

## **Front Wheel Choices, Wide Fixed, Narrow Double, Tricycle, and Wide Adjustable.**

The first McCormick Deering tractors were Standards. Standards have fixed, not adjustable wheels spacing, front and rear.

Wide spacing increases stability.

Since the front wheels are used for steering and do not provide drive force, they are called “dead axles”.

Normally, fixed wide front wheels are set to the same width as the rear wheels which are also fixed. Standards of this type are also called “Wheatlands” and “Westerns”.

IH introduced the Farmall row crop tractor in 1924. The Farmall was designed for high crop clearance and for maneuverability. The front wheels were spaced closely together. This arrangement, along with the ability to brake either rear wheel individually, allowed the Farmall to turn in a radius of its own length. That ability was of great value when cultivating crops or mowing hay. In later narrow front tractors, the front wheels were toed-in at the bottom. This had the effect of further reducing the turn radius.

The word tricycle literally means, “three wheels”. Tractors with two close front wheels are not technically tricycles but they are commonly called tricycles.

There are true tricycle tractors, however. Tractor manufacturers have long offered a single front wheel version. That single tire is normally

somewhat wider than the tires that are used on a double front wheeled tricycle.

Utility tractors have adjustable width, wide front axles. Utility tractors are used around the farm for a variety of chores. Most often for tasks that use front or rear mounted equipment. Utility tractors were also popular for factory and construction work.

Row crop models could be equipped with wide, adjustable front axles. Such tractors were often multipurpose: for field work in row crops and in the off season for front loader work. That loader work might be manure loading or winter snow plowing.

Tricycle tractors could carry front-end loaders and often did, but they were inherently unstable. It was easy to tip a tricycle with a load in the bucket. I have done that myself. More than once. Fixed rear wheels on tractors such as Standards or Utilities are often adjustable in limited increments. Adjustment is made by changing the wheel mounting locations on the rims.

From the 1920s until the 1960s, row-crop tractors were most popular in the Midwest, Standard tractors were most popular in the Great Plains of the US and Canada.

By 1960, farmers were using multi row equipment and herbicides. The need for short turning at the end of the row diminished. Row-crop and Standard tractors were replaced by a single tractor type. That newer tractor had much more power, much bigger tires, possibly rear duals, a wide front end with adjustable wheels throughout.



**LEFT:** This W-4 is a good example of a Standard. It has fixed front and rear wheel spacing. The front axle is a single cast element. Rigid, strong and non-adjustable. The wheel spacing, both front and rear can only be changed a few inches. That is possible by changing the attachment locations of the hubs to the rims. But that is of limited advantage and is seldom done.





**ABOVE:** A classic row-crop, Farmall. This H is normally referred to as a tricycle configuration. The rear wheels are easily adjustable for width. The front wheels are not, except, the rims can be turned for a limited adjustment.



**ABOVE:** The International 300 above is a "Utility" tractor. It has adjustable width front and rear wheels. A Utility tractor like this 300, might be used for row-crop work, general field work and loader work. Some Utility tractors did construction or road work with front end loaders and rear mounted backhoes.



**ABOVE:** This Farmall M is a true tricycle. The single wheel is bigger than each of the two wheels on the H in the previous photo. True tricycles are not common. They have an advantage in shorter turning radius but they have a disadvantage of less flotation in soft soil.



**ABOVE:** This Super M has an after-market, wide, adjustable width, front end. The wide front was added when the loader was added. A loader this large would make the tricycle version of this tractor quite unstable. With the bucket full, it could hold well over a ton of manure or dirt. The center of gravity and the inertia of turning a tight corner could easily flip this machine with a tricycle front.