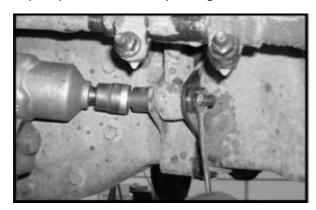
- 1. To begin installation, block the rear tires of the vehicle so that the vehicle is stable and can't roll backwards. Safely lift the front of the vehicle and support the vehicle with a pair of jack stands. Place a jack stand on both the driver and the passenger side. Special note: Place the jack stands on the body mounts. Next, remove the front wheels and tires from both sides.
- 2. Working on the driver side, remove the stock sway bar from the frame mounting location. Save the hardware. Repeat procedure on the passenger side.



3. 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.

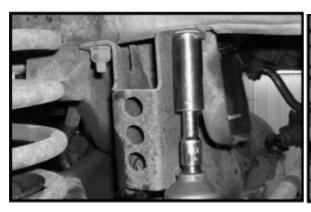


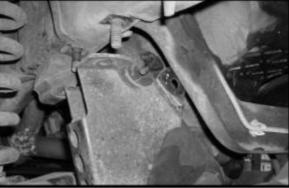
- 4. Place a pair of hydraulic floor jacks under the front driver and passenger side twin eye beam axles. Carefully raise up on the hydraulic floor jacks until they come into contact with the front twin eye beam axles. Also, place a pair of hydraulic floor jacks under the driver and passenger side stock radius arms. Carefully raise up on the hydraulic floor jacks until they come into contact with the stock radius arms.
- 5. 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.





6. 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.





7. Working on the rear passenger side twin eye beam axle, remove the stock mounting hardware that connects the rear axle to the stock location. The stock hardware may be discarded.



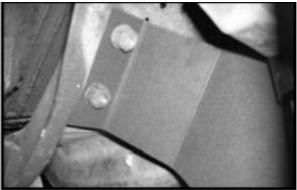
8. Working on the driver side stock radius arm bracket, remove the stock hardware or the stock rivets that connect the bracket to the frame rail. The stock hardware and rivets may be discard. Repeat procedure on the passenger side. Special note: Using a die grinder and making a cross cut on the rivets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



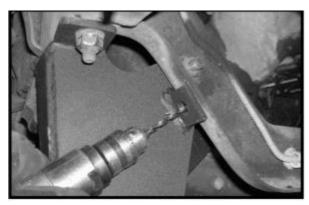


9. Locate the new front twin eye beam relocation bracket and the stock hardware. Install the new front relocation bracket to the stock location and secure using the stock hardware. Make sure to use thread locker or loctite and torque to 85 ft lbs.



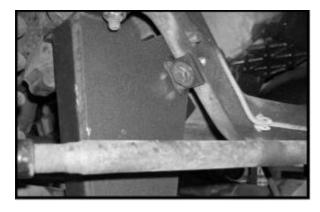


10. Working on the newly installed front twin eye beam axle pivot relocation bracket and using the tab on the bracket as a guide, carefully drill a 1/2" hole into the stock front cross member. Special note: Take special care not to drill into the cooling lines that wrap around the front cross member. Also, drilling a pilot hole first may make drilling easier.





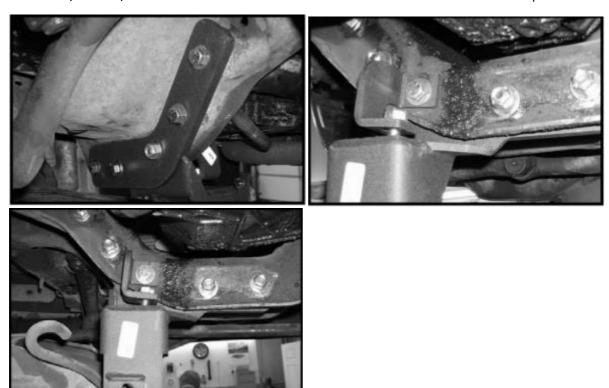
11. Locate (1) $1/2" \times 1 \ 1/2"$ bolts, (2) 7/16" USS flat washers and (1) 1/2" unitorque nuts from hardware bag. Secure the newly installed front axle pivot relocation bracket to the front cross ember using the new $1/2" \times 1 \ 1/2"$ bolt and hardware. Make sure to use thread locker or loctite and torque to 75 ft lbs.



12. Working on the stock rear axle pivot relocation bracket, remove the rivets holding the bracket to the cross member. Special note: Using a die grinder and making a cross cut on the rivets then using a air chisel will help make the removal of the rivets easier. The stock bracket may be discarded. Carefully drill out the (5) rivet holes to 7/16".



13. Locate the new rear twin eye beam axle pivot relocation bracket and new support bracket. Also, locate $(5) 7/16'' \times 1 1/2''$ bolts, $(1) 1/2'' \times 1 1/2''$ bolts, (10) 3/8'' USS flat washers, (2) 7/16'' USS flat washers, (5) 7/16'' unitorque nuts and (1) 1/2'' unitorque nut from hardware bag. Special note: The stock axle pivot bracket was attached to the front of the stock cross member, the new bracket will be attached to the back side of the stock cross member. Secure the new rear twin eye beam axle pivot relocation bracket to the back side of the stock cross member using the new $7/16'' \times 1 1/2''$ bolts and hardware. Do not tighten at this point. Special note: For now, only attach the bracket by the (4) outer holes. Attach the new support bracket to the top of the box portion of the new bracket using the new $1/2'' \times 1 1/2''$ bolts. Do not tighten at this point. Now secure the support bracket to the rear portion of the cross member and newly installed rear twin eye beam axle pivot relocation bracket using the new $7/16'' \times 1 1/2''$ bolts and hardware. Special note: The stock cross member is going to be between the newly installed rear axle pivot bracket and support bracket. Move back to the newly installed $7/16'' \times 1 1/2''$ bolts and add some thread locker or loctite and torque to 45 ft lbs. Move back to the newly installed $1/2'' \times 1 1/2''$ bolt and hardware and add some thread locker or loctite and torque to 65 ft lbs.

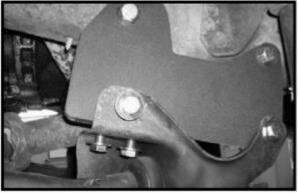


14. Working on the driver side, carefully drill out the frame and the stock radius arm bracket holes to 1/2". Repeat procedure on the passenger side.

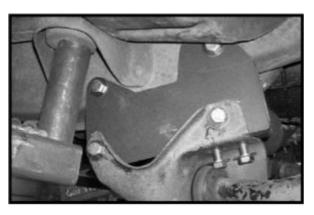




15. Locate the new driver and passenger side radius arm relocation brackets. Also, locate (16) 1/2" x 1 1/2" bolts, (32) 7/16" USS flat washers and (16) 1/2" unitorque nuts from hardware bag. Working on the diver side, secure the new radius arm relocation bracket to the stock radius arm bracket using the new 1/2" x 1 1/2" bolts and hardware. Do not tighten at this point. Now secure the new radius arm relocation bracket to the stock frame rail using the new new 1/2" x 1 1/2" bolts and hardware. Move back to all 1/2" hardware and add some tread locker or loctite and torque to 65 ft lbs. Repeat procedure on the passenger side.

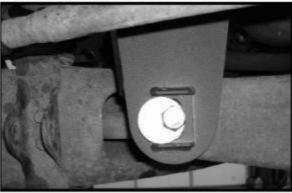






16. Locate (1) 9/16" x 3 1/2" cam bolt, (2) cam washers and (1) 9/16" unitorque nut from hardware bag. Carefully raise up on the hydraulic floor jack that is supporting the driver side front twin eye beam axle until it slides up into the newly installed bracket. Secure the axle to the new bracket using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





17. 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 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: Make sure to install the bolt from the rear of the vehicle to the front of the vehicle. Also, for now place the cam washer in the center position.





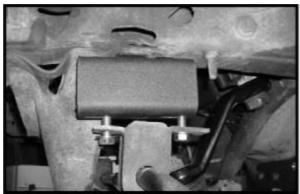
18. The brackets around the "D" bushings on the stock front sway bar may need to be opened up to 7/16". Try a 7/16" bolt in each location to make sure that it will fit. If not, open the holes up so that the new 7/16" bolts will fit.



- 19. 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.
- 20. 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. Repeat procedure on the passenger side.



21. Locate (4) $7/16" \times 1 \ 1/2"$ 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 $7/16" \times 1 \ 1/2"$ 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 on both sides, 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 installation is completed and the weight of the vehicle is on the ground.





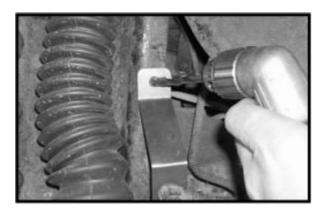
- 22. Move back to the stock lower sway bar end link mounting hardware and add some thread locker or loctite on both the driver and passenger side and torque to 65 ft lbs.
- 23. Slight adjustments may need to be done to the outer tie rods so the vehicle can be driven to an alignment shop. If this is 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.

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 # 28. Also, the following pictures are used from a F150 which uses the same style brake line and brake line relocation brackets but the F150 brake line is positioned towards the rear of the coil springs but on the Rangers it is positioned towards the front of the coil springs.

24. 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.



25. 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. Special note: Take special care not to damage the stock brake line when performing this step.



26. 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.



27. 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 installation of this suspension is completed 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.





28. 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.

29. 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.