Front end installation:

- 1. To begin installation, block the rear tires of the vehicle so that the vehicle is stable and can't roll backwards. Safely lift the front of the vehicle and support the vehicle with a pair of jack stands. Place a jack stand on both the driver and the passenger side. Special note: Place the jack stands on the body mounts. Next, remove the front wheels and tires from both sides.
- 2. Working on the driver side, remove the stock shock from the stock upper and lower mounting location. Save the stock lower mounting hardware. The upper mounting hardware and shock may be discarded. Special note: Some vehicles come stock with multiple shocks in the front end. Repeat procedure on the passenger side. Special note: New longer front shocks are needed after this suspension system has been installed and the front shocks need to be ordered as a separate part #. If you have not already ordered your front shocks, please feel free to contact or your local dealer and order your front shocks. We recommend installing a 20" fully extended nitrogen gas in the front and a 23" fully extended cellular shock in the front for the auxiliary shock.







3. Working on the driver side, remove the stock sway bar from the frame mounting location. Save the hardware. Repeat procedure on the passenger side.



4. Working on the driver side, remove the stock sway bar end link from the stock axle location. Save the hardware. Repeat procedure on the passenger side. Set the sway bar aside.



- 5. Place a pair of hydraulic floor jacks under the front driver and passenger side twin eye beam axles. Carefully raise up on the hydraulic floor jacks until they come into contact with the front twin eye beam axles. Also, place a pair of hydraulic floor jacks under the driver and passenger side stock radius arms. Carefully raise up on the hydraulic floor jacks until they come into contact with the stock radius arms.
- 6. Working on the front driver side twin eye beam axle, remove the stock mounting hardware that connects the front twin eye beam axle to the stock bracket. The stock hardware may be discarded.



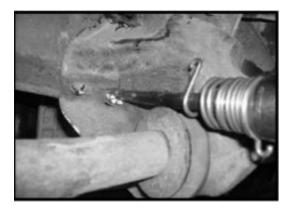
7. Working on the front driver side twin eye beam axle bracket, remove the stock bracket from the stock location. Save the stock hardware but the stock bracket may be discarded.



8. Working on the rear passenger side twin eye beam axle, remove the stock mounting hardware that connects the rear axle to the stock location. Save the stock hardware.



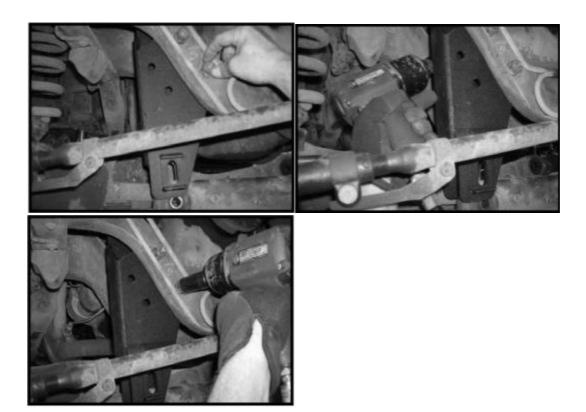
9. Working on the driver side stock radius arm bracket, remove the stock hardware or the stock rivets that connect the bracket to the frame rail. The stock hardware and rivets may be discard. Repeat procedure on the passenger side. Special note: Using a die grinder and making a cross cut on the rivets then using an air chisel will help make the removal of the rivets easier.



10. Make sure that the hydraulic floor jacks are supporting the front and rear twin eye beam axles and the stock radius arms.



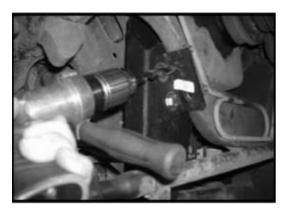
11. Locate the new front twin eye beam relocation bracket and the stock hardware. Install the new front relocation bracket to the stock location and secure using the stock hardware. Make sure to use thread locker or loctite and torque to 85 ft lbs.



12. Locate the new front twin eye beam axle pivot support bracket. Also, locate (2) 1/2" x 1 1/2" bolts, (4) 7/16" USS flat washers and (2) 1/2" unitorque nuts from hardware bag. Install the new support bracket to the newly installed front twin eye beam axle pivot bracket using the new 1/2" x 1 1/2" bolts and hardware. Make sure to use thread locker or loctite and torque to 75 ft lbs



13. Using the new support bracket as a guide, carefully drill (2) 1/2" holes into the stock front cross member. Special note: Take special care not to drill into the cooling lines that wrap around the front cross member. Locate (2) 1/2" x 1 1/2" bolts, (4) 7/16" USS flat washers and (2) 1/2" unitorque nuts from hardware bag. Secure to newly installed front twin eye beam axle support bracket to the stock front cross member using the new 1/2" x 1 1/2" bolts and hardware. Make sure to use thread locker or loctite and torque to 75 ft lbs



14. Locate (1) 9/16" x 3 1/2" cam bolt, (2) cam washers and (1) 9/16" unitorque nut from hardware bag. Carefully raise up on the hydraulic floor jack that is supporting the driver side front twin eye beam axle until it slides up into the newly installed bracket. Secure the axle to the new bracket using the new cam bolt and hardware. Make sure to use thread locker or loctite and torque to 85 ft lbs. Special note: For now, place the cam washer in the center position.



15. Locate the new rear twin eye beam axle pivot relocation bracket and the stock hardware. Install the new rear twin eye beam axle pivot relocation bracket into the stock location and secure using the stock hardware. Make sure to use thread locker or loctite and torque to 75 ft lbs. Special note: Make sure that the new twin eye beam axle pivot relocation bracket is seating square into the stock location.

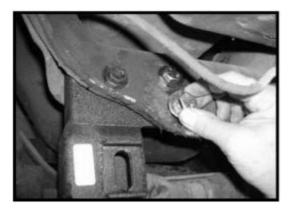




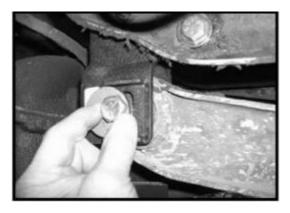
16. Using the new rear twin eye beam bracket as a guide, carefully drill (2) 1/2" holes into the stock cross member. Special note: Drilling from the front of the vehicle to the back will make this step easier. Also, take special care not to drill into the cooling lines that wrap around the rear cross member.



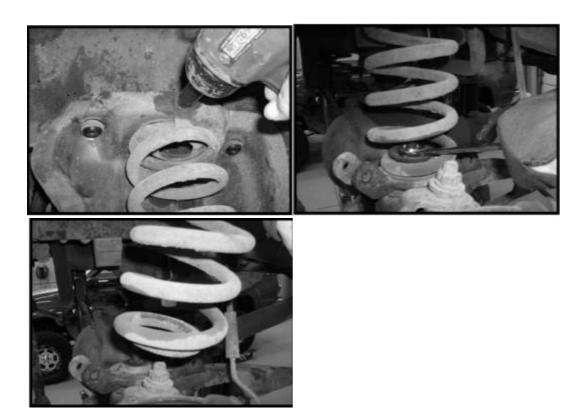
17. Locate (2) 1/2" x 1 1/2" bolts, (4) 7/16" USS flat washers and (2) 1/2" unitorque nuts from hardware bag. Secure the new rear twin eye beam axle pivot relocation bracket to the cross member using the new 1/2" x 1 1/2" bolts and hardware. Make sure to use thread locker or loctite and torque to 75 ft lbs.



18. Locate (1) 9/16" x 3 1/2" cam bolt, (2) cam washers and (1) 9/16" unitorque nut from hardware bag. Carefully raise up on the hydraulic floor jack that is supporting the passenger side rear twin eye beam axle until it slides up into the newly installed bracket. Secure the axle to the new bracket using the new cam bolt and hardware. Make sure to use thread locker or loctite and torque to 85 ft lbs. Special note: For now, place the cam washer in the center position.



19. Working on the driver side, remove the stock coil clip from the stock location and save the stock hardware and coil clip. Now remove the stock hardware that connects the stock coil spring to the stock front twin eye beam axle. Save the stock nut and coil washer. Remove and discard the stock coil spring. Repeat procedure on the passenger side.



20. Using a 1/2" drill bit, carefully clean the stock frame rail on the driver and passenger side and also clean each hole on the stock driver and passenger side radius arm relocation bracket.

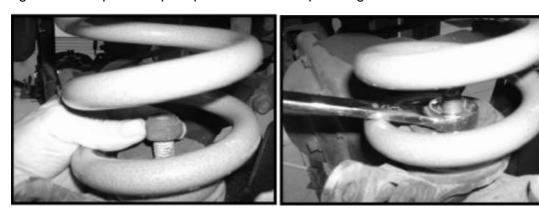


21. Locate the driver and passenger side radius arm relocation brackets. Locate (8) 1/2" x 1 1/2" bolts, (16) 7/16" USS flat washers and (8) 1/2" unitorque nuts from hardware bag. Working on the driver side, install the new radius arm relocation bracket into the stock location and secure using the new 1/2" x 1 1/2" bolts and hardware. Do not tighten at this point. Repeat procedure on the passenger side.

22. Locate (8) 1/2" x 1 1/2" bolts, (16) 7/16" USS flat washers and (8) 1/2" unitorque nuts from hardware bag. Working on the driver side, install the stock driver side radius arm bracket to the newly installed radius arm relocation bracket. Secure using the new 1/2" x 1 1/2" bolts and hardware. Add some thread locker or loctite on the (8) 1/2" x 1 1/2" bolts holding the new bracket to the frame and the stock bracket to the new bracket and torque all (8) bolts to 75 ft lbs.



23. Locate the new front coil springs. Also, locate the stock lower coil spring washer and hardware. Working on the driver side, install the new coil spring into the stock location and secure using the stock hardware. Do not tighten at this point. Repeat procedure on the passenger side.



24. Locate the stock upper coil clip and hardware. Working on the driver side, secure the new coil spring into the stock location and secure using the stock coil clip and hardware. Make sure to use thread locker or loctite and torque to 14 lbs. Repeat procedure on the passenger side. Move back to the driver and passenger side stock hardware holding the new coil spring into the stock lower location and add some thread lock or loctite and torque to 145 ft lbs.

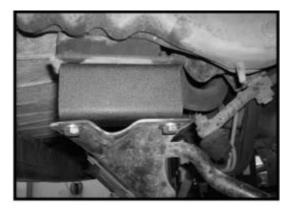


25. Locate the stock sway bar and the stock sway bar lower hardware. Working on the driver side, install the stock sway bar end link into the stock location and secure using the stock hardware. Do not tighten at this point. Repeat procedure on the passenger side. Let the stock sway bar hang.



26. Locate the new driver and passenger side sway bar relocation brackets. Also, locate the stock upper frame sway bar mounting hardware. Working on the driver side, secure the new sway bar relocation bracket to the stock location using the stock hardware. Do not tighten at this point.

27. Locate (4) 7/16" x 1 1/2" bolts, (8) 3/8" USS flat washers and (4) 7/16" unitorque nuts from hardware bag. Working on the driver side, swing the stock sway bar up and secure it to the newly installed sway bar relocation brackets. Secure using the new 7/16" x 1 1/2" bolts and hardware. Do not tighten at this point. Repeat procedure on the passenger side. Once the sway bar has been attached to the new sway bar relocation brackets, add some thread locker or loctite to the stock and new bolts and torque the stock and new bolts on the driver and passenger side to 38 ft lbs. Special note: If you are not able to attach the stock sway bar to the newly installed sway bar relocation brackets, this step may need to be done once the completion of the installation is completed and the weight of the vehicle is on the ground.



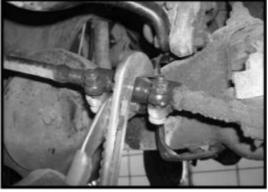
- 28. Move back to the stock lower sway bar end link mounting hardware and add some thread locker or loctite on both the driver and passenger side and torque to 65 ft lbs.
- 29. Working on the stock pitman arm, remove the stock cotter pin and castle nut. Save the stock hardware. Carefully remove the stock tie rod from the stock pitman arm. Special note: Take special care not to damage the stock tie rod dust boot. If the stock tie rod dust boot looks damaged, it would be a good time to replace it.
- 30. Remove the stock hardware that connects the stock pitman arm to the sector shaft on the stock steering box. Save the hardware. Using a pitman arm puller, carefully remove the pitman arm from the stock location. The pitman arm may be discarded.
- 31. Locate the new pitman arm. Locate the stock hardware that connected the stock pitman arm to the sector shaft on the steering box. Install the new pitman arm into the stock location and secure using the stock hardware. Make sure to use thread locker or loctite and torque to 145 ft lbs.
- 32. Locate the stock cotter pin and castle nut that connected the stock tie rod to the stock pitman arm. Install the stock tie rod to the newly installed pitman arm and secure using the stock hardware. Torque the castle nut to 65 ft lbs. Now install the stock cotter pin to the stock tie rod and castle nut. Special note: If you are not able

to install the stock cotter pin because the hole in the tie rod does not line up with the castle nut, DO NOT loosen, tighten the castle nut until the stock cotter pin can be installed.



33. Slight adjustments may need to be done to the outer tie rods so the vehicle can be driven to an alignment shop. If this is the case on the vehicle that you are working on, loosen the stock hardware on the adjusting sleeve and using a pair of pliers, adjust the toe close enough so that the vehicle can be driven.





34. Locate the new front shocks. New longer front shocks are needed after this suspension system has been installed and the front shocks need to be ordered as a separate part #. Working on the new shocks, install the new bushings and proper sleeves that are packaged with the new shocks into the eyelet end of each new shocks. If the vehicle that you are working on has the auxiliary shock, no sleeve will be installed in the eyelet of the shock, it will just be the bushing only. Special note: Make sure to use a lithium or moly base grease prior to installing the new bushings and sleeves into the eyelet of the new shocks. This will help with the life of the bushings as well as prevent squeaking. Locate the stock lower shock mounting hardware. Also, locate the new upper stem mount hardware that was packaged with the new shocks. Working on the driver side, install the new shocks into the stock location using the stock lower hardware and the new upper hardware. Make sure to use thread locker or loctite and torque the bottom hardware to 65 ft lbs. and the upper hardware to 18 ft lbs. Repeat procedure on the passenger side.

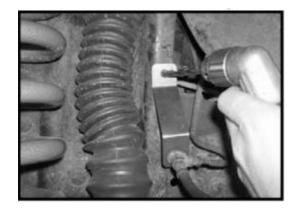
Special note: This kit comes with a front and rear brake line relocation kit. Sometimes the brake line relocation kit is not needed. Check the stock brake lines and if they are too tight, then the new front and rear brake line relocation kit will need to be installed. If the brake line relocation kit does not need to be installed, please skip to step # 40.

35. Working on the driver side, carefully remove the stock eclip from the stock brake line the stock e-clip may be discarded. Repeat procedure on the passenger side.



36. Working on the driver side, carefully pull the hard line out so that the new front brake line relocation bracket can be installed. Repeat procedure on the passenger side. Special note: Take special care not to damage the stock brake line when performing this step.

37. Locate the new front brake line relocation brackets from hardware bag. Working on the driver side, slide the open end of the new brake line over the stock brake line. Now measuring from the stock brake line hole up 2 1/2", carefully drill a 5/16" hole into the stock shock/coil spring bucket. Repeat procedure on the passenger side.



38. Locate (2) 5/16" x 1" bolt, (4) 1/4" USS flat washers and (2) 5/16" unitorque nuts from hardware bag. Working on the driver side, secure the new front brake line relocation the to the previously drilled hole using the new 5/16" x 1" bolt and hardware. Make sure to use thread locker or loctite and torque to 12 ft lbs. Repeat procedure on the passenger side.



39. Locate (2) e-clips from hardware bag. Working on the driver side, install the new e-clips to the stock brake line on the back side of the newly installed brake line relocation bracket. Repeat procedure on the passenger side. Special note: Once the completion of the suspension system has performed and the weight of the vehicle is on the ground, check to make sure that the stock brake line does not rub on the inside of the tire.





- 40. If you have not already done so, remove all the hydraulic floor jacks from under the vehicle. Check and double check to make sure that all steps have been performed properly and check again. Install the tires and wheels and carefully lower the vehicle to the ground.
- 41. If you were not able to install the stock sway bar to the newly installed sway bar relocation brackets, perform this step now that the weight of the vehicle is on the ground.

Front end installation completed!

Rear end installation:

- 42. To begin installation, carefully block the front tires and wheels so that the vehicle can not roll forward. Safely lift the rear of the vehicle and support the vehicle with a pair of jack stands. Place a jack stand on both the driver and the passenger side. Next, remove the rear wheels and tires from both sides.
- 43. Working on the driver side, remove the stock shock from the stock location. The stock shock may be discarded but save the stock upper and lower hardware. Repeat procedure on the passenger side. New longer rear shocks are needed after this suspension system has been installed and the rear shocks need to be ordered as a separate part #.
- 44. Working on the driver side, remove the stock sway bar end link from the stock sway bar. Save the stock hardware. Repeat procedure on the passenger side.



- 45. Place a pair of hydraulic floor jacks under the rear differential. Carefully raise up on the hydraulic floor jacks until they make contact with the rear differential.
- 46. Working on the driver side, remove the stock u-bolts from the stock location. The stock u-bolts and hardware may be discarded. Save the stock upper u-bolt plate. Repeat procedure on the passenger side.



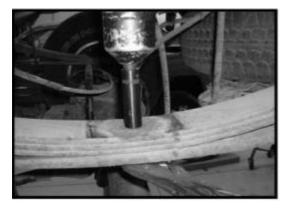
47. Carefully lower down on both hydraulic floor jacks at the same time allowing enough room for the new rear add-a-leafs to be installed. Working on the driver side, remove the stock block from the stock location and set aside. Repeat procedure on the passenger side.

48. Working on the driver side and using a pair of "C" channel vise grips, clamp the stock rear springs together. Place one towards the front of the stock centering bolt and one towards the rear. Special note: Make sure not to clamp the stock over load. Repeat procedure on the passenger side.



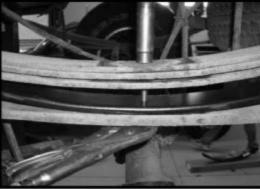


49. Carefully remove the stock centering bolt from the stock location and discard. Special note: Once the stock centering bolt has been removed, the stock over load will fall out. Save the stock over load. Repeat procedure on the passenger side



50. Locate the new rear add-a-leafs. Also, locate the new 3/8" centering bolts and nuts from hardware bag. Working on the driver side, install the new add-a-leaf between the stock spring and the stock overload. Secure using the new 3/8" centering bolt and nuts. Tighten the new centering bolt until all the springs come together and torque to 40 ft lbs.





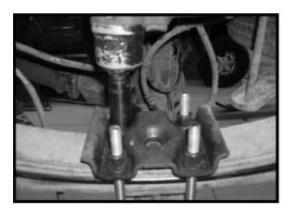
51. Working on the driver side and using a die grinder, carefully cut off the excess thread from the new centering bolt. Repeat procedure on the passenger side.



52. Locate the stock blocks. Working on the driver side, install the stock block into the stock location. Repeat procedure on the passenger side. Carefully raise up on both hydraulic floor jacks that are holding the rear axle until the stock blocks make contact with the stock springs.



53. Locate (4) 9/16" x 3 1/2" x 10 1/2" round u-bolts. Locate (8) 9/16" u-bolt high nuts and (8) 9/16" u-bolt harden washers from hardware bag. Also, locate the stock upper u-bolt plate. Working on the driver side, secure the axle to the stock spring using the new u-bolts, u-bolt hardware and stock u-bolts plates. Torque to 110 ft lbs. Repeat procedure on the passenger side.



- 54. Locate the new rear shocks. New longer rear shocks are needed after this suspension system has been installed and the rear shocks need to be ordered as a separate part #.
- 55. Locate the stock upper and lower shock mounting hardware. Working on the driver side, install the new shocks into the stock location using the stock upper and lower hardware. Make sure to use thread locker or loctite and torque both the upper and lower hardware to 65 ft lbs. Repeat procedure on the passenger side.
- 56. Remove both hydraulic floor jacks from under the vehicle. Special note: This kit comes with a front and rear brake line relocation kit. Sometimes the brake line relocation kit is not needed. Check the stock brake lines and if they are too tight, then the new front and rear brake line relocation kit will need to be installed. If the brake line relocation kit does not need to be installed, please skip to step # 60.
- 57. Working on the driver side, remove the stock e-clip that is holding the stock brake line to the stock location. The stock e-clip may be discarded.
- 58. Carefully pull the stock brake line downward, pulling the line through the stock hole.



59. Locate the new rear brake line relocation bracket, (1) 5/16" x 1" bolt (2) 1/4" USS flat washers, (1) 5/16" unitorque nut and (1) e-clip from hardware bag. Slide the open end of the new brake line over the stock brake line. Push the new bracket up on the cross member and carefully drill a 5/16" hole into the cross member. Secure the new brake line into the previously drilled hole and secure using the new 5/16" x 1" bolt and hardware. Make sure to use thread locker or loctite and torque to 12 ft lbs. Now install the new e-clip into the stock location.



60. Locate the stock sway bar end link hardware. Working on the driver side, secure the stock sway bar end link to the stock sway bar using the stock hardware. Make sure to add some thread locker or loctite and torque to 32 ft lbs. Repeat procedure on the passenger side.

- 61. Check and double check to make sure that all steps were performed properly and check again.
- 62. Install the tires and wheels and carefully lower the vehicle to the ground.