



#J1500, J1501 Installation Instructions 2007-2008 Jeep JK 4wd 5" 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: hours

Special Tools Required

Welder

1-5/16" Socket

Pitman Arm Puller

Tire/Wheel Fitment

Kit Contents

Qty	Part	Qty	Part
2	Front Coil Spring	2	Front Sway Bar Link
2	Rear Coil Spring	2	Rear Sway Bar Link
1	Pitman Arm	8	Sway Bar Link Bushing
1	Front Track Bar Brkt (outside)	8	Sway Bar Link Sleeve - 0.625 x 0.075 x 1.375
1	Front Track Bar Brkt (inside)	2	Bolt Pack - Sway Bar Links
1	Front Track Bar Brkt Sleeve - 0.750 x 0.083 x 1.375	2	Front Lower Control Arm
1	Bolt Pack - Front Track Bar Brkt	2	Rear Lower Control Arm
2	Front Bump Stop Extension	16	LCA Bushing
1	Bolt Pack - Front Bump Stop Extensions	8	LCA Sleeve - 0.750 x 0.090 x 2.620
1	Rear Bump Stop Extension (drv)	8	90 Degree Grease Fitting
1	Rear Bump Stop Extension (pass)	2	Rear Adjustable Upper Control Arm
1	Bolt Pack - Rear Bump Stop Extension	8	Rear UCA Bushing
1	Rear Track Bar Brkt	4	Rear UCA Sleeve - 0.750 x 0.095 x 2.288
1	Bolt Pack - Rear Track Bar Brkt	8	Rear UCA Spacer Washer
1	Rear Track Bar Brkt Sleeve - 0.750 x 0.090 x 1.575	4	Straight Grease Fitting
		2	Mountable Zip Tie

Important—measure before starting!

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

LF _____ RF _____

LR _____ RR _____

INSTALLATION INSTRUCTIONS

1. Park the vehicle on a clean, flat surface and block the rear wheels for safety.
2. Disconnect the positive and negative battery cables from the battery.

»» PRE-INSTALLATION CONTROL ARM ASSEMBLY

1. Locate the provided front and rear lower control arms (2 front, 2 rear), bushings (16 large), sleeves (8 - 0.750 OD x 2.620 Long) and 90 degree grease fittings (8).
2. Lightly grease and install the bushings and sleeves into each of the LCA ends.
3. Install the provided 90 degree grease fittings into the threaded holes in each of the control arm ends. Once installed, ensure that the grease fittings are pointing toward each other.
4. Set the assembled LCAs aside for installation later. The longer set of arms are for the front of the vehicle.
5. Locate the provided rear adjustable upper control arm assemblies (2), bushings (8 small), sleeves (4 - 0.750 OD x 2.288 Long) and straight grease fittings (4).
6. Lightly grease and install the bushings and sleeves into each of the UCA ends. The sleeves will be longer than the assembled bushings are wide. Center the sleeves in the ends so equal amounts of sleeve protrude from each side.
7. Install the provided straight grease fittings into the threaded holes in each of the control arm ends.
8. Adjust the length of the UCA to 18-1/4" center of eye-to-center of eye. These are starting lengths for initial installation and may need to be adjusted slightly to fine tune driveline angles at the end of the installation. This length will also vary from 2Dr to 4Dr models. Leave the jam nut loose on the UCAs and set them off to the side.

» FRONT INSTALLATION

1. Locate and disconnect the front track bar from the passenger's side axle bracket. **Figure 1**



Figure 1

2. Raise the front of the vehicle with a hydraulic jack and support with jack stands just behind the lower control arm pockets. Do not place the jack stands on the factory front skid plate crossmember.
3. Remove the front wheels.
4. Disconnect the front track bar from the driver's side frame bracket. Remove the track bar from the vehicle and save along with the hardware. **Figure 2**



Figure 2

5. Disconnect the steering drag link from the pitman arm. Remove the tie rod end nut. Strike the end of the pitman arm near the tie rod end to dislodge the taper and remove the end from the pitman arm. Take care not to strike the tie rod end. Save tie rod end nut. **Figure 3**
6. Make note of the orientation of the pitman arm on the steering box. Remove the pitman arm nut and washer. Using an appropriate pitman arm puller, remove the pitman arm from the steering box sector shaft. **Figure 3**



Figure 3

7. Install the new provided pitman arm on the steering box section shaft in the same orientation as the factory when it was removed. Fasten the pitman arm with the factory washer and nut. Torque nut to 185 ft-lbs.
8. Disconnect the factory sway bar links from the sway bar and the axle. Save the lower mounting bolts/nuts. The links will not be reused.
9. Locate the new provided front brake lines. There will be two sets, one longer than the other. The shorter of the two sets are the front lines. The pairs of are made up of a driver's and passenger's side line. They differ at the axle end (L-shaped end) in how the end is formed. Match up the new line end to the factory ones still on the vehicle to determine the driver's versus passenger's side line. Make note of the correct location for each new line for installation later.
10. Disconnect the front brake line retainers from the frame. Save hardware.

Figure 4

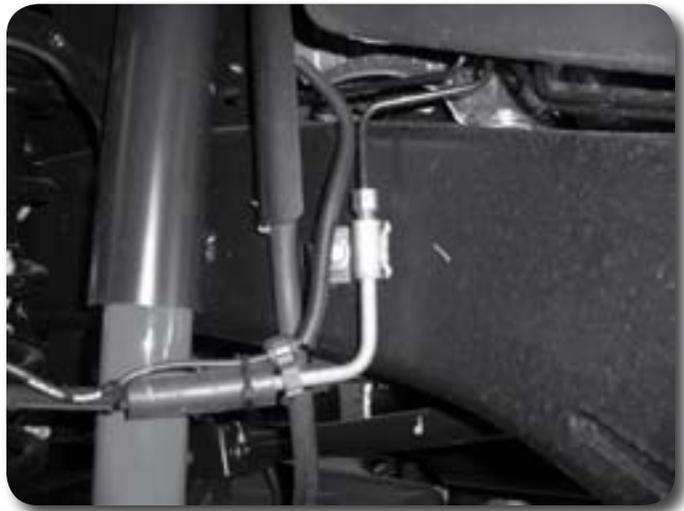


Figure 4

Step 12 Note

It is normal for brake fluid to leak out of the system when changing the brake lines.

11. Install the provided L-shaped brake line brackets on the frame with the original bolt. Position the bracket so the surface with the large hole is in the horizontal position. Tighten bolt securely.
12. Disconnect the factory front rubber brake line from the upper hard line and from the caliper at the axle. Save the lower banjo bolt from the caliper. Be sure that the factory crush washers are removed from the banjo bolt and/or the caliper.

13. Locate the proper new brake line and route the straight end through the new bracket on the frame and attach to the factory hard line. Tighten the fitting securely. Fasten the line to the bracket with a provided new line clip.
14. Connect the lower end of the brake line to the caliper. Place a new crush washer on the factory banjo bolt. Put the banjo bolt through the brake line end, install a second crush washer and attach the line to the caliper. Torque the factory banjo bolt to 23 ft-lbs.
15. Repeat front brake line installation on the opposite side of the vehicle.
16. Locate the 3 bolts mounting the transmission skid plate to the frame rails and transmission crossmember. Remove the bolts and skid plate. **Figure 5**



Figure 5

17. Support the front axle with a hydraulic jack. Disconnect the front shocks from the axle and the frame. Save axle mount hardware.
18. Rubicon models only: Disconnect the front locker electrical wire from the driver's side front upper control arm. **Figure 6**



Figure 6

19. Lower the axle and remove the factory front coil springs.
20. Locate and mark the center of the axle coil mount. Drill a 5/16" hole at the mark. Using the provided 3/8" self-tapping bolt, cut threads in the 5/16" holes in each coil mount. Remove the bolt and reuse the other side. **Figure 7**

Step 20 Note

Bump stop hardware is located in hardware pack #438.



Figure 7

21. With the axle still well support remove the factory lower control arms from the axle and frame. Save hardware.
22. Locate the new front LCAs that were assembled earlier. The front arms are the longer set. Install the new arms in the factory axle and frame pockets with the original hardware. Install the arms so the grease fittings are up. Leave hardware loose.
23. Locate the new front track bar bracket plates (outside, inside) and sleeve (0.750 x 0.083 x 1.375). The outside bracket plate is triangular shaped and the inside has a "wing" on it. The inside plate wing will be welded on during the installation. Using a grinder (or equivalent) remove the zinc plating from the bottom edge and approximate 1/2" up the front face of the wing. This will promote good welds. **Figure 8**

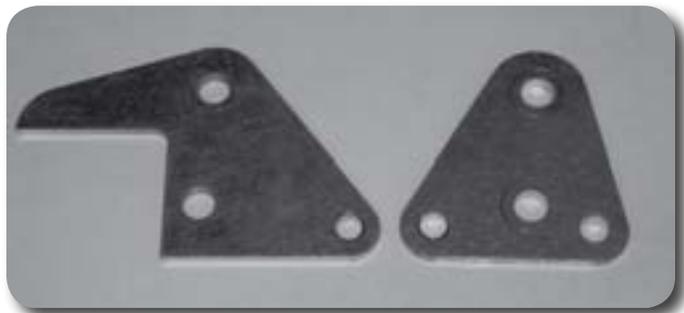


Figure 8

24. Locate the three small holes (one on the inside, two on the outside) in the factory bracket. Drill these holes out with a 7/16" drill bit to clear the new mounting hardware. **Figure 9**
25. Remove any paint, grease/dirt from the front edge of the passenger's side coil mount where the track bar bracket will be welded. **Figure 9**

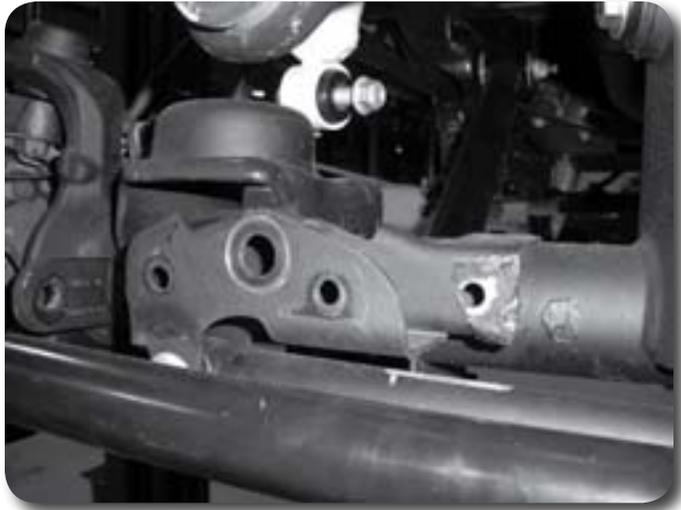


Figure 9

26. Position the new bracket plates on the factory track bar mount. The inside bracket will mount so the wing will rest flush with the top-front edge of the coil mount bracket. The outside plate mounts to the front face of the factory bracket. Position the provided sleeve (0.750" OD x 1.375" Long) in the original track bar mount position aligned to the original mount holes as well as the large holes in the new bracket plates. Loosely fasten with a 9/16" x 3" bolt, nut and washers. Snug hardware so the plates set flush against the factory mount. **Figure 10**

Step 26 Note

All fasteners needed for the front track bar bracket installation are located in hardware pack #922.



Figure 10

27. Loosely fasten the two bracket with the provided 7/16" x 1-1/4" bolts, nuts and washers in the remaining three holes. Leave hardware loose.
28. Adjust the inside bracket as necessary to make sure the wing is relatively flush and square to the coil mount edge. Weld the inside bracket to the coil mount along the bottom edge of the wing. Allow the weld to cool and paint any exposed metal to prevent corrosion. **Figure 11**



Figure 11

29. Locate the new front coil springs (taller set) and 3" front bump stop extensions. Place the extensions inside the coils and install in the vehicle. Rotate the coils so they seat properly in the axle coil mount. Raise the axle until the coil makes contact with the upper mount.
30. With the front coils in place, fasten the bump stop extensions to the axle using 3/8" x 3-1/2" bolts and washers into the tapped holes made earlier. Figure 12 Put Loctite on the bolt threads and tighten to approximately 25 ft-lbs.

Step 30 Note

Bump stop hardware is located in hardware pack #438.



Figure 12

31. Locate the new front shocks. Lightly grease and install the provided hourglass bushing and sleeve in the shock eye. Attach the shock to the factory axle mount with the original hardware. Leave loose.
32. Install a provided stem washer followed by a stem bushing on the top end of the shock. Run the shock through the upper shock mount and fasten with another stem bushing, washer and provided 1/2" nut. Tighten the upper nut until the bushings begin to swell. Torque the lower bolt to 65 ft-lbs.
33. Locate the new front sway bar links. The front links are the longer set (1/2" longer) and also have offset ends. Install the provide hourglass bushings and sleeves (0.625 x 0.075 x 1.375) in each end of the links.

Step 31 Note

Be certain the brake/ABS lines run on the outside of the shock.

34. Attach the new front sway bar links to the inside face of the factory mounting tabs with the provided 12mm x 60mm bolts, nuts and washers. Position the links so they go toward the inside of the vehicle as they go up toward the sway bar. Leave hardware loose. **Figure 13**



Figure 13

Step 34 Note

Front AND rear sway bar link hardware is located in hardware pack #758. There are two packs included in the kit, one for each set of links.

35. Attach the new sway bar links to the sway bar using the original lower mounting bolts/nuts. Run the bolt from outside in. Torque the upper and lower link mounting bolts to 60 ft-lbs.
36. Reattach the front locker electrical wire to the driver's side upper control arm with the provided mountable zip tie.
37. Attach the steering drag link to the pitman arm with the original nut. Torque nut to 65 ft-lbs.
38. Install the wheels and lower the vehicle to the ground. Torque lug nuts to 90-115 ft-lbs.
39. Reattach the factory front track bar to the driver's side frame mount with the original hardware. Run the bolt from front to rear. Leave hardware loose.
40. Position the axle end of the track bar into the new bracket. Fasten the track bar to the bracket with a provided 9/16" x 3" bolt, nut and washers. Have an assistant turn the steering wheel to aid in aligning the track bar to the bracket. With the track bar attached to the axle bracket, torque the three 7/16" bolts to 45 ft-lbs, followed by the upper and lower 9/16" bolts to 95 ft-lbs. Torque the track bar bolt at the frame to 95 ft-lbs.
41. Check all hardware for proper torque.

Step 40 Note

New track bar bolt is located in hardware pack #922.

» REAR INSTALLATION

1. Block the front wheels for safety.
2. Disconnect the rear track bar from the driver's side axle mount. Save hardware. **Figure 14**

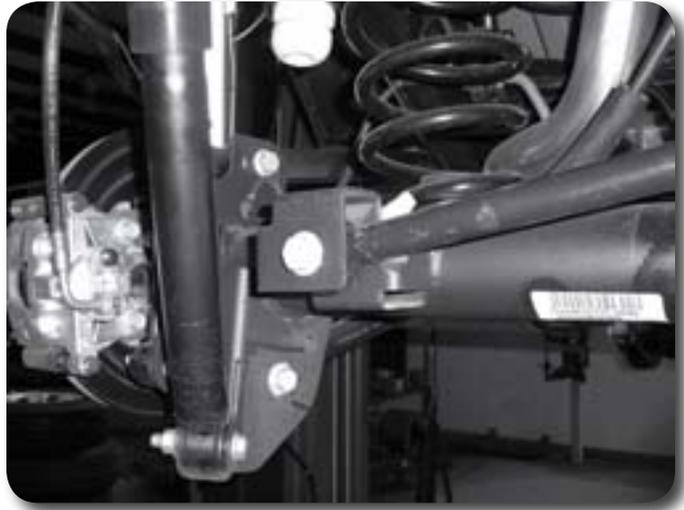


Figure 14

3. Raise the rear of the vehicle with a hydraulic jack and support with jack stands under the frame rails just ahead of the lower control arm pockets.
4. Rubicon models only: Disconnect the locker electrical wire from the top of the differential. Figure 15



Figure 15

5. Locate the new provided rear brake lines. There will be two sets, the longer of the two sets are the rear lines. The pairs are made up of a driver's and passenger's side line. They differ at the axle end (L-shaped end) in how the end is formed. Match up the new line end to the factory ones still on the vehicle to determine the driver's versus passenger's side line. Make note of the correct location for each new line for installation later.
6. Disconnect the rear brake line retainers from the frame. Save hardware. Figure 16



Figure 16

7. Install the provided L-shaped brake line brackets on the frame with the original bolt. Position the bracket so the surface with the large hole is in the horizontal position. Tighten bolt securely.
8. Disconnect the factory rubber brake line from the upper hard line and from the caliper at the axle. Save the lower banjo bolt from the caliper. Be sure that the factory crush washers are removed from the banjo bolt and/or the caliper.
9. Locate the proper new brake line and route the straight end through the new bracket on the frame and attach to the factory hard line. Tighten the fitting securely. Fasten the line to the bracket with a provided new line clip.
10. Connect the lower end of the brake line to the caliper. Place a new crush washer on the factory banjo bolt. Put the banjo bolt through the brake line end, install a second crush washer and attach the line to the caliper. Torque the factory banjo bolt to 23 ft-lbs.
11. Repeat rear brake line installation on the opposite side of the vehicle.
12. Disconnect the rear sway bar links from the sway bar and the axle. Save the axle hardware. The links will not be reused.
13. Remove the two nuts and the cable bracket mounting the parking brake cables to the bottom side of the cab floor. Remove the cables from the bracket. It will not be reused. **Figure 17**



Figure 17

14. Disconnect the ABS wires from the upper control arm mounts on the axle.
Figure 18



Figure 18

15. Support the rear axle with a hydraulic jack. Disconnect the shocks from the axle and frame. Save all hardware.
16. Slowly lower the axle and remove the coils springs from the vehicle. The upper rubber isolators will come free with the spring. Save for reinstallation with the new coil springs.
17. With the axle still well supported, remove the two upper control arms from the axle and frame. Save hardware. Figure 19



Figure 19

18. Located the 2 pre-assembled rear upper control arms along with the provided 8 large spacer washers. Position a washer on each side of the control arm ends and install into the factory frame and axle mounts with the original hardware. The short adjustable end goes to the frame and the bend in the arm goes toward the inside of the vehicle. Leave hardware loose. Figure 20



Figure 20

19. Again, with the axle well supported, remove the factory lower control arms from the axle and frame. Save hardware.
20. Locate the 2 pre-assembled lower control arms (short set compared to front) and install into the factory frame and axle mounts so that the grease fittings are up. Loosely attach with factory hardware.
21. Locate the new rear track bar relocation bracket. Using a grinder (or equivalent) remove the zinc plating from the moon shaped bottom edge and approximately 1/2" up the face of the wing. This will promote good welds.
22. Position the relocation bracket on the factory bracket so it is flush to the top and back faces. Ensure that the large slot in the new bracket is in line with the original track bar mounting hole. Using the upper hole in the bracket as a template, mark the hole location to be drilled. [Figure 21A/B](#)



Figure 21A

Step 23 Note

If there is an excessive gap between the wing and the axle tube place the bracket wing in a bench vise and slightly bend the end. It should only take a small amount to close the gap to an acceptable distance



Figure 21B

23. While the bracket is still in position, check for an excessive gap between the wing of the bracket and the axle tube where it will be welded. Because of variances in the factory mount the new bracket wing may need to be formed slightly to narrow the gap. Anything under 1/8" is acceptable. Note the area to be welded on the axle tube. Clean the area of any rust, grease, paint, etc. **Figure 21C**



Figure 21C

Step 25 Note

Rear track bar bracket hardware is located in hardware pack #921.

24. Remove the bracket from the axle and drill a 7/16" hole at the mark made in the top of the factory bracket.
25. Reposition the relocation bracket on the original mount and loosely fasten to the newly drilled hole with a 7/16" x 1-1/4" bolt, nut and 3/8" USS washers.
26. Locate the provided crush sleeve (0.750 x 0.090 x 1.575) and position it in the factory track bar bracket. Fasten the new bracket to the original mount with the original track bar bolt and nut tab. Run the bolt through the holes in the bracket as well as through the crush sleeve. **Figure 22**
27. With both mounting bolts in place, torque the 7/16" hardware to 55 ft-lbs and the factory hardware to 100 ft-lbs.
28. With the bracket hardware tight, weld the wing of the new bracket to the axle tube. Allow the weld to cool and paint any exposed metal to prevent corrosion.
29. Disconnect the rear track bar from the passenger's side frame mount. Save hardware.



Figure 22

30. Attach the driver's side end of the rear track bar to the new track bar bracket with a 9/16" x 3" bolt, nut and washers. The bolt must run from the front to rear to avoid contact with the coils spring. Leave hardware loose. The passenger's side will be reattach when the weight of the vehicle is on the suspension.
31. Locate the new provided rear bump stops. The rectangular bump stops mount to the existing holes in the axle bump stop pad. One of the bump stops will have a corner missing. This is the passenger's side bump stop which needs to be positioned on the axle so that the upper chamfered corner is toward the rear. Fasten the bump stops to the axle with 1" x 1-1/4" bolts, nuts and washers. Torque hardware to 20 ft-lbs. Figure 23

Step 31 Note

Bump stop extension mount hardware is located in hardware pack #123406.



Figure 23

32. Locate the new rear coil springs (short set compare to fronts). Install the coil springs in the vehicle along with the factory upper spring isolators. Raise the axle with the jack just until the springs have pressure on them.
33. Locate the new rear shocks. The ROD end of the shock with have a bar pin pre-installed. Install the provided hourglass bushing and sleeve in the BODY end of the shock.
34. Install the new rear shocks in the vehicle with the factory upper and lower hardware. Torque the upper bolts to 30 ft-lbs and the lower bolts to 65 ft-lbs. When installing the passenger's side shock make sure that the rear track bar is positioned above the shock.

Step 36 Note

Sway bar link hardware is located in hardware pack #758.

35. Locate the new rear sway bar links (longer set compared to the front). Install the provided 0.625 x 0.075 x 1.375 steel sleeves into each of the pre-installed bushings.
36. Attach the new sway bar links to the out surface of the original axle mount and sway bar. Attach the links to the axle with the original hardware and to the sway bar with the provided 12mm x 60mm bolts, nut and washers. Run the bolts from outside in. Torque bolts to 60 ft-lbs. Figure 24



Figure 24

37. Reconnect the ABS lines to the upper control arm mounts on the axle. Use the provided mountable zip ties to attach the lines in one of the original mounting holes (1 per side).
38. Install the wheels and lower the vehicle to the ground. Make sure the rear track bar is above the passenger's side shock when lowering the vehicle.
39. Bounce the rear of the vehicle to settle the suspension. Reattach the rear track bar to the frame mount with the factory hardware. Run the bolt from front to rear. Torque the track bar bolts at the axle and frame to 95 ft-lbs.
40. Torque the upper and lower control arm bolts to 95 ft-lbs. Lock off the upper control arm jam nuts securely.

»» POST-INSTALLATION

1. The brake system must be properly bled before operating the vehicle. Refer to the factory (or equivalent) service manual for proper procedure.
2. Check all hardware for proper torque.
3. In most cases the steering wheel will need to be adjusted back to center. This must be done to avoid problems associated with the ESP system. This is done by loosening the two bolts on the steering drag link clamp near the pitman end of the steering linkage. With the front wheels tracking straight ahead, rotate the drag link adjuster until the steering wheel is centered. After adjustment, torque clamp bolts to 40 ft-lbs.
4. If there is a rear driveline vibration the pinion may need to be adjusted slightly to obtain better driveline angles. Lengthening the rear upper arms will move the pinion up and shortening will lower the pinion. The pinion should be nearly in line with the drive shaft or slightly below.