COMPARABLE COMMERCIAL RIG RETAILS FOR ABOUT $130,000

Home-Built 4-WD Sprayer Cost Under $1,000

"I needed a commercial high boy sprayer but I couldn't justify the $130,000 price tag. I told the dealer I could build my own sprayer for $1,000, but he said there was no way. Well, that's the wrong thing to tell me," says John Roy, Bagot, Manitoba, who went on to build his own 4-WD self-propelled sprayer for less than $1,000.

He used the frame, axles, engine, and transmission from a 1983 Dodge 1-ton truck, the cab from a New Holland 980 combine, and big 13.00 by 28 flotation tires from a 1952 Massey Ferguson combine. The sprayer is equipped with a 500 gal. tank and 72-ft. boom.

Roy bolted the cab onto the front of the truck frame, using 4-in. sq. steel tubing to raise it up. He bolted the tank onto the back end. He used sheet metal from one of the combines to make the hood, mounting the cut-down grille from an old Freightliner semi tractor on front. He used 1-in. sq. steel tubing to make the boom. The truck engine belt-drives a hydraulic pump that's used to power the spray pump and to raise or lower the boom and fold it for transport. The boom can be adjusted from 18 to 56 in. high.

"I paid $500 for the truck, $200 for the tank, which was slightly damaged, and $100 for steel tubing. I already had the combines," says Roy.

"It'll go through just about anything without getting stuck. There's no mud hole I can't go through. Last spring I used it to custom spray a field that had ponds at least 2 ft. deep in places. There were ducks swimming in them. The farmer advised me to go around the pond, but I went right through it. The rig is very light and with the big flotation tires it hardly sinks into the ground at all. I had been using a pull-type sprayer but I got stuck all the time and left deep ruts in the field. It works better than commercial hydrostatic-driven sprayers because when they get stuck, all the oil rushes to one wheel which just spins until it blows a seal.

"The 318 cu. in. V-8 gas engine has a lot of power, and the 4-speed transmission and 2-speed transfer case give me eight forward gears. I go 10 to 12 mph in the field which lets me cover at least 60 acres per hour. I can go 50 mph in fourth gear on the road while pulling a service truck at the same time. I mounted a pair of shocks designed for a 1-ton truck on each wheel to reduce bouncing.

"It takes only about 3 1/2 minutes to fill the 500-gal. tank. I use a gas engine-driven pump mounted under the cab to suck water into the tank. While I'm filling the tank I pump chemicals into another container at the same time. I use a steel ladder on front to get into the cab. The ladder is hinged so I can pull it up out of the way when spraying tall crops."

For more information, contact: FARM SHOW Followup, John P. Roy, Box 60, Bagot, Manitoba, Canada R0H 0E0 (ph 204 252-2294).

Roy used the frame, axles, engine, and transmission from a Dodge 1-ton truck, cab from a New Holland combine, and flotation tires from a Massey Ferguson combine.

BUILT FROM AN OLD COMBINE AND AN OLD TRUCK FRAME

Self-Propelled High Clearance Sprayer

"We used it last year to do all our fall desiccation and to spray for leaf diseases. It worked great," says Bruce Christopher, Russell, Manitoba, about the self-propelled high clearance sprayer that he and his father Alan built out of an old International combine and an old International truck frame.

The sprayer is equipped with a 64-ft. boom and 750-gal. tank and has 36 in. of clearance under the frame. Power is provided by a 345 cu. in. gas engine.

The Christophers started with an International 915 combine and stripped it down to the cab, drive train, and radiator. They then stripped the old International truck frame down to the front springs and frame and widened it to 4 ft. to make room for the combine's hydraulic pump. They used 6-in. sq. steel tubing to build the rear axle and mounted the differential and transmission on it. They used 1-in. thick steel plate to make mounting plates for the differential and welded them onto the axle which is equipped with big 12.4 by 46 tires. The front axle is made out of 4-in. sq. steel tubing and mounts on the truck springs.

The boom can be hydraulically adjusted from 28 to 82 in. high. There's a 6-ft. breakaway section on each end of the boom and the two outer sections fold hydraulically for transport. "Bicycle wheels that mount 6 ft. from each end of the boom keep it level on uneven ground," says Christopher.

"We use an MT 3000 rate controller which allows us to spray at speeds of 6 to 12 mph. Most of our fields are about 130 acres and we can usually spray them with only one refill. We kept most of the combine controls and had to add three more remote outlets which wasn't a big problem. The cab has air conditioning and a charcoal filter so the operator stays comfortable. The hood tilts forward for easy access to the engine. The engine is mounted just like it would be in the truck except that the gearbox and hydraulic pumps are on the back side of it."

Contact: FARM SHOW Followup, Bruce Christopher, Box 344, Russell, Manitoba, Canada R0J 1W0 (ph 204 773-3850).

The Christophers mounted a 750-gal. spray tank on back and added a 64-ft. boom.

His First Combine Reborn As Self-Propelled Sprayer

"Our first combine ever was an AII Gleaner with a cab and M&W automatic header control. Now, some 30 years later, it has returned to the farm. It was given to us by a farmer who wanted to get rid of it," says Case Van Wyk, Pinetown, N.C.

"We decided to rebuild it as a self-propelled sprayer. We lowered the spindles on the rear to raise the chassis to get the same clearance as on the pulling axle. We left the original wheels on the drive axle but put 20-in. rims on the rear.

"The motor was rebuilt and moved lower, mounted crosswise on the frame about where the return augers were originally. I used the same belts and drives, and left the parts of the frame intact that originally housed the cylinder. The cab mounts on top of that section.

"I mounted a 700-gal. poly tank behind the cab and equipped it with a 3-pt. hitch on front that holds a 50-ft. spray boom. I also made an 8-row boom with skidding feet to sidedress nitrogen on corn."

Contact: FARM SHOW Followup, Case Van Wyk, 503 Van Wyk Rd., Pinetown, N.C. 27865.