

# #J1200 Installation Instructions 1987-1995 Jeep Wrangler YJ 2" Suspension Lift

# Read and understand all instructions and warnings prior to installation of product and operation of vehicle.

Zone Offroad Products recommends this system be installed by a professional technician. In addition to these instructions, professional knowledge of disassembly/ reassembly procedures and post installation checks must be known. Minimum tool requirements include the following: Assorted metric and standard wrenches, hammer, hydraulic floor jack and a set of jack stands. See the "Special Tools Required" section for additional tools needed to complete this installation properly and safely.

### >> PRODUCT SAFETY WARNING

Certain Zone Suspension Products are intended to improve off-road performance. Modifying your vehicle for off-road use may result in the vehicle handling differently than a factory equipped vehicle. Extreme care must be used to prevent loss of control or vehicle rollover. Failure to drive your modified vehicle safely may result in serious injury or death. Zone Offroad Products does not recommend the combined use of suspension lifts, body lifts, or other lifting devices.

You should never operate your modified vehicle under the influence of alcohol or drugs. Always drive your modified vehicle at reduced speeds to ensure your ability to control your vehicle under all driving conditions. Always wear your seat belt.

### >>> TECHNICAL SUPPORT

*Live Chat* provides instant communication with Zone tech support. Anyone can access live chat through a link on www.zoneoffroad.com .

*www.zoneoffroad.com* may have additional information about this product including the latest instructions, videos, photos, etc.

Send an e-mail to tech@zoneoffroad.com detailing your issue for a quick response.

888.998.ZONE Call to speak directly with Zone tech support.

### »Pre-Installation Notes

- 1. Special literature required: OE Service Manual for model/year of vehicle. Refer to manual for proper disassembly/reassembly procedures of OE and related components.
- 2. Adhere to recommendations when replacement fasteners, retainers and keepers are called out in the OE manual.
- 3. Larger rim and tire combinations may increase leverage on suspension, steering, and related components. When selecting combinations larger than OE, consider the additional stress you could be inducing on the OE and related components.
- 4. Post suspension system vehicles may experience drive line vibrations. Angles may require tuning, slider on shaft may require replacement, shafts may need to be lengthened or trued, and U-joints may need to be replaced.
- 5. Secure and properly block vehicle prior to installation of Zone Offroad Products. Always wear safety glasses when using power tools.
- 6. If installation is to be performed without a hoist, Zone Offroad Products recommends rear alterations first.
- 7. Due to payload options and initial ride height variances, the amount of lift is a base figure. Final ride height dimensions may vary in accordance to original vehicle attitude. Always measure the attitude prior to beginning installation.

### **Difficulty Level**

easy 1 2 3 4 5 difficult Estimated installation: 4-6 hours

# Special Tools Required

T40, T55 Torx Drive Socket

# Tire/Wheel Fitment

Tire: 31x10.50

Wheel: 15x8 w/3.5-4" backspacing

ev060313

#### \*Important\* Verify you have all of the kit components before beginning installation. **Kit Contents** Qty Part Qty Part 4 0.750 x 0.120 x 3.00 Sleeve 4 Leaf Spring 2 1/2" x 2-1/2" x 6-3/4" U-bolt/nuts/washers 4 Degree Leaf Spring Shim 6 2 5/16" x 3-1/2" Center Pin/Nut 2 1/2" x 3-1/4" x 7" U-bolt/nuts/washers 1 Front Brake Line Bracket (drv) 16 Leaf Spring Bushing 4 0.750 x 0.090 x 3.00 Sleeve 1 Front Bracket Line Bracket (pass) Bolt Pack - Brake Line Hardware 1

# Important—measure before starting!

Measure from the center of the wheel up to the bottom edge of the wheel opening

<i>LF</i>	<i>RF</i>
LR	RR

# **Step 5 Note**

A T40 Torx drive will be needed to remove the factory bolt from the frame.

# **Pre-Installation Notes**

- 1. When working on older model vehicles it is important to do a thorough check of all factory steering, brake and drivetrain components. Parts such as tie rod ends, brake lines and driveshaft u-joints should be inspected for wear and replaced if necessary.
- 2. The leaf springs provided in this lift system are based from the ride height of a new factory spring. Vehicles with high mileage and/or worn factory springs may net more than the 2-2.5" expected lift height.

## **Front Installation**

- 1. Park vehicle on a clean, flat surface and block the rear wheels for safety.
- 2. Raise the front of the vehicle and support with jack stands under the frame rails directly behind the leaf spring hangers.
- 3. Remove the wheels.
- 4. Remove the factory front shocks. Save the lower hardware and discard the rest.
- 5. Locate the front brake line junctions mounted to the top of the frame rails, just ahead of the shock towers. Figure 1 Remove the bolt mounting each junction (1 per side) to the frame. Save hardware.



Figure 1

6. Disconnect the front sway bar links from the leaf spring u-bolts plates. Save hardware. Figure 2



Figure 2

7. Loosen but do not remove the front track bar bolts at the frame and axle. Figure 3A,B The frame hardware will require a T55 torx drive.

# Step 6 Note

The sway bar links may be easier to remove once the u-bolts are removed in a later step.



Figure 3A



Figure 3B

### **Step 8 Note**

Install Tip: Even though the leaf springs can be installed in either direction, two different sized sleeves are required in each end. Install the smaller ID sleeve in the end of the spring that has the part # marked on it. This end will mount to the shackle and make identifying the spring orientation during installation easier.

- 8. Locate the provided new leaf springs, bushings and sleeves. There are two different sized sleeves with IDs of <sup>1</sup>/<sub>2</sub>" and 9/16". The <sup>1</sup>/<sub>2</sub>" ID sleeves will mount to the shackle end of the spring and the 9/16" to the hanger end. Lightly grease and install the bushings and sleeves into the spring ends. The springs are symmetric so there is no specific front or rear direction. Assemble all 4 springs at this time.
- 9. Loosen but do not remove the leaf spring shackle and hanger bolts Figure 4A,B as well as all 4 front leaf spring u-bolts Figure 4C.



Figure 4A



Figure 4B

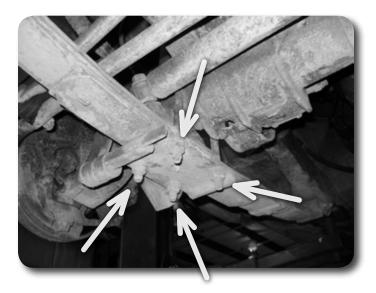


Figure 4C

# Step 12 Note

When lowering the axle make sure not to over-extend the brake lines. They can be carefully pulled down from the top of the frame to gain needed slack.

- 10. Working on one side at a time, support the front axle with a hydraulic jack. Remove the leaf spring u-bolts followed by the leaf spring hanger/shackle bolts and remove the spring from the vehicle. Save leaf spring hardware.
- 11. Install the new leaf spring to the frame and shackle mounts using the factory hardware. Leave hardware loose.
- 12. Lower the axle to the leaf spring and align the center pin/hole. Fasten the leaf springs to the axle with the provided new u-bolts. On the front axle use the provided wider u-bolts on the inside positions. Fasten with the provided ½" high nuts and washers. Snug hardware just enough to loosely seat the spring. Repeat spring installation on opposite side of the vehicle.
- 13. With the front spring installation complete, torque the u-bolts to 75-90 ft-lbs.
- 14. Reattach the front sway bar links to the leaf spring u-bolt plates with the original hardware. Torque to 50 ft-lbs.
- 15. Locate the provided brake line drop brackets. They are driver's/passenger's side specific. See Figure 5 to identify the brackets. Attach the brackets to the original brake line junction location on the top of the frame rails with the original hardware. Torque bolts to 15-20 ft-lbs. The brackets should be oriented so they rest against the edge of the shock tower, pointing out toward the tire. Figure 6

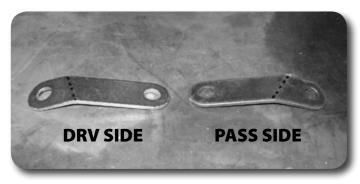


Figure 5



Figure 6

- 16. With the bracket line brackets installed, carefully reform the brake hard lines to attach the junction to the new brackets. Fasten the junction with the provided 5/16" hardware. Torque hardware to 15 ft-lbs.
- 17. Locate the new provided front shocks. Install the provided bushings and sleeves into the eye and a cup washer/stem bushing on the stud. Install in the vehicle with a second stem bushing/cup washer and 3/8" nut at the frame and factory

hardware at the axle. Tighten the top mount until the bushings begin to swell and install the provided jam nut and tighten against the hex nut securely. Torque the lower hardware to 45 ft-lbs.

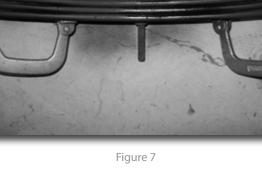
- 18. Install the wheels and lower the front of the vehicle to the ground. Bounce the front of the vehicle to help settle the suspension into place. Torque lug nuts to 75-90 ft-lbs.
- 19. Check the front track bar at the slotted frame mount. Be sure that the track bar is slid all the way to the passenger's side. Torque frame bracket hardware to 125 ft-lbs. Torque the axle hardware to 74 ft-lbs.
- 20. Retorque the leaf spring u-bolts to 90 ft-lbs.
- 21. Torque the leaf spring shackle bolts to 75 ft-lbs, hanger bolts to 90 ft-lbs.
- 22. Check brake line clearance to the tires. Reposition as necessary to ensure they do not rub throughout full steering sweep.
- 23. Check all hardware for proper torque.

#### **Rear Installation**

- 1. Block the front wheels for safety and raise the rear of the vehicle. Support with jack stands under the frame rails just ahead of the leaf spring hangers.
- 2. Remove the wheels.
- 3. Remove the factory shocks from the axle and frame mounts. Save hardware.
- 4. Loosen but do not remove the rear track bar bolts at the frame and axle.
- 5. Loosen but do not remove the leaf spring shackle and hanger bolts as well as all 4 rear leaf spring u-bolts.
- 6. Working on one side at a time, support the rear axle with a hydraulic jack. Remove the leaf spring u-bolts followed by the leaf spring hanger/shackle bolts and remove the spring from the vehicle. Save leaf spring hardware.
- 7. If installing this lift without any additional driveline modifications (ex: transfer case drop, SYE/CV driveshaft, motor mount lift) then it is necessary to install the provided 4 degree shims on the rear leaf spring to correct the rear driveline angle. Using 2 c-clamps, clamp the leaf spring together on each side of the center pin. Remove the center pin from the spring. Place a provided shim on the top leaf and run a new center pin from the top down through the shim/spring. Fasten with the provided nut and tighten to 20 ft-lbs. The excess pin can be cut off. Before tightening the center pin, be sure the thick portion of the shim is toward the front end of the spring that has the larger 9/16" ID sleeve. This will ensure that the axle pinion is rotated up when the spring is installed. Figure 7



It may be desirable to completely remove the rear track bar from the vehicle. Unlike the front track bar that aids in steering/handling, the rear track bar provides very little benefit to the overall function of the rear suspension. Removing the track bar actually frees up the rear suspension, in some cases allowing it to articulate more freely.



- 8. Install the new leaf spring to the frame and shackle mounts using the factory hardware. Leave hardware loose.
- 9. Lower the axle to the leaf spring and align the center pin/hole. Fasten the leaf springs to the axle with the provided new u-bolts. Fasten with the provided ½" high nuts and washers. Snug hardware just enough to loosely seat the spring. When lowering the axle make sure not to over-extend the brake line.
- 10. Repeat spring installation on opposite side of the vehicle.
- 11. With the rear spring installation complete, torque the u-bolts to 75-90 ft-lbs.
- 12. Check the rear brake line slack. If the line is taunt, the upper frame mount tab can be carefully bent downward so the fitting at the frame runs more in-line with the rubber hose. Figure 8





- 13. Locate the new provided rear shocks. Install the provided bushings into the eyes. Install the provided sleeve into the BODY end bushing (which will mount to the axle). Install in the vehicle with the factory hardware. Torque the upper and lower hardware to 45 ft-lbs.
- 14. Install the wheels and lower the rear of the vehicle to the ground. Bounce the rear of the vehicle to help settle the suspension into place. Torque lug nuts to 75-90 ft-lbs.
- 15. Check the rear track bar at the slotted axle mount. Be sure that the track bar is slid all the way to the passenger's side. Torque frame and axle hardware to 125 ft-lbs.
- 16. Retorque the leaf spring u-bolts to 90 ft-lbs.
- 17. Torque the leaf spring shackle bolts to 75 ft-lbs, hanger bolts to 90 ft-lbs.

### **Post-Installation**

- 1. Check all hardware for proper torque.
- 2. The steering wheel will need to be recentered after the lift is installed. This is done be loosing the clamps at each end of the steering drag links and rotating the adjusting link to center the wheel. With the front wheels straight, length the drag link until the steering wheel is straight again. Take care to tighten the clamps securely when adjustment is complete.
- 3. Check hardware after 500 miles.

Post-Installation Warnings

1. Check all fasteners for proper torque. Check to ensure for adequate clearance between all rotating, mobile, fixed, and heated members. Verify clearance between exhaust and brake lines, fuel lines, fuel tank, floor boards and wiring harness. Check steering gear for clearance. Test and inspect brake system.

2. Perform steering sweep to ensure front brake hoses have adequate slack and do not contact any rotating, mobile or heated members. Inspect rear brake hoses at full extension for adequate slack. Failure to perform hose check/ replacement may result in component failure.

3. Perform head light check and adjustment.

4. Re-torque all fasteners after 500 miles. Always inspect fasteners and components during routine servicing.