



AccuTune Offroad Front Weld-On Coilover Kit

AOR-1000-0008

2018+ Jeep JL Wrangler Rubicon
2020+ Jeep JT Gladiator Rubicon





Installation Instructions

Front Weld-On Coilover Brackets AOR-1000-0008
2018+ Jeep Wrangler JL Rubicon and 2020+ Jeep Gladiator JL

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	Grinder & Appropriate Consumables
Basic Hand Tools (Wrenches, Sockets, Ratchets, Etc)	Sawzall & Appropriate Consumables
Torque Wrench	Welder
Jack & Jack Stands	
Coil Spring Compressor (optional)	

Parts List – Front Coilover Kit (AOR-1000-008)

P/N	Description	QTY
AOR-2000-052-L	Coilover Bracket Tower, Front Upper, JL, Left	1
AOR-2000-052-R	Coilover Bracket Tower, Front Upper, JL, Right	1
AOR-2000-039-L	Reservoir Mount, Front Left	1
AOR-2000-039-R	Reservoir Mount, Front Right	1
AOR-2000-040-L	Shock Relocation Bracket, Front Left	1
AOR-2000-043-R	Shock Relocation Bracket, Front Right	1
AOR-2000-046-L	Brake Line Relocation Bracket, Left	1
AOR-2000-046-R	Brake Line Relocation Bracket, Right	1
3000-001-038-0100	Screw, 3/8-18 x 1.00"	6
3000-001-050-0275	Screw, 1/2-20 x 2.75"	4
3000-007-038	Nut, 3/8-18	6
3000-007-050	Nut, 1/2-20	4
3000-009-036	Hose Clamp	4
3000-010-038	Washer, SAE, 3/8"	12
3000-010-050	Washer, SAE, 1/2"	8
3000-014-12-100	Self Tapping Screw	6

Other Modifications or Parts Required & Not Included

Requires 68" wide axles (Rubicon Axles)

Bump Stop Spacers: Front 2.5", Rear 2.0"

Tires & Wheels:

Tire bulge must be 11.5" from outside of frame min

37x12.5R17 – 17" wheel, 8-9" wide, 4.0" backspacing

40x12.5R17 – 17" wheel, 8-9" wide, 3.5" backspacing

Lower short arm links should be 24.5" (±1/8")

Track bar length = 34.125" (±1/8")

NOTE: If your measurements are different you must cycle the suspension to verify tire to coilover & coilover to frame clearance. Fully articulate the suspension each direction and check the steering lock to lock.

Prepare the Vehicle

Jack the vehicle up and securely set the chassis and axles on jack stands. Remove wheels and tires.

****Instructions assume you already have a suspension kit capable of similar droop. If not check e-locker and diff breather hose and reroute as necessary.**

Disassembly:

1. Disassemble front OEM components:

Inner fenders

Front springs (coil spring compressor can be helpful)

Front shocks

Brake line bracket at lower spring perch

Wiring from shock tower stud (passenger side)

To remove inner fender loosen 3 screws and pop out all large OD clips. There are two options for the small plastic rivets holding the inner and outer fenders together.

Remove OE Brackets

1. Cut shock tower off the frame and spring bucket carefully. Reference Figure #1 for cut locations. Once bracket is removed, clean frame of access material and prep for mocking up new coilover shock tower.
2. Prepare new coilover bracket to be mocked up and welded in place. Note: Now is a good time to paint the new bracket, except for the bottom edge that will be welded to the frame.

Install New Coilover Shock Tower

1. Place coilover shock tower on frame and spring bucket. Measure 3 1/8" from the outside edge of frame slot/weld to coilover tower. Confirm tower is sitting on top of frame rail properly and ready for final welding. Note that the top of the frame is the most important surface and should be aligned well on that surface first. **(Reference image #3)**
2. Weld coilover shock tower to frame and spring perch.



FIGURE #1

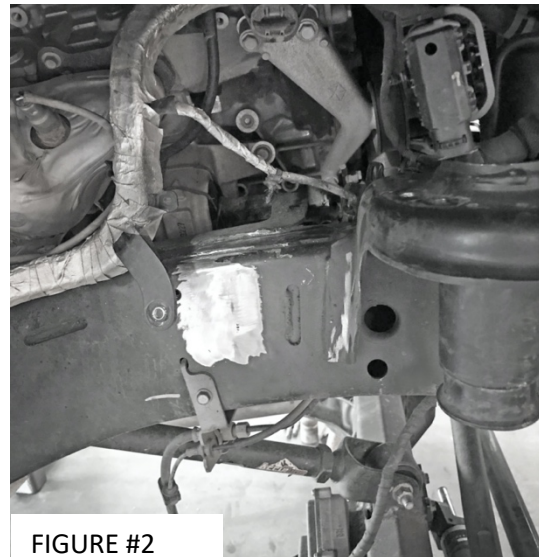


FIGURE #2

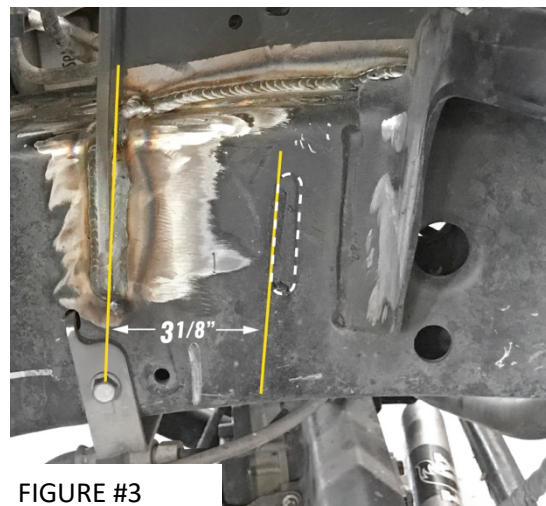


FIGURE #3

Lower Coilover Mount Installation:

1. Drill OEM brake line bracket holes to 13/32. Trim ½" off the back edge of lower spring perch for coilover clearance. Deburr & paint.
2. Loosen any existing bump stop spacer and install brake line relocation bracket underneath with screw facing out. Re-install bump stop spacer & tighten to 30 ft-lb.
3. Tighten all 3/8-24 bolts to 37 ft-lb

Remote Reservoir Bracket Installation:

Line the back edge of the reservoir mount with frame weld and align the reservoir mount bend with the top edge of the frame. Clamp in place and install self tapping screws. Use hose clamps to mount reservoir to bracket.

Coilover Installation:

Install springs on to the shocks, lighter rate springs on top, spring slider with long side up. Using a spring compressor will make it a lot easier. Set the upper nuts with the following amount of threads above the perch:

Fox 2.5 For 3" of Lift:

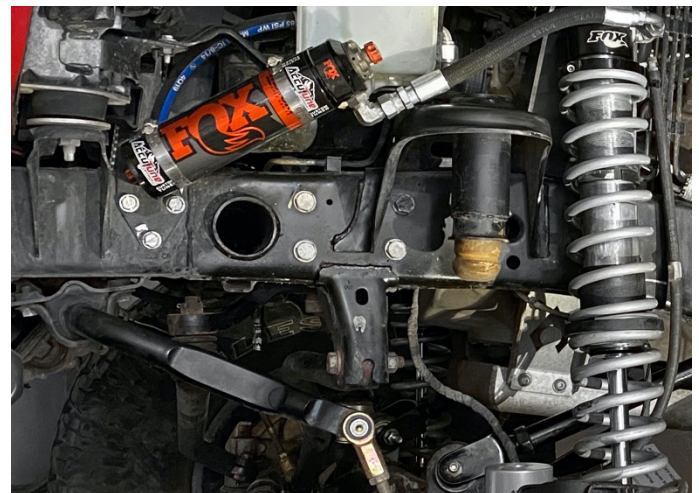
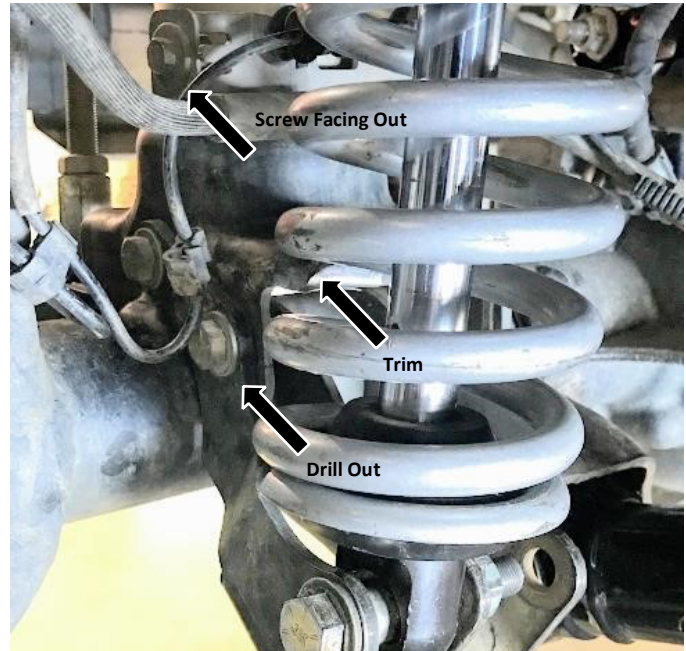
1.5" preload when 0" of thread showing
JLR start with TBD" of thread showing
JLUR start with 0.25" of thread showing
JT - TBD

0 to 1.0" of thread showing is acceptable, swap springs if outside this range. Note, springs must be in new condition to swap.

King 2.5 For 3" of Lift:

TBD

1. Install coilover into upper & lower mounts using ½" x 2.75" long bolt, washers, and nuts. Torque to 80 ft-lb.
2. Install reservoirs using the lowest groove in each set.
3. Make sure the brake lines and wheel speed sensor have adequate clearance with coilover at full droop. Loosen bump stop spacer and adjust as necessary.



Setting Ride Height:

4. Reinstall tires & wheels, torque to factory spec., set vehicle back on its own weight.
5. Adjust upper springs nuts until desired ride height is achieved. 1" of adjustment equals 1" of ride height. Sometimes it is easier to remove the coilover and use a spring compressor.

Note: wheels & tires do not need to be removed to take off the coilovers (if you have a lift).

6. Set the dual rate nuts to 1" away from the spring slider at ride height.

Bolt Check

After 500 miles or one off-road trip check the torque on all the bolts.



Installation Requirements:

Note: Some shocks may have their own requirements, consult your shock package for more details.

Jeep JL Fitment Table

Model	Tire	Wheel	Front Bump Stop	Rear Bump Stop	Front SB End Link E/E	Rear SB End Link E/E	Front LCA Length	Front UCA Length	Front Track Bar Length	Rear LCA Length	Rear UCA Length	Rear Track Bar Length
JLUR	37/12.5R17	17 x 8 W/ 4.5" BS	2.5"	2.0"	8.50"	11.25"	24.125"	20.188"	34.125"	19.75"	17.43"	37.875"
JLUR	35/12.5R17	17 x 8 W/ 4.5" BS	1.0"	1.0"	8.50"	11.25"	24.125"	20.188"	34.125"	19.75"	17.43"	37.875"
JLU	35/12.5R17	17 x 8.5 W/ 4.75" B	3.0"	2.0"	8.50"	11.25"	24.125"	20.188"	34.125"	19.75"	17.43"	37.875"

Torque Specs:

Joint	Wrench Size (Bolt/Nut)	Torque
Front LCA to Axle	21mm/24mm	190 ft-lb
Front LCA to Frame	21mm/24mm	190 ft-lb
Front UCA to Axle	18mm/18mm	80 ft-lb
Front UCA to Frame	18mm/21mm	80 ft-lb
Front Track Bar to Axle	21mm/21mm	110 ft-lb
Front Track Bar to Frame	21mm/21mm	110 ft-lb
Front Brake Hose To LCA	15mm	15 ft-lb
Front Sway Bar Link To Axle	5/8"/3/4"	60 ft-lb
Front Sway Bar Link To Frame	5/8"/3/4"	60 ft-lb
Front UCA Heat Shield	10mm	40 in-lb
Front Bump Stop	9/16"	20 ft-lb
Front Shock To Frame	18mm	80 ft-lb
Front Shock To Axle	18mm	75 ft-lb
Rear LCA to Axle	21mm/21mm	90 ft-lb
Rear LCA to Frame	21mm/21mm	90 ft-lb
Rear UCA to Axle	21mm/21mm	95 ft-lb
Rear UCA to Frame	21mm/21mm	120 ft-lb
Rear Track Bar to Axle	21mm/21mm	90 ft-lb
Rear Track Bar to Frame	21mm/21mm	90 ft-lb
Rear Sway Bar Link To Axle	5/8"/3/4"	60 ft-lb
Rear Sway Bar Link To Frame	5/8"/3/4"	60 ft-lb
Rear Bump Stop	9/16"	20 ft-lb
Rear Shock To Frame	18mm	80 ft-lb
Rear Shock To Axle	18mm	75 ft-lb

Alignment Specs:

Spec	Front Left	Front Right
Caster	4.80 +/- 1.0 Deg	4.80 +/- 1.0 Deg
Toe-In	0.0 - 0.12	0.0 - 0.12