

Answers on Backspacing and Spindles / Knuckles

Here at Maxtrac, we have a decent sized lineup of lifted spindles, many questions are raised about wheel backspacing and why certain offset wheels are required. We have received many calls from customers with the misconception that after installing our lift spindles on their 2WD trucks or SUV's, they can bolt their factory wheels and tires back on. We are also often asked if factory wheels with a larger tire can be ran with our spindles.

We would like to make it clear that most lift spindles on any 2WD IFS application will not accept stock wheels or high offset wheels as they are too "sucked in". By this we mean the wheels and tires physically sit too far into the wheel well and will actually hit the new spindles, or possibly the outer tie rods, sway bar links or even the frame when turning. The reason why this occurs is that an aftermarket lift spindle has a much taller neck than the factory spindle and a relocated wheel bearing position. This causes the spindle to stand up taller than the wheel and tire while also creating a wider track width. For proper geometry or clearance reasons, a lower offset "lifted application" wheel is required.

Here is the best way to measure back spacing on a wheel. First, find a straight edge (steel is what we used) and cut it down so it will sit INSIDE the outer lip of the wheel. This is important because if the straight edge is sitting on the lip, that will give the wrong reading. Now take a ruler or tape measure and measure the distance from the mounting surface of the wheel to the straight edge, and that will tell you the back spacing of your wheel.



In the example below, you can see the wheel mounted, and the possible clearance issue that arises. This is the area that you have to worry about touching other parts of the suspension such as the steering knuckle, tie rod ends, etc. In this case, there's plenty of room on our test vehicle.



Depending on the vehicle and the spindle, ([Why wont lift spindles work on 4WD?](#)) different backspacing on wheels is required for proper clearance. There are a few exceptions on certain vehicles where the factory wheels and tires can be put back on as long as the tires are actually the factory size. We have our wheel backspacing recommendations listed along with all of our spindles on our website. Please make sure you are aware of this so that you can avoid confusion before performing the installation and realizing that the factory wheels, or certain offset wheels, will not bolt back on! This occurrence is not only with Maxtrac products but can typically be said for almost any brand lift spindle or lift kit that uses a taller knuckle.

Please keep this in mind prior to purchasing our products and performing installations. We want to make sure that all of our customers have the right information and are properly educated. For more details, feel free to give us a call at 1-866-409-8673 and we would be more than happy to answer any questions you may have. Thank you!