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Here are the steps we recommend for changing out the coils in the back of the following vehicles, especially for the Long Travel rear coils from Dobinsons.

- 4th and 5th Gen 4Runner from 2003-2024
- Lexus GX470 and GX460 from 2003-2023
- Toyota FJ Cruiser all years
- Toyota Prado 120 and 150

This also applies to many different coil sprung 4x4 rear ends as well, as the steps on most 5 link rear suspension setups are the same. Remember, these are the steps for Long Travel coils, which are sometimes 10" longer than stock coils, so all of this extra droop will not be necessary for basic lifted coils of 2" or less.

1. Raise the vehicle on jack stands under the frame, just forward of the lower control arm mounts, allowing the axle to be lowered and raised with a floor jack, remove the wheels and tires. Make sure the frame is up high enough, as the axle needs to have room for the 23-25" long coils to go in. Have a jack supporting the axle under the middle. Be sure the parking brake is on, it will help later.
2. Remove the top shock nut and washers, while holding the shock body so it doesn't rotate. A ratcheting wrench works best. On some cars, it's easier to do this at ride height, so the shock isn't pulling down too much.
3. Once the top shock mount is loose, pull the shock down, and straighten it out (lean it forward) to be at a 90 degree angle from the lower mount so that the shock will come off the lower mount easily. Undo that lower bolt and slide the shock off.
4. Disconnect the upper sway bar link nuts so the sway bar doesn't limit droop travel. On KDSS models, disconnect the sway bar from the axle on both sides and lower it out of the way (do this before going to full droop to make it easier)
5. Loosen and disconnect the panhard rod connection at the axle to allow for more droop.
6. Disconnect the brake line connection bracket and ABS lines up on the body of the vehicle so that they don't get stretched at full droop. Pay very close attention to these at all times in the next steps.
7. If you are adding new brake lines for a Long Travel (LT) kit, change those brake lines now. You can bleed it later when you're putting the wheels back on.
8. Optional, but makes life easier - Loosen the upper and lower control arm mounting bolts on all 4 ends so that the rubber bushings aren't binding while the axle droops. These

need to be retorqued at the new ride height anyway to prevent the bushings from being bound up, and to make sure the ride quality is correct without preloaded bushings adding harshness to the ride.

9. Use some tape or stickers to mark the existing coils left and right for future reference. Left side is the left side as if you are sitting inside the vehicle.
10. Lower the floor jack to the point that the ABS and brake lines are not getting stretched, then you can remove the stock coils. They should come out easily with this much droop right now. Or push down on the axle with someone's foot to get further droop on that side.
11. Check the coils you are installing to make sure if they're labeled left and right, or Driver/Passenger, etc. Dobinson's rear coils are the same height on both sides for the above-mentioned vehicles, but some Land Cruisers and others have side-specific coils. One is taller than the other. Match up the original taller coil with the new taller coil to install it on the correct side. This is more accurate than relying on the labels on the coils.
12. For really long coils, you might need to disconnect the parking brake cables where they attach to the side of the lower control arms, so that they don't bend or get kinked at full droop. They're easy to simply disconnect.
13. Depending on the length of the new coils you are putting in, especially Dobinson's LT coils, you may need a spring compressor to get them into position. Place the OE top coil isolator on top of the new coils, matching the existing notch in the rubber to the end of the new coil up top (not doing this can add artificial lift height until the coil embeds itself into the rubber.
14. If a spring compressor is needed, mount one front and one rear, so that you can get them off once the spring is up and in position on the axle. The part that is a nut needs to face down, with the threads upwards, so that you can loosen it once installed. I suggest trying to get it into the coil bucket first without it. With the center of the diff supported, parking brake on, have an assistant step down on the end of the axle you are putting the coil into, this will help droop it down. Or if no one is around, use a 2nd jack on the opposite side of the axle and raise it up so that the side you're working on will tilt down further.
15. Be sure the top rubber isolator is properly centered in the bucket, and that the lower coil seat has the coil ending at the notch in it. Not doing this will cause artificial lift. Rotate the coil correctly.
16. Remove the spring compressors at this point.
17. If this didn't work for you, be sure all of the upper and lower links are loose. If it still won't work, disconnect the upper link on the side you're working on. Don't disconnect both upper links at the same time or the axle will roll and you'll have your hands full.
18. Go to the opposite side of the axle, using that 2nd jack, jack up the side with the spring already in place, so that the current side will go down. The spring will try to fight you, so have someone again stand on that axle (literally put a foot onto the brake rotor and push down, this will stretch the arms down further to get maximum droop. WATCH YOUR BRAKE AND ABS LINES!!!
19. Repeat the other steps for getting the coil in.

20. Reinstall the panhard rod on the axle end. If you're lifting 2.5" or more, you'll most likely need an adjustable longer panhard rod so that the axle is centered. Use a ratchet strap from the axle up to the frame, and tighten it to shift the axle over so that the hole lines up. Put the bolt in, but Don't tighten yet.
21. Put the new shocks in, always from the bottom mount first, then pull the shock back and up through the mounting hole. These can be tightened in the air or on the ground.
22. Reinstall the sway bar link, new links will be needed for 2" or more of lift as the stock ones have a hard time reaching. Tighten it to have the same bushing squish that it previously had. This can be more easily done with the truck weight back on the ground with wheels and tires on.
23. With the vehicle back on the ground, re-tighten all of the upper and lower arm bolts and panhard rod bolts. These will now not have any preload on them at the new ride height so that you get the proper flex and articulation out of the rear end. Control arms that have poly bushings with an inner sleeve that can rotate, or heim joints, can be tightened in the air, as they're not prone to bushing preload.

Post Work Checklist

- Check bolt and nut torque on the upper and lower trailing arms and panhard rod - all done at the new ride height!!!
- Check that the shock upper and lower mounts are properly centered and installed and tightened down. If applicable, make sure any external resi and hose are properly mounted and not in the way of any moving parts
- Check the sway bar links are properly back in place, or that your KDSS sway bar is reattached correctly
- Check that your brake lines and ABS wires did not get over-stretched or damaged, and reattached any disconnected clips to make sure they aren't loose
- Make sure the coils are properly seated at the bottom
- Bleed your brakes if you changed the brake lines
- Reconnect parking brake cables to the lower control arms, if they were disconnected
- Check the centering of the rear axle, making sure the left to right sides are even under the frame of the vehicle. Order an adjustable panhard rod if you're out by ¼" or more
- Make sure all wheels are properly torqued
- New coil springs take 500-1000 miles to break in, and measuring the lift height right now will be very inaccurate. Drive the vehicle for 10 miles and then you can take a measurement, but it will still be different once it settles.