



## The Willys-Overland Farm Jeep

*The Farm Jeep, a low-cost alternative to the tractor couldn't cut it on the farm mostly because of its light weight, weak drive train and cost.*

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*"If it can pull a bogged lorry out of the sand, it can pull a plow, or a harrow, or a seeder, or a cultivator." This 1944 advertisement cited the Jeep's battlefield prowess as justification for use in the farm fields of America.*

**Image courtesy Darrel Wrider**

At the beginning of World War II, farm tractor and implement manufacturers suspended production as they converted their factories to war-time production. With 4 million American farmers (out of a total of 5.5 million) owning neither a pickup nor a tractor, Willys-Overland executives saw a big post-war market for a Jeep adapted for use on the farm. Maybe they were also inspired by the description of the Jeep by World War II correspondent Ernie Pyle: "It's as faithful as a dog, as strong as a mule and as agile as a goat."

Early planning for conversion to civilian use began in 1942, when two military jeeps were tested by the Department of Agriculture at a tillage laboratory in Alabama. Testers were surprised by how well the jeeps performed, but recommended lower gearing, a stronger clutch and additions such as a drawbar.

By early 1944, when it appeared the Allies were going to win the war, Willys-Overland began drawing plans for a postwar farm jeep. Engineers took two military jeeps off the production line and called them "CJ-1" for "Civilian Jeep." Modifications included addition of tailgates, lower gearing and drawbars. A civilian-style top was designed to be offered as an option.

## Birth of the Farm Jeep

When the CJ-1 was ready for production, it was called a "CJ-2." The CJ-2 had lower axle ratios, lower low-range ratios for the transfer case, a stronger transmission, provision for center and rear PTOs, and changes to the chassis to position the drawbar. The Go Devil L-head engine was retained but with a different carburetor and ignition, and a governor for the PTO was added.

Willys introduced the CJ-2 to the public in July 1945 with the addition of a 265-pound weight mounted between the frame rails behind the front bumper. Engineers added that as a counter-weight to hold the front end down for plowing. The CJ-2 model name was changed to CJ-2A later in 1945, CJ-3A in 1949 and CJ-3B in 1953. All of those were marketed as the Farm Jeep, although some early units had AgriJeep tags on the dash.

The "Jeep Tractor," a stripped-down version of the Farm Jeep, was introduced in 1952. It was sold without front shocks, spare tire, windshield, passenger seats, tailgate, headlights, fuel-pump booster, speedometer or horn. The Jeep Tractor couldn't be licensed for on-road use so it quickly lost its versatility. It's not surprising that few were sold.

## Priced out of the market

The 1946 Jeep CJ-2A came equipped with the 134.2-cubic-inch L-4 "Go Devil" engine rated at 63hp and 105 ft/lb torque at 2,000rpm. The transmission was a 3-speed Warner T-90 mounted to a 2-speed Spicer 18 transfer case. Gross vehicle weight was 3,500 pounds; curb weight was 2,215 pounds.

The manufacturer's suggested retail price for the 1946 CJ-2A was \$1,241 (\$16,011 today). Since Willys advertised the CJ-2A as a low-cost small tractor, it is interesting to compare it to the price of its chief competitor, the 8N Ford. Comparable figures available from 1952 show the 8N listed at \$1,504 (\$14,278 today), and an estimate of the list price of the CJ-2A was \$1,712 (\$16,253).

No Farm Jeeps were produced in 1951 or 1952 as Willys shifted production to manufacture only military jeeps during the Korean War.

## Aftermarket producers gear up

Early advertising had the ring of Madison Avenue with slogans such as "A Powerhouse on Wheels" and "The All-Around Farm Work Horse." Some ads stressed the Jeep's versatility: "Now it's a Truck... Now it's a Tractor... Now it's a Runabout... Now it's a Mobile Power Unit." Willys claimed the Jeep could "pull a 5,500-pound load on the highway at a good speed." The company also claimed the Jeep could "do the job of two heavy draft horses operating at a speed of 4mph, 10 hours a day, without causing the engine to overheat."

Willys and other companies designed a wide assortment of attachments for the Jeep. The Monroe Co. built a 3-point hitch with hydraulic lift, and the Newgren Co., Hillsdale, Michigan, built a mounted 2-bottom plow.

Other attachments included a mounted disc plow, front-mounted loaders built by at least three companies, a side-mounted sickle bar mower, a semi-mounted sickle bar mower, mounted discs and spring-tooth harrows. Front- and rear-mounted offset cultivators were impractical attachments, as the Jeep didn't have the clearance required to complete cultivation of corn to "knee-high by the Fourth of July."

The Jeep was also used to pull trail-type spring-tooth and spike-tooth harrows and discs. Pictures show it being used to operate corn binders, 1-row corn pickers, balers and combines.

## Product ahead of its time

Production of the Jeep Tractor ended in 1950. The CJ-3B Farm Jeep was discontinued as a separate model in 1953 with fewer than 100 manufactured that year. After that, buyers who wanted a Jeep for farm use would have had to buy the standard CJ-3B and modify it.

The best use for the Farm Jeep was as a mobile power unit. In that capacity, it was used to power feed grinders, buzz saws, generators, sprayers, balers, combines and other PTO-powered equipment.

There are many reasons why the Jeep failed to compete in the market with tractors. In fact, it was not designed to be a tractor. The category did not exist in the post-war years, but the Jeep of that era was the ancestor of today's sport utility vehicle. The Jeep was too light, and its drive train was not designed for rugged work such as plowing. Those who added rear duals and extra weight experienced added wear on the drive train.

The May 2012 issue of *Four Wheeler* magazine shows Roger Huddle plowing with his restored 1946 CJ-2A with a mounted 2-14 plow, without extra wheels or weight. After an hour of plowing, the rear axle was too hot to touch. Cost was another factor. Production numbers for the Jeep were never large, and the production halt during the two years of the Korean War likely sealed its end.

Willys and successive Jeep manufacturers of the first mass-produced 4-wheel drive vehicle were ahead of their time. In the explosive market we know today, they would likely find great success with the Wrangler, Cherokee and similar models. **FC**

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