lift (will measure 10.5" for 2.75" lift)

6. Cut off OEM frame shock mount. See Fig 2.
7. Clean up frame, grind flat, remove paint from surrounding areas.
8. Cut off lower shock mounts and grind smooth.
9. If you're running Fox IFP Air Bumps we included a reinforcement plate for the stock axle bump pads. Clean up the bump pads for welding.

Install New Brackets

10. Hold the upper coilover bracket in place. This is a two person job. First hold it flush against the inside of the frame, slide it up until the little tang sits on the bottom of the frame. Line up the front edge of bracket on the cross member. When properly positioned the bracket will be parallel to the tub basket, flat on the frame and the bolt will just barely slide by the body ribbing. Trim the bracket as necessary then tack into place. See Fig 3 & 4.



11. If you're using stock bump stops and spacers remove the foam bumper by prying it out. If you're using air bumps then remove the pressure.
12. Jack the axle up until it's firmly against the bump stops.
13. Let the pressure out of the coilovers, install slider, then one spring. Install the coilover into the upper mount. Bolt the lower mount onto the coilover.
14. Collapse the shock until there is 3/8" between the bumper and end of the shock. If they are King or Sway-A-Way be sure to install the spring perch. We recommend using a spacer to hold the shock in position.

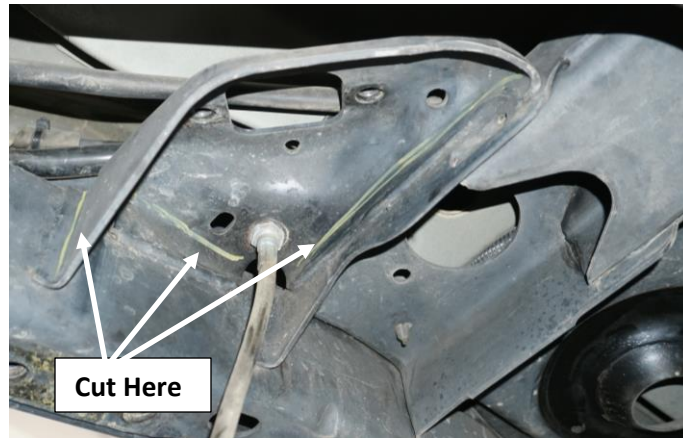


Fig 2. Rear Frame Shock Mount. Note that is not standard brake line routing and needs to be moved before cutting.

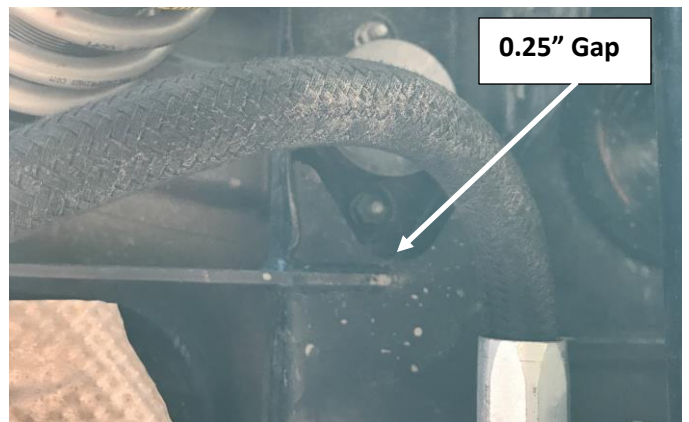


Fig 3. Front edge of mount is 1/4" away from cross member radius.

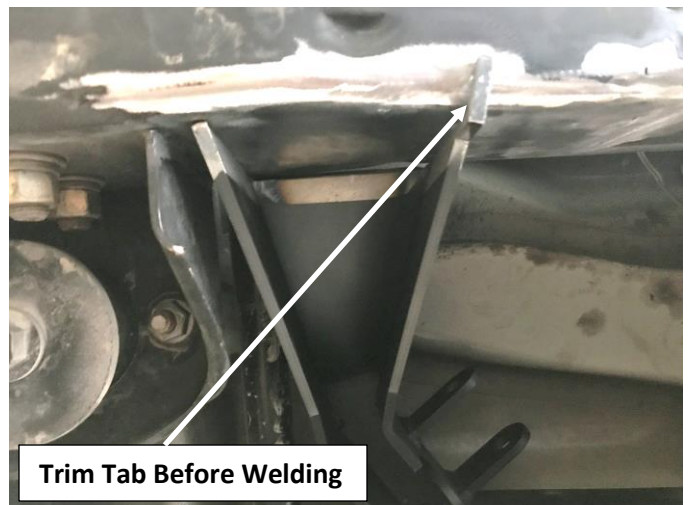


Fig 4. Rear upper mount fitment.

16. Cycle the suspension straight up and down from full bump to full droop. Some track bar brackets hit larger shocks and need to be clearanced. At full droop check brake line length. See figure 5.

17. Install a tire on the driver side and compress it all the way while letting the passenger side droop out completely. Check for clearance between the spring slider, spring and frame. Check tire and fender clearance. If you want to increase or decrease clearance note how much.

18. Repeat the previous step with the tire on the passenger side at full bump and driver side at full droop.

19. If you want to change clearance increase or decrease bump stop spacer by that amount. Break the tacks on the lower shock mounts and reset everything to retain the 3/8" of clearance. Repeat articulation until clearances are good.

20. Remove the shocks, trim the lower tab from the upper bracket, fully weld, paint.

21. Trim the stock heat shield and reinstall.

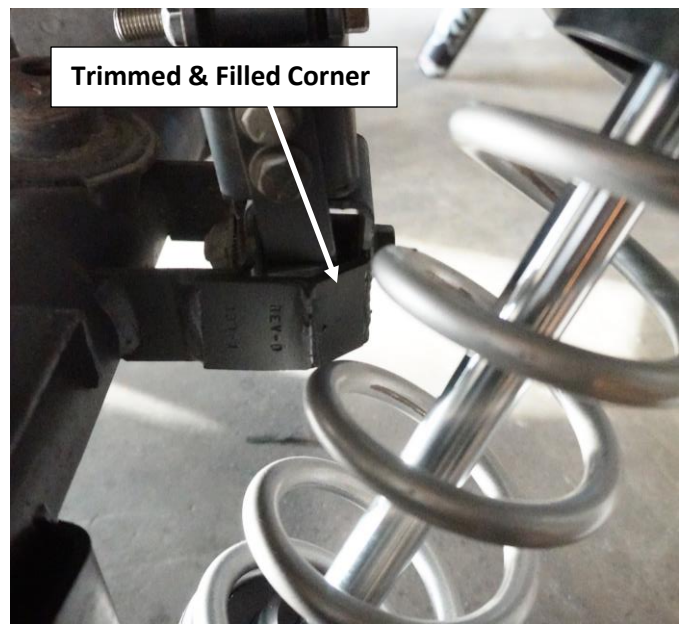


Fig 5. Trimmed factory rear track bar bracket.

Reservoir Mounting

22. Paint reservoir brackets.

23. All reservoir hoses point back. All Fox 2.5 shocks and all King shocks should have the hose pointed down with a 90 degree fitting. With pressure removed from shocks loosen fittings (if necessary). Orient reservoirs to avoid exhaust and track bar. Hold reservoir brackets to reservoir and mark outside of bracket. Line up bracket, center punch holes, pre-drill 21/64. Install brackets using self-threading screws.

24. Mount the reservoir gently using the supplied hose clamps. Make sure the hose is not hitting anything. **Retighten the fittings.**

Check Ride Height & Spring Rates

25. Take axle to full droop. Remove shock, install springs, charge shocks (150 PSI King, 200 PSI Fox & Sway-A-Way). Charge air bumps (100 psi). Reinstall shocks.

**If you don't want to remove the reservoir you can just remove the lower shock bolt and install the springs that way.

26. **Torque shock bolts to 90 ft-lb. Tighten shock rotating remote reservoir if equipped.**

27. With the axle at full droop add 2" of preload to the springs. (Tighten upper spring nut until the nut touches the springs and they stop rattling, thread the nut down 2" more).

28. Install tires & wheels, torque to factory specs, remove jack stands. Re-install sway bar and torque to factory specs. Re-install bump stops. Rock vehicle or drive a short distance to settle the suspension.

29. Measure shock shaft showing (aluminum cap to rod end), Measure up travel (bump stop shaft showing plus bump stop clearance). Thread the upper spring nut up or down to achieve desired ride height. If you move the nuts more than 1/2" call with your measurements and we'll swap springs.

Make sure brake lines and other wires do not interfere with the springs or shocks. Replace exhaust as necessary. Recheck torque on all fasteners after 100 miles.



Hose Routing For Coilovers With 90 Deg Fittings

For more information about preload and shock/spring setup check
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