

# #J5403, J5406 Installation Instructions 2007-2012 Jeep Wrangler JK 2/4wd Front/Rear Stainless Steel Brake Lines

# 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.

## Difficulty Level

easy 1 (2) 3 4 5 difficult

Estimated installation:1-2 hours

## **Special Tools Required**

Brake Line Wrenchs

Proper Brake Fluid - See Owners Manual

#### >> 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.

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#### **Kit Contents**

Qty Part

- 1 Brake Line Drv
- 1 Brake Line Pass
- 2 Brake Line Frame Bracket
- 2 Brake Line Clip
- 4 3/8" Crush Washer
- 4 Zip Ties

#### >>> Pre-Installation Notes

- Layout the supplied brakelines to determine the proper location on the vehicle.
   This is especially important when installing both front and rear lines. The longer set of lines are for the rear brakes. The caliper end of each line is angled slightly so the steel leader will angle inward toward the axle as it bends upward toward the frame. This routing will ensure the brake line stays clear of the inside of the wheel.
- 2. Have plenty of rags, proper brake fluid (check owners manual) and a drain bucket on hand. After the installation is complete the entire brake system needs to be bled properly to evacuate air from the system. This can be accomplished with a couple of techniques. Be sure you are familiar with this process before proceeding. If you are not comfortable with performing this process we recommend having a qualified mechanic perform this installation.
- 3. Now is a good time to inspect the rest of your brake components. Worn pads and rotors, sticky calipers, etc should be addressed. Also, if you have an older model vehicle with high miles it is a good time to completely replace the brake fluid in the entire system. Most major automotive manufacturers suggest doing this at certain intervals during the service life of a vehicle.
- 4. These instructions outline the basic installation of the brake lines. The steps can be applied to both front and rear installations. Be sure to complete the entire installation before bleeding the system.

### >>> Installation Instructions

- 5. Park the vehicle on a clean, flat surface. Block the wheels opposite of the axle you will be working on.
- 6. Raise the axle and remove the wheels. Support the axle with jack stands for safety.
- 7. If equipped, disconnect the ABS line from the rubber brake hose. Save any reuseable line clips.
- 8. Newer models have a bracket connecting the brake line to the axle. Disconnect this bracket, it will not be re-used.
- 9. Disconnect the brake line from the brake caliper. Be sure that the copper crush washer is removed from the caliper.
- 10. Disconnect the brake hardline from the rubber brake line at the frame. Use an appropriate line wrench to avoid damaging the fitting.
- 11. Remove the brake line from the frame. Save mounting bolt.
- 12. Attach the new 'L' shaped brake line brake to the original mount hole on the frame with the factory bolt. Torque bolt to 15 ft-lbs.

- 13. Determine the proper brake line for the location you are working on (pre-installation note #1). Route the new brake line through the new frame bracket and fasten to the factory hardline.
- 14. Make sure that the brake line routes smoothly from the frame to the caliper (no loops, twists, etc). Place a new copper crush washer on the factory banjo bolt. Insert the bolt into the brake line end and then install a second crush washer. Install the line to the caliper and snug hardware.
- 15. Check brake line routing and end configurations. Tighten the fitting at the frame securely and retaining the brake line to the new bracket with the provided clip.
- 16. Torque the banjo bolt at the caliper to 23 ft-lbs.
- 17. If equipped, reattach the ABS wire to the new line with the reuseable factory clips and provided zip ties where necessary.
- 18. Repeat installation process on the other side.
- 19. With the installation complete properly bleed the brake system.
- 20. Install the wheels. Turn the steering in both directions to full lock. Check for proper brake line clearance and adjust where necessary.
- 21. Be sure fluid is topped off properly.
- 22. Check brake function before driving.

# **Step 19 Note**

If installing both front and rear brake lines, be sure to do the entire installation before bleeding the system.