



## *Ford FAQ*

### ***Can I put Superduty springs on my F250 with the stock TTB Dana 50?***

No. We don't recommend Super Duty springs with the TTB axle. The F250 has very stiff springs to survive the twisting motion the TTB imparts upon them. So swapping lighter springs in isn't really an option without getting rid of that axle. We've seen it done, and the springs are fatigued and sagging almost instantly.

We recommend just doing the 2" FSR with stock springs and the TTB drop brackets. The shackle reversal will improve the ride and make the truck livable. We have a kit just for that. But to make it actually ride *well* we recommend a Dana 60 swap and better springs.

We make kits to use the 85-97 Dana 60, 99-04 Dana 50/60, or 05-17 Dana 60.

### ***Is the Superduty spring RSK worth the money over an OBS spring RSK?***

Yes. Even just doing an OBS spring kit your 20+ year old springs are worn. They at least need bushings and isolators. The Super Duty springs are longer and ride nicer. Rather than buying new OBS springs, or spending the money to refresh your old ones, you may as well buy SD springs. Plus if you're doing a lift there are much more spring options available for those trucks than the OBS. If you're swapping from a 2wd it's the same amount of parts and close to the same cost to do Superduty springs.

### ***I want to 4x4 swap my 2wd OBS. What axle should I do?***

We make kits that work with either the 85-97 Dana 60 axle, 99-04 Dana 50/60 axles, or 05-16 Dana 60 axle.

The 85-97 would be the most straight forward install, however those axles are getting hard to find, and expensive, if you can get a donor rig or chassis it can be a good way to go because you can use a lot of the little parts like shock mounts, brake line brackets etc.

99-04 are about the cheapest, especially the Dana 50 because, well it's not a 60. But they are metric, different lug pattern and take a different panhard bar. The 99 and newer rear axle has disk brakes and aside from different shock mounts and ebrake, they bolt in.

The 05+ are a pretty good deal too, we've bought front and rear axle with all the stock suspension for \$2000. They are coil sprung and ride very well, have a much better turning radius, bigger brakes, tie rod ends, etc, but are also of course metric and the larger brakes require at least 17" wheels. The matching rear 99+ axles have rear disk brakes. One thing to note is around 2010 they switched to dual channel rear ABS. This moved the speed sensor from the diff out to the wheels. This is not a big deal and you can swap the tone wheel and sensor from your Sterling 10.25 to the later axle.

So I'd start with choosing and finding the axle(s), tire size and lift you want to run. Then we have all the parts to make it happen.

### ***I want to do a rear shackle flip kit, but will it affect my towing?***

Ok, lets talk about the difference between a tension shackle configuration (stock, shackle pointing up, and compression shackle configuration (rear shackle flip)

There is actually a surprising amount of science involved in leaf spring suspensions. But the main factor here, which is often overlooked, is as the shackle angle increases in a compression shackle design (shackle pointing down) the spring rate decreases. This is why this design rides better, as when you hit bumps the spring softens up. However if you overload this design and the shackle swings back further than it should the resulting decrease in spring rate can be a problem.

In a tension shackle design as the shackle angle increases, so does the spring rate. So if you are overloading the vehicle it's less of an issue.

The takeaway here is put your suspension together with the proper shackle angle and don't overload it and you'll be fine. For a truck that is infrequently loaded heavy a lighter spring with a shackle flip that rides nice with airbags that can be pumped up when additional capacity is needed is ideal.

### ***I want to do the Superduty Spring Front Shackle Reversal but don't want any lift***

This is just not possible without a massive amount of frame cutting, fabrication and axle rework. Thanks to physics you can't hang a spring from a shackle where it was at a fixed point before without some lift. The spring eyes have to be dropped down evenly to maintain caster and pinion angles. 2" is the minimum lift to do a shackle reversal. Our kits are measured with the V-code springs and that is what we recommend. People might tell you that you can get less lift with the U code and w code springs, which are gasser springs. We don't recommend them for diesels or big block trucks as they will quickly sag under the weight. 2" is just enough to level a stock truck, it's not a huge lift.

### ***I want to do 6" or more lift, what drop pitman do I need?***

You need more than just a drop pitman. Up to 4" of lift you can correct the geometry on the drag link and the panhard bar with a drop pitman and a drop panhard bracket.

Beyond 4" there just isn't enough drop bracket to correct it. The big 5" drop brackets tend to crack the engine crossmember as they put too much leverage on it. The big 6" drop pitman arms can shear the sector shaft on your steering box.

Really there is a lot of room for improvement on the stock design anyway. The stock drag link "T"s into the tie rod, this creates tie rod roll every time you turn the wheel. The stock panhard bar is stubby and therefore cannot maintain the same arc as the drag link.

Beyond 4" we recommend our crossover steering and crossover panhard kits.

The combination of crossover panhard and crossover steering really make these trucks drive better than they did stock. Because ideally you want both the panhard bar and the steering drag link as horizontal as possible and as parallel as possible. So they're working together on the same arc, not fighting each other. The crossover steering eliminates tie rod roll and the longer drag link means less change of angle through it's range of motion. The longer panhard bar with mounting points as close to the same as the drag link keeps the two bars parallel.

### ***I'm swapping my OBS rear 10.25 to a 10.5 with disk brakes, do I need to change my master cylinder and prop valve?***

NO. We have run the stock OBS brake system with the disk brake rear axles with zero issues. Stops impressively well with no other changes. We have run the OBS trucks with even the 2010+ eLocker 10.5 rear axle with no issues.

***Can I buy and OBS spring shackle reversal and later swap to Superduty Springs?***

Yes, but you will need to buy a whole new kit, as no parts are shared between the two. The SD springs are 4" longer than the OBS springs and the SD kit is designed to accommodate the longer spring while keeping the axle where it is supposed to be. However all the kits mount to the frame using the same holes, so it is easy to swap from one kit to another.

What shocks do I run on my OBS with X amount of lift?

With the hundreds of variations in suspension setups, springs etc. the best way to determine is to measure your truck. Measuring from upper to lower shock mount center to center will get us as close as we can without flexing your truck up to measure full compression and full droop.

We have the lengths for common setups on these trucks such as 2" FSR with V-code super duty springs, but these are all just a general guide. Shock lengths for the Bilstein 5125 shocks we carry are on the product page.