## A Few Words On Lift Kits

## Contributed By: Michael E. Shimniok

Rancho makes a 2.5" lift for around \$590 total. Warranty on this is superb; parts that are in any way failing, get replaced, no questions asked. I don't think this includes the shocks. RS5000s run about \$145 and RS9000s are about \$240. You probably won't need a dropped pitman arm, sway bar extenders, or extended brake lines for this amount of lift. YMMV.

Superlift makes a 4" that comes with front springs, and your choice of rear blocks only, or add-a-leafs (short or long) and rear blocks. From \$390 to \$450. Shocks are around \$170. I'm told the warranty on this is reasonably good; defective or failing/failed parts are replaced after dealer verification. This doesn't include the pitman arm or the extended brake lines.

Skyjacker does an all-spring 4" lift "system" for around \$650. This does not include shocks, dropped pitman arm, or brake lines. Shocks available are Skyjacker Hydro for around \$120 or Nitro for \$140. Based on posts to the IFSJA list, this seems to be the most popular kit by far. Reports are that you probably want to go with the Hydros unless you can stand a very rough ride. There have been reports ranging from no bump-steer problems whatsoever, to noticable bump-steer even with the dropped pitman arm. Note that on more than a few trucks, this system gains 5-6" of actual lift.

Trailmaster does a 4" front spring, rear add-a-leaf + block for \$361. You have your choice of a long or short add-a-leaf. You can even go with just a block lift. Prices vary a little based on the type of lift you choose. Shocks run around \$170. Dropped pitman and brake lines are not included.

Rough country manufactures a 3" lift, your choice of blocks in the rear, or a full "system" of four springs. The front springs and rear block kit runs \$325. The full "system" runs \$525 at Rocky Mountain Suspension, but can be more elsewhere. The system includes Heckethorne Hydros.

Pro Comp (4wheel parts wholesalers) does a 4" lift and it runs pretty cheap, also, but you pay for that in terms of material (Taiwanese steel springs, according to what I was told by a local 4x4 shop) and difficulty with warranty, since it's proprietary to 4wph, also according to the shop. I would ask about the warranty on anything you buy and make absolutely certain that it isn't difficult to get replacements and that your local shop can handle the warranty work/paperwork/whatever, rather than being forced to ship this stuff to some factory somewhere.

It seems that all the kits include full bushings for any component being replaced (ie: front spring bushings if replacing front springs) which means you may want to upgrade your sway bar bushings. And while you're at it, if you're getting a sizeable lift, you might want quick disconnect sway bar extenders. Actually they come in stock sizes as well as lifted sizes. Contact JKS Manufacturing (or look in the back of 4x4 mags). If you get the Wrangler disconnect in the appropriate length, you're set. They come with grease fittings, greasable fluted poly bushings, and stainless steel parts (from the advert).

With any of these > 3" kits (maybe even those, too) a dropped pitman arm must be installed. These seem to run in the \$60-\$80 range. I believe SuperLift and TrailMaster make these, probably others, too.

In some, maybe all cases, 4" lifts require longer brake hoses (sometimes included, sometimes not). AFAIK, for driveline alignment, at least one of these kits (Skyjacker) and probably all of them, include the necessary hardware to maintain proper alignment. You may find it necessary to move the shock mounts on the AMC 20 rear axle for the shocks to fit correctly; this can be done by a welding shop--or maybe even your local 4x4 shop.

A quality steering stabilizer might be a good idea. Those set you back anywhere in the \$35-\$50 range. Rancho, Superlift and presumably others manufacture singles or duals (not recommended unless you have very large tires, say in the 35" range) for our rigs.

There are a number of other options for lifting your trucks. Keep in mind that the theoretical goal of lifting is to enable you to mount larger tires, and to gain frame clearance (which we enjoy a great deal of thanks to the excellent design of our truckstry looking under a Toyota 4-Runner or a late model Blazer sometime). Larger tires means higher differential clearance which equates to true ground clearance, although I have to admit that I personally have never hi-centered a diff, but have whacked rocker panels and trailer hitches dozens of times.

You can install a body lift (2"-3" seems common among members) to gain extra clearance without having to do a spring lift, but there are lots of other considerations with this method, making it more complicated. You need to worry about your fan in relation to the radiator. It is likely you'll need to fabricated extended linkages for the trans and/or the tcase. You may find wiring and other cables and lines a problem as well. I don't have much info on kits available for body lifts. Look in 4x4 magazines and see what you can find for companies that make body lift kits.

An option for lifting is a spring-over conversion in front, which requires some welding on the axles to swap some things around (I'm not sure of the actual procedure or what's involved). These expensive steps must be taken otherwise, you entirely lose camber in the front wheels, which means that the truck will wander around -dangerously- on the road. Not cool. Runs somewhere on the order of \$300 for the conversion. On the other hand, it gains you about 5" or so.

You can have springs fabricated. National Spring (in CA) is the only option I've ever heard. Apparantly they do a fabulous job, tailoring the springs to your vehicle's weight and your requirements of lift, carrying capacity, and whatnot. It's a super-spendy option, though, far exceeding the cost of the Skyjacker system, just for the springs and bushings. You'll still need shocks, dropped pitman arm if you're going 4" or more, and brake lines.

You can also have springs rearched, which costs between \$200 and \$400 for all four springs. The disadvantage of rearching a set of stock springs to be higher than stock is a significantly rougher ride -- far more than a kit system, apparantly. In addition, there have been reports of rearch jobs sagging prematurely, though that may depend more on whether you had soft-riding truck to start with, or a truck with heavier-duty springs.

Tapered lift blocks in the rear (for maintaining driveline alignment) run around \$40 including the u-bolts. You can have high grade custom u-bolts manufactured for \$10-20 each.

You can also find add-a-leafs for the rear, but they make the ride significantly stiffer than stock. They are inexpensive however, and you could combine them with rear blocks.

Shackle conversions seem to be a big no-no (depends on who you ask). Certainly don't exceed 1-2" increase, as any more could lead to them breaking which results in big ugly terrible things happening to your truck and the people in it when that happens.

As far as performance concerns, I would guess that a fabricated full spring set would give best articulation esp. if used with a sway bar disconnect. Next I would guess one of the quality lift "systems" with four springs. I suspect that blocks get you up in the sky but probably don't do much for articulation. It'd be interesting if we could get some comparison figures for 20 degree ramp travel between various kits. I have no idea which shocks would be best for off-road use, only that some members have found nitro (gas) shocks to provide a bone-jarring ride while the hydros were more livable.

I still haven't put a lift kit on my rig. I do have 31" tires that rub during extreme articulation off-road. I'm still debating on which kit I should get. My primary goal is to improve off-road frame and tire clearance as well as articulation (I have a Rover D90 to humiliate). But I don't want to sacrifice a great deal of comfort and I won't sacrifice drivability; I can live with a slightly stiffer ride, but bump-steer or wander is not acceptable.

Michael