

Allis Chalmers

WC

West Allis, WI 1936



The Allis Chalmers Model WC was built from 1933 to 1948. The WC was designed from its start to be a nimble, low-cost, but well-powered row-crop tractor that would make the best use of pneumatic rubber tires, which Allis Chalmers had just introduced to agriculture in 1932. A very successful model, the WC was the best-selling tractor Allis Chalmers ever built.

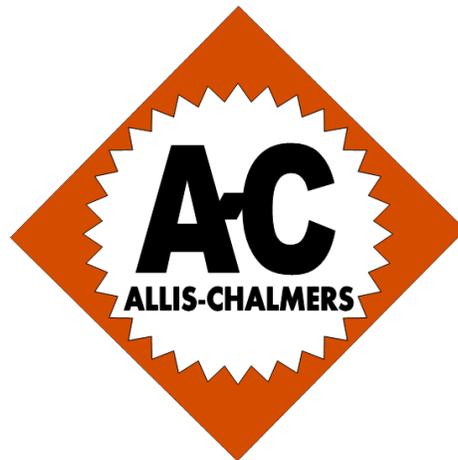
The WC was a variation on the Model W to be used as a cultivating tractor, thus the name WC.

The WC was the first farm tractor to have rubber tires as standard equipment and the first tractor tested on rubber in the Nebraska Tractor Tests. The pneumatic-rubber, tire-on-steel-wheel combination was more expensive to make than a steel wheel with cleats. To make rubber tires standard equipment, while also keeping the cost of the tractor low, the WC's designers, C.E. Frudden and Walter Strehlow, gave the WC drop gearing at the rear (bull-gear-with-pinion final drives), which allowed row-crop ground clearance while having smaller-diameter drive wheels. Drop gearing had appeared many times before on earlier tractors, but never for this new reason — to minimize the amount of rubber needed for the tires.

Like other row-crop tractors from various makers, the WC could be ordered in both tricycle (narrow tread) and wide tread (that is, wide front track) versions, with the tricycle configuration by far the most popular. The tractor could also be

ordered as "air front," meaning rubber tires in front and steel wheels in back.

In 1938, Allis Chalmers led the way with the Hydromantic Tires (tires filled with sodium chloride to give extra weight at a low point to increase traction) and the WC was there. This worked very well. However, 30 years later, it was discovered this mixture ate rims and rusted them, so such a mixture is now frowned upon.



Because more than 90 percent of WCs were sold with optional electric started and lights, Allis-Chalmers executive Harry Merritt decided in 1939 that these features would henceforth be standard equipment. Thus, the WC became one of the earliest farm tractors to have starter and lights as standard equipment.

The WC, with many good features and various first-to-market attributes, still had at least a few drawbacks. Its clutch

was not particularly well-designed, and, like other tractors of the 1920s through mid-1930s, it lacked usability in the design of its brake controls. Because there were hand levers on both sides of the tractor, the operator had to take his hands away from other controls to apply the brakes. Other tractors had foot pedals on both sides, but that meant the clutch and left brake could not be operated simultaneously.

Around 178,000 WC tractors were made from 1933 to 1948. They were assembled at the West Allis plant in Wisconsin, near Milwaukee, with around 29,000 of them being built in 1937 at the peak of their production. In 1934, the WC was listed at \$825 on rubber (standard), \$675 on steel (optional). By 1936, the prices were \$960 and \$785, respectively. The tractor could also be ordered as "air front."

The WC line did not end in 1948 because the road grader WC Speed Patrol was continued until 1950. If you consider the WD and WD45 were basically the same tractor as the WC, the design continued until 1957 because of improvements and tweaks.