



Actual tractor Horsepower

Said plainly, equipment is rated by PTO Horsepower since Engine HP ratings are meaningless. This equipment does not connect to the PTO, but published PTO HP ratings are closer to actual pulling power. Older farmers are more familiar with PTO HP ratings. Older tractors are typically known by PTO HP.

Tractors also have Drawbar HP ratings. Over the years, tractor were sold by PTO HP but recently switched to selling Engine HP (it's a higher number to charge more \$\$\$). Don't lose the knowledge and value of actual tractor power that has been gained over the last century with the Nebraska Tractor Tests.

Tractors properly sized for Junior Series equipment can actually have as much as 50 Engine HP to achieve (approx) 45 PTO HP.

Drawbar HP can be higher if the tractor is heavier. Engine HP simply doesn't consider tractor weight for traction. New, modern tractors are often lighter than older models, requiring additional ballast to prevent spinning wheels. Various tractors with the same Engine HP can have different weights. Know pulling power before buying tractors or choosing equipment.

Wheel spacing

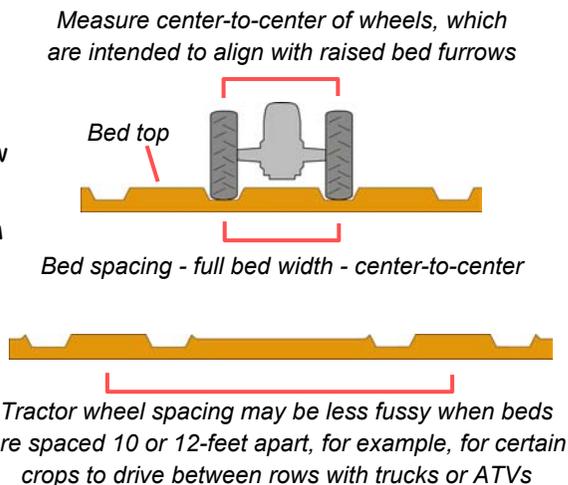
Tractor wheel spacing is the starting point to coordinate equipment for raised beds or row crops. More row configurations are possible with wider bed tops. 54" wheel spacing is minimum with 4-ft plastic mulch. Without plastic mulch, cultivators generally need more space between rows for basic cultivating tools.

60" wheel spacing is an industry standard for larger tractors. Some compact tractors can reach 60" but a 54-60" range is offered as a standard for tractors this size. Narrower is certainly possible, which sacrifices bed width and/or mulch width.

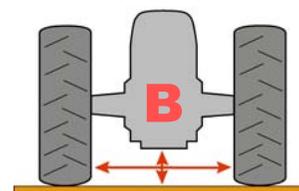
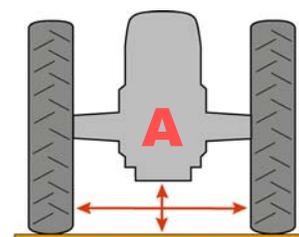
Modifying your row system to fit a tractor too narrow may be problematic long term. Feel free to adjust tractor wheels *one time* to fit a good row system.

The Nebraska Tractor Tests
In 1920, the state of Nebraska established the testing of tractors for reliability, which was then performed by the University of Nebraska. This was to stem the tide of some poorly made tractors that failed to pull as promised among the dozens of small manufacturers that existed at the time. Tractors were weighted for best traction to test torque and fuel consumption. These tests are now a global standard. Test results are available on the internet and in book form.

We are happy to help analyze any feature of your tractor or a tractor to buy. Feel free to call but email is preferred.



Row crop tractors (A) have wheels that add horizontal and vertical space for crops. These tractors are generally more nimble in the field with row crops



Compact tractors (B) are commonly equipped with wider and smaller diameter wheels. Use what you have but more serious growers fit the tractor with row crop wheels. If tractor dealers are not responsive to row crop wheel configurations, tell them to wake up

MORE WHEEL SPACING DETAILS FOLLOW WITH BED SHAPING AND PLASTIC MULCH APPLICATION