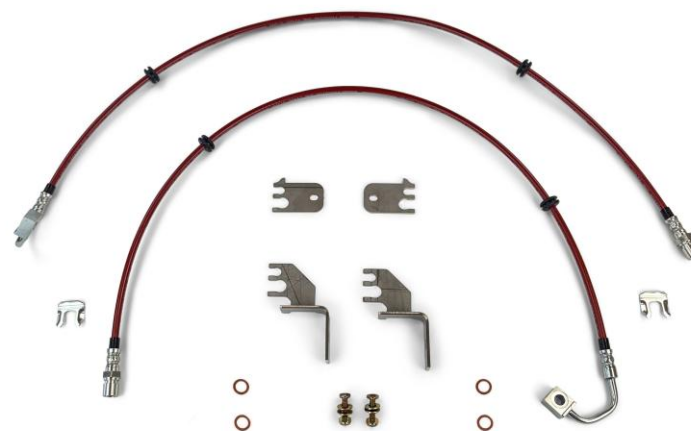


INSTALLATION MANUAL: COR-1309104

HD 40" EXTENDED FRONT BRAKE LINES
2018+ JEEP WRANGLER JL &
2020+ JEEP GLADIATOR JT



REV: A | DATE: 06/08/2026 | AUTH: KW18

DISCLAIMER

WARNING:

Suspension systems and their components are designed to enhance your vehicle's off-road performance. This may cause your vehicle to handle differently, on and off-road. Always wear your seatbelt and take extra care when driving a modified vehicle. Failure to do so can result in loss of control which may result in a rollover causing serious injury, or even death to the driver and/or passengers of the vehicle. Regular maintenance and consistent inspections are required to keep your modified vehicle safe and functioning properly. These suspension systems and any components should be installed by certified technicians only. Attempts to install these products without proper knowledge can lead to poor performance, or possible failure, which may jeopardize the safety of the vehicle and its passengers. The installer is responsible for proper installation ensuring a safe and properly functioning vehicle. Take extra care when operating a modified vehicle and thoroughly inspect your vehicle before and after every off-road use.

Read the instruction set in its entirety before attempting the installation.

NOTE:

This product may require general welding, fabrication, and automotive mechanic skills. Welding should only be done by a competent welder. Clayton Off Road implies no guarantees or warranties and is not liable for improper installation. Some grinding and fitment may be required when installing this product. Every vehicle varies slightly, and some fabrication and/or modification may be required.

ATTENTION:

It is the customer's responsibility to thoroughly inspect all received parts to ensure they are assembled correctly and fully welded. Please carefully examine all weld seams and verify that bolt-through holes are properly aligned. Some Clayton Off Road products are permanent, non-removable, weld-on solutions. **If a defect or issue is found after installation, especially with permanent weld-on components, it may be difficult or impossible to correct.** Inspecting the part(s) received beforehand helps prevent unnecessary and avoidable complications.

All Clayton Off Road products are engineered and tested on U.S. spec, left-hand drive vehicles. Compatibility with right-hand drive vehicles is not guaranteed. Customer verification is highly recommended to ensure proper fitment prior to purchase.

ATTENTION: TORQUE SPECIFICATION

When working on any vehicle, it is good practice to torque suspension/weight-bearing components while the vehicle is resting under its load. This instruction set, as well as any other Clayton Off Road instruction set, assumes the installer will tighten any suspension-related components properly, to the recommended torque specification, when the vehicle is resting safely under its own weight.

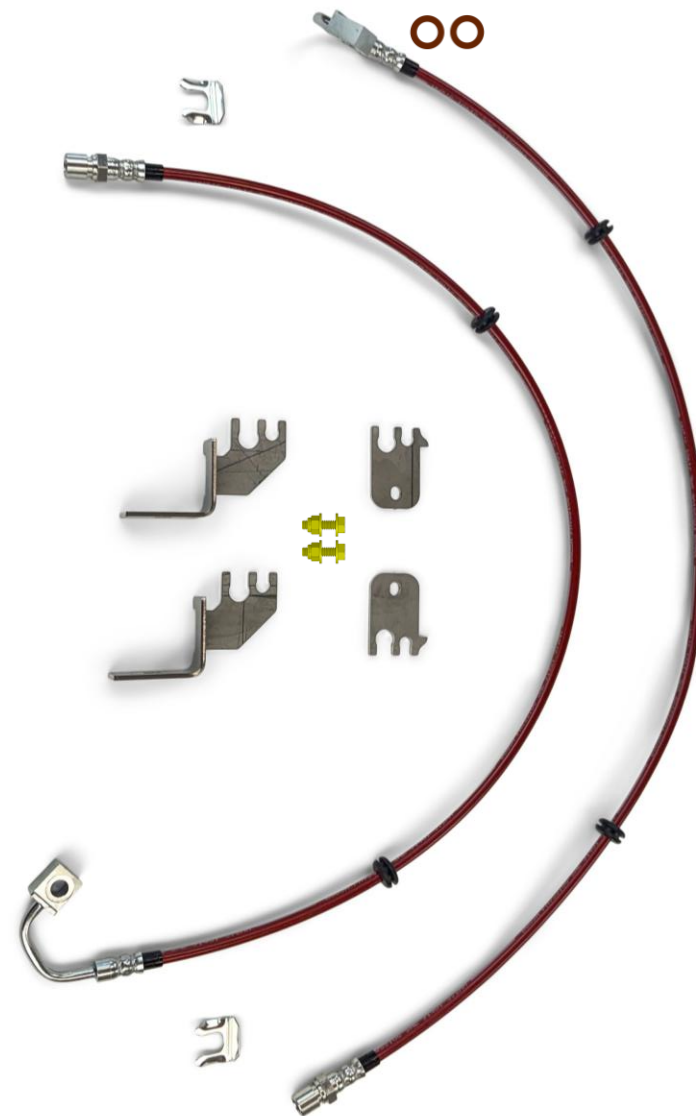
INCLUDED ITEMS

1309104 HD Jeep Front Brake Lines 40" (2018+, JL/JT)			
QTY	Part Number	Description	Class/Grade
2	1309104	Left/Right Brake Line Hose Assembly	N/A
2	1309100A	JL Front Brake Line Axle Mount	Stainless Steel
2	1309100B	JL Front Brake Line Control Arm Mount	Stainless Steel
2	15005	0.25" - 20 x 1" Hex Bolt	Grade 8
4	33813	0.25" x 0.625" Washer	Grade 8
2	37183	0.25" - 20 NyLock Nut	Grade 8
4	BQ 1016	Banjo Fitting Copper Crush Washers (10mm hole)	N/A
2	BQ 3052	Brake Hose Retaining Clip	N/A

Product Notes and Features:

The Jeep Front Brake Line Kit (2018+, JL/JT) includes all necessary hardware to replace the front OEM braking system with extended, anti-expansion hosing. Included brackets provide safe rerouting options to keep the brake line and ABS cable routed away from numerous pinch points on the vehicle's suspension.

- Included axle and control arm brackets are laser cut using 1/8" thick stainless steel and formed using the latest CAD software and manufacturing techniques
- OEM-style hydraulic brake fittings ensure a precise, no-leak fit
- Approximately 43" overall length (~40" hose length) allows for use in many different vehicle suspension setups
- Ideal for suspension kits that yield 4.5" or more lift

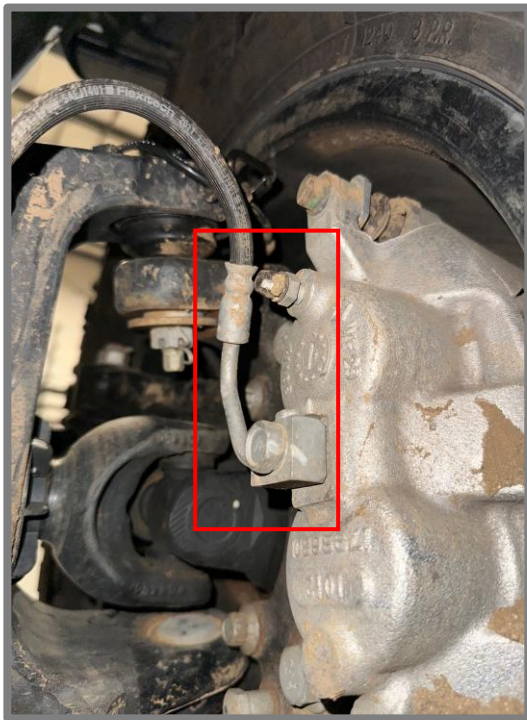


ATTENTION!

Verify that you have the proper brake line kit for your vehicle.

1309104 should only be installed on vehicles with the OEM HD brake caliper (pictured left).
1309105 should only be installed on vehicles with the OEM Standard brake caliper (pictured right).

Identify which front brake kit you need by comparing your OEM front brake fitting to the photos below.



HD brake caliper
Use [1309104](#)



Standard brake caliper
Use [1309105](#)

INSTALLATION INSTRUCTIONS

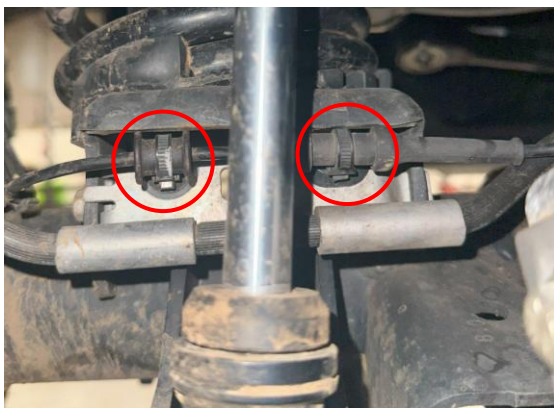
TOOLS REQUIRED FOR INSTALLATION

- Basic hand tools
- Metric ratchet wrench set, (12mm, 15mm, 16mm, 17mm)
- Metric socket set, (10mm, 13mm)
- Standard socket set, (7/16in, 1/2in)
- Vice grips
- Pliers
- Brake fluid and rags

*****Take this product to a licensed professional if you are hesitant about the installation process!*****

*****Remove the front tires and jack the vehicle on stands for easy wheel-well access*****

1. Remove all ABS cable clips/zip ties holding the line to the brake hose. This includes the zip ties at the bottom of the coil, the c-clips retaining the ABS line next to the brake hose, the OEM control arm mount, and the frame mount. See figures below. Take care when cutting the zip ties so you don't accidentally cut the ABS cable.



Coil bucket zip ties to be cut



Old brake-line clips to be removed



Frame mount ABS cable to be removed

The ABS cable should be completely free from the OEM brake line hose. At this point, it should only be connected at the sensor, and past the frame mount.

INSTALLATION INSTRUCTIONS

2. Remove the brackets holding the brake line to the axle. The retaining bolt can be removed using a 10mm ratchet or wrench and is located under the coil, as seen in the figures below. You can replace this bracket with the included JL Front Brake Line Axle Mount (1309100A). There is no left or right specific side for this bracket.



NOTE:

Use the supplied 1/4" - 20 x 1" bolts, washers, and NyLock nut to mount the included axle mount to the axle. Use a 7/16" wrench and socket to tighten.

You can discard the OEM 10mm bolt retaining the factory axle mount, as it is not reused.



INSTALLATION INSTRUCTIONS

3. Remove any brake line bracket that is installed on the lower control arm. The size of this bolt may vary, but Clayton Off Road front lower control arms come with a self-tapping bolt. Use a ½" socket or wrench. Install the new control arm brake line brackets onto the control arm (1309100B).



NOTE:

Reuse the control arm bolt to mount the new control arm bracket.

If you already have a brake line extension bracket (as seen to the left), you may reuse it as an extension or simply remove it.



INSTALLATION INSTRUCTIONS

4. Once the front brackets (axle and frame) are in place, you may replace the front brake lines. You may find it easier to remove the banjo bolt at the caliper first, hang the loose end to avoid a mess, then remove the frame end fitting of the brake line.



Brake caliper banjo bolt (15mm)

TIP:

Use rags when removing any brake line fittings to absorb as much brake fluid as possible.

You may also press the brake pedal in and hold it down with a brake pedal tool to hold pressure in the system when disconnecting the lines.



Frame end fitting (16mm and 12mm)

INSTALLATION INSTRUCTIONS

5. Remove the metal retaining clip on the hard-line fitting using pliers. Both the left and right front frame-side brackets will have one. You can discard these clips, as you are given new clips to use in the kit.



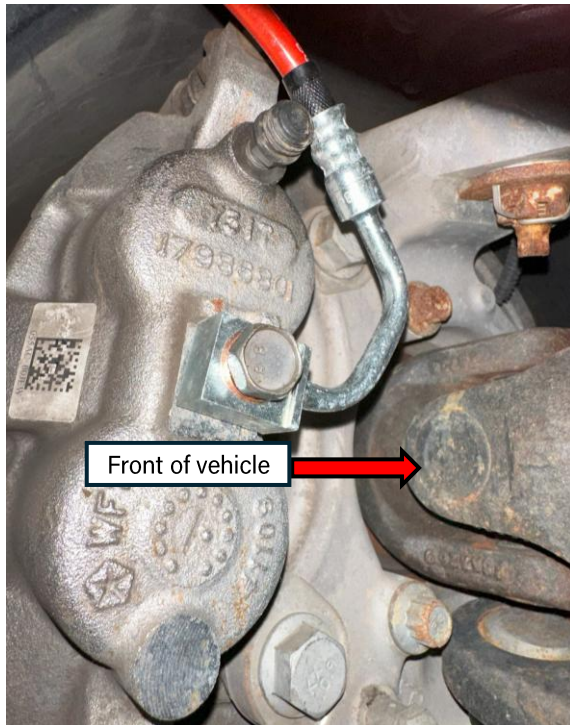
INSTALLATION INSTRUCTIONS

6. The front brake lines **ARE** side specific. Make sure that you match each fitting to its proper side. Reference the photos below. The new banjo fittings included in the kit have one raised edge. Ensure this edge is facing the front of the vehicle on both sides, and torque the banjo bolt (15mm) to 26 ft-lbs.

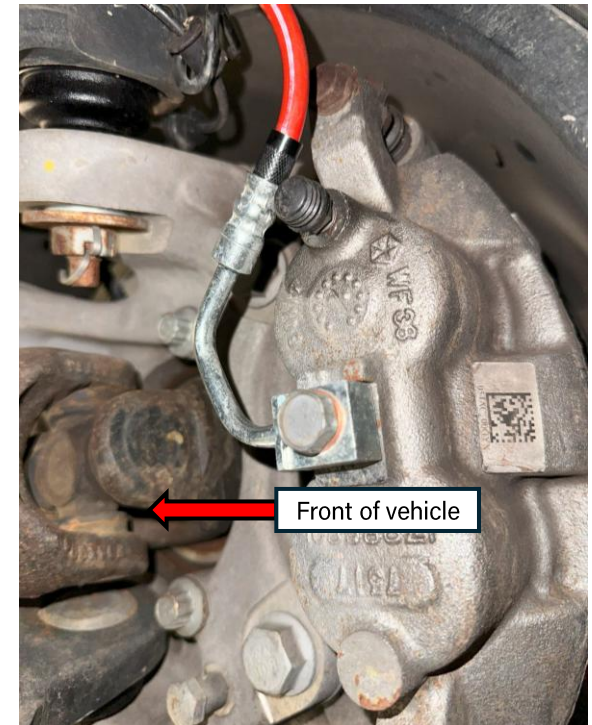
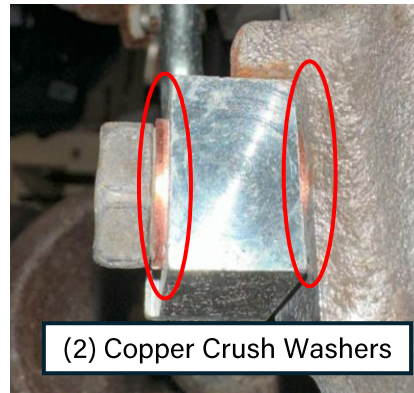
NOTE:

When reinstalling the banjo bolt, use the **new** copper crush washers that are included in this kit. Put one washer on either side of the fitting.

See the assembly photo below.



New banjo fitting installed (front driver's side)



New banjo fitting installed (front passenger's side)

You may need to carefully bend the fitting tube down in order to clear the bleeder valve.

INSTALLATION INSTRUCTIONS

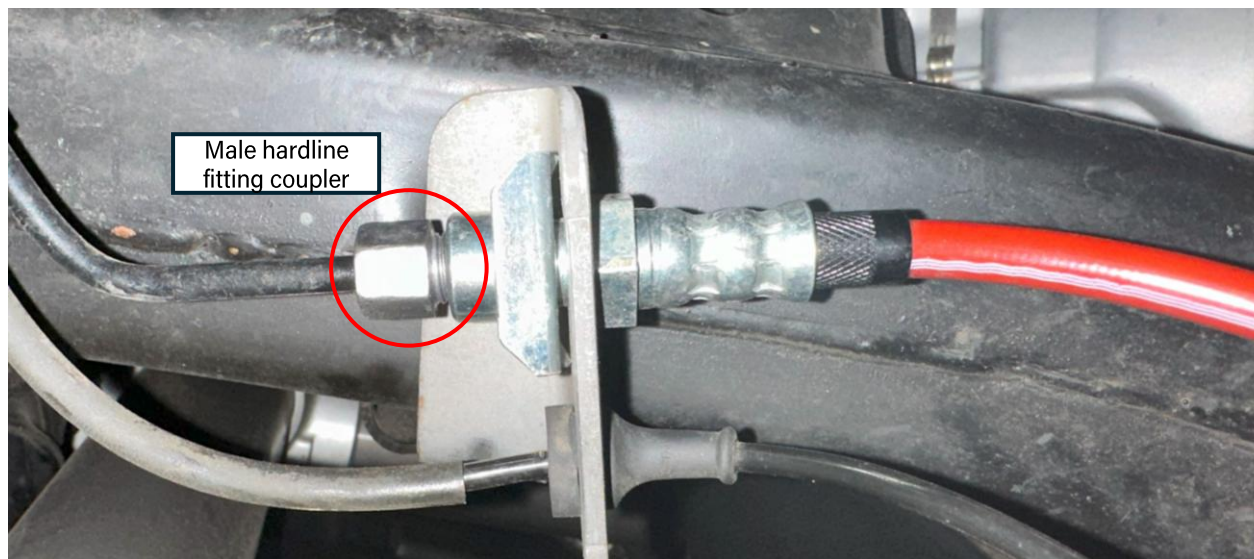
7. With the caliper-end of the new brake line installed, route the hose around the shock, and install the first rubber grommet into the new axle mount that you previously installed. Then route the brake line and the second rubber grommet to the control arm mount. The new brackets also provide new routing points for your ABS cable, however, **use caution: make sure there is enough slack in the ABS cable from the control arm mount to the frame mount at full flex.** You may need to leave out the ABS frame mount (see note below) to provide enough cable slack at full flex.



TIP: You may zip tie the brake line and ABS cable together on the opposite side of the coil bucket (zip ties not included).

INSTALLATION INSTRUCTIONS

8. Route the new fitting through the frame mount bracket. Without cross-threading the fitting, thread the male hardline fitting at the frame into the new female fitting. The male fitting should spin freely on the hardline, like a coupler. Tighten this connection point to 15 ft-lbs using a 12mm and 17mm wrench. Install the new spring retaining clip as shown in the figure below.



WARNING:

If the male coupler fitting is seized on the hardline, you may need to disconnect the caliper banjo fitting and spin the entire new line onto the fitting. **Use caution when doing this to not cross-thread the fittings.**

NOTE:

If the threads on your vehicle's male coupler fittings are stripped, Jeep over-torqued your brake line fittings at the factory. If the coupler does not thread properly into the new female fitting, Clean and/or re-tap the male coupler fitting to M10x1.00.

INSTALLATION INSTRUCTIONS

9. If you are only installing new front brake lines, you may now bleed the brakes. If you are installing new rear brake lines, top off the brake fluid reservoir. It is best to keep brake fluid flowing during a brake line swap to keep air out of the lines. If air is introduced from the reservoir at any point, you will have to do a full brake bleed. It is easiest to do a brake bleed with another person, with the use of a brake bleed tool.

Check all connections for leaks. Wipe down surfaces coated in brake fluid with surface cleaner. Brake fluid will eat away paint, so wipe clean as soon as your connections are tight.

WARNING:

Do not drive the vehicle until you are sure that there is no air remaining in the brake lines. Driving the vehicle with air in the brake lines will result in poor braking power, putting you and others at risk.

POST-INSTALLATION CHECKLIST:

- Caliper Banjo Bolts torqued to 26 ft-lbs
- Copper Crush Washers installed on both sides of the banjo fitting
- Frame mount brake line fitting torqued to 15 ft-lbs
- Brake line is evenly spaced between the control arm and the axle mount
- ABS cable has enough slack at full-flex (see Step 7)
- No air is present in the brake lines
- Brake pedal is firm after brake bleed
- Lug nuts are torqued to manufacturer's specification

