

Self-Propelled, Articulated 4-WD Sprayer

Floyd Wagoner used parts from several old pickups to build a self-propelled, articulated 4-WD spray rig for a total cost of only about \$1,600.

He put an articulation joint just behind the cab and mounted a hydraulic cylinder on each side to steer the truck. A 400-gal. poly tank mounts on back with a 30-ft. long, 3-section boom from an old homebuilt, pull-type sprayer.

"It works better than a pull-type sprayer because the cab protects me from chemicals and I can cover acres a lot faster. I go about 12 mph," says Wagoner. "It turns a little shorter than a conventional pickup. The front wheels are fixed so whenever I turn the rear wheels follow the front wheels. There's only two sets of tracks which really works great for spraying in drilled soybeans because less of the crop gets run over. Also, with only two tracks I can make turns in muddy spots a lot better."

He mounted the cab from a 1966 Chevy pickup on the frame off a 1958 Ford 1-ton 4-WD. He cut the frame in half and used a 1-in. dia. steel pin inside a steel bracket to join the two frames together. He also mounted an 18-in. long, 2-in. dia. cylinder on each side. He mounted the rear axle off an old Ford 3/4-ton pickup on front. The rear axle is also off a Ford 3/4-ton pickup. The 6-cyl., 300 cu. in. gas engine was salvaged from a 1979 Ford F-150 1/2ton pickup, and the 4-speed transmission and transfer case came out of an early 1960's IH 4-WD.

"I use it to spray both preemergence and postemergence herbicides on soybeans and milo," says Wagoner. "When spraying drilled soybeans I use conventional size pickup tires. Otherwise, I use 14 by 16 floater tires because they don't pack the soil as much and provide a softer ride. I'm now building a 51-ft. hydraulic-fold boom for more capacity.

"The engine has over 100,000 miles on it but still works good. An air tank mounts behind the cab to provide air for the sprayer's foam marker. It also comes in handy for putting air in the tires.

"There are three belt-driven accessories - the air compressor, power steering pump, and sprayer pump. To provide power for the pumps and compressors I used a jackshaft and three extra pulleys that run off the crankshaft."

Contact: FARM SHOW Followup, Floyd Wagoner, Rt. 4, Box 173, Hiawatha, Kan. 66434 (ph 913 742-3859).



High Volume Air Compressor Built From Old Diesel Tractor Engine

"We needed a high volume air compressor to blow out irrigation lines in the fall but we couldn't justify the \$15,000 to \$20,000 price tag on a big industrial compressor," says Glen Goby who built a high capacity air compressor using an old diesel tractor engine.

"I don't know exactly what the capacity of it is," says the Avonlea, Sask., farmer, "but we can blow out a half mile of 8-in. dia. line in less than 15 minutes running it at about 900 rpm's."

Goby used a 350 cu. in. engine out of late 1940's WD9 IHC tractor he bought from a neighbor. It mounts on a two-wheel trailer made from a 1/2-ton pickup axle.

"We installed commercial air compressor intake valves on the engine," he says. "Then we took the injectors out and fitted the ports with regular air compressor valves so that the injector ports actually became the exhaust valves. The engine sucks air in and blows it out on each stroke."

He used the tractor's original air cleaner on the intake valves and filled the cooling system with oil to dissipate heat. A 2 in. dia. pipe carries oil from the top radiator hose connection to the bottom. The pipe is open at the top to allow for expansion.

The engine mounts on the trailer with the flywheel side facing forward so it can be direct-driven off a tractor's pto shaft. Goby had to make a shaft that comes off the flywheel's pilot bearing. He bolted a plate to the flywheel to help center the shaft. He powers the home-built compressor with a 110 hp tractor.

Out-of-pocket expense was \$750. Contact: FARM SHOW Followup, Glen Goby, Box 117, Avonlea, Sask., Canada SOH OCO (ph 306 868-4424).



Pull-Type Feed "Caker"

"It doesn't look like much but it really works well and frees up my pickup bed for other jobs," says Lloyd Rolf, Sundance, Wyo., about the pull-type "cattle caker" he built using an old IH combine grain tank and the rear axle, frame, and coil springs off a Chevrolet car.

Rolf welded the car's front steering spindles to the axle and used scrap steel to make the tongue, then mounted a 2-in. ball coupler on it. He used heavy duty steel to make a hinged lid for the top of the tank. The lid can be propped up by a fold-over post while the hopper is being filled. A sliding trap door at the bottom of the tank controls feed flow and is operated by a rope leading up to the pickup cab.

"I built it 30 years ago but still use it a lot," says Rolf. "Capacity is about 1,800 lbs. In deep snow I drag an old tire under the tank to make a path for feed to fall into so it won't get buried or trampled



under by cattle."

Contact: FARM SHOW Followup, Lloyd Rolf, Box 249, Sundance, Wyo. 82729 (ph 307 283-3425).

"Meals On Wheels" Silage Feeder Made From Old Wagon Gear

Old 4-wheeled wagon gears can be turned into low-cost, giant portable feed bunks that can easily be pulled behind a pickup, says J.T. McAdams, Clayton, New Mexico, who converted a cotton trailer into what he calls his "Meals On Wheels" silage feeder.

The 20-ft. long feeder has an open top for filling and "stanchions" on both sides with steel bar and plywood dividers. It holds about 6,000 lbs. of silage and feeds about 30 head at a time (15 on each side).

"It eliminates a lot of expensive equipment - such as trucks and feed bunks - and is easy to use," says McAdams, who has built three of the feeders. "All I need now is a front-end loader to fill them. I use my pickup to pull them out to my pasture. Works great for feeding corn silage in wheat pasture to control bloat."

McAdams stripped the trailer down to the running gear, then built a 3-ft. wide plywood floor on top of a pair of old center pivot irrigation pipes that he welded onto both axles. He used 14-ga. sheet metal to build the upper sides, which flare out at the top, and plywood to build the lower sides where cattle eat. Plywood was also used on the front and rear sides.

Contact: FARM SHOW Followup, J.T. McAdams, Rt. 1, Box 106, Clayton, New Mexico 88415 (ph 505 374-9545).