

Home-Built 4WD "Blue Goose"

"You're not as tired when you come in from a day in the field with this tractor," says Kansas farmer Dean Holbert, of Concordia, who built his "Blue Goose" 4WD tractor from scratch with the help of his two sons, Greg and Gary.

About the only new steel used in the tractor was bought from a local dealer to build the cab. Otherwise, Dean worked mostly with salvaged scrap iron to complete the new machine last winter. Before starting, he sought advice from 4WD tractor owners, gathering ideas on what they liked and didn't like about their tractors.

His Blue Goose is powered by a 250 hp. Cummins diesel engine lifted from a '64 White truck. It uses planetary axles, and the transmission and drop

box from an industrial loader. He added power steering and tilt wheel, and put in a swivel seat for easy entrance and exit.

A 230 gal. fuel tank has access from both sides of the tractor. A 6-speed forward shuttle transmission makes it possible to shift into reverse by moving one lever. The tractor has 18.4 x 34 dual tires, and enough axle strength for triples. The cab was sprayed with foam insulation inside to make it quiet, and to insulate it for air conditioning.

"Not figuring labor, we have about \$5,000 in the tractor," Holbert told FARM SHOW. "We figured that if we couldn't get the prices for our crops that we wanted, we'd hold our crops off the market and build our own tractor."



Combination Planter-Cultivator

Brothers Don and Kenny Mauer, and their brother-in-law, Tim Stone, Greensburg, Ind., wanted to speed up their planting and save trips over the field. So, they mounted two IH Cyclo planter units in the center of a Hesston field cultivator and added 12 John Deere Max-Emerge planter units on a toolbar across the back.

Don Mauer says they can easily plant 15 acres per hour at 5½-6 mph, and have had no trouble with planting accuracy at the higher speed.

They removed the Cyclo units from old planters they already had. "You can pick up used ones almost anywhere," says Don, who adds that they chose the Max-Emerge planter units because of their accurate depth control. He says the planter units come with one spring, but they added another one on each unit to increase penetration and improve depth control. However, they were unable to find anyone who would sell them the complete units so they had to buy them from parts. Even that wasn't all bad though, according to Mauer, because they were able to eliminate some parts they didn't need that would have come with the assembled units. Thus, the cost was about the same.

A 28½ ft. Hesston field cultivator was chosen because, "It's about as heavy as any on the market," says Don. "It has 3 in. tubing whereas some others, especially older models, used only 2½ in. frame members." The cultivator is just about the right size for 12, 30 in. rows and

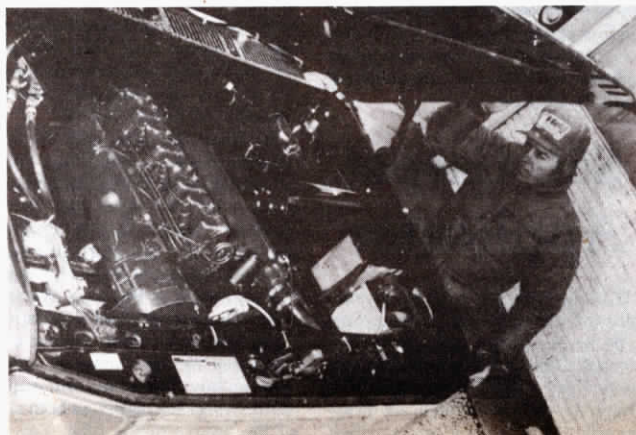
it folds to about 15 ft., 8 in. — enough to pass through a 16 foot gate.

The Mauers and Stone built their own markers and used a separate hydraulic cylinder to control each one. "With independent control, we can raise or lower either marker any time and we don't have to worry about getting markers fouled up, or dropping the wrong one after we cross a waterway or something like that," says Don.

The field cultivator itself was not modified. Because there are no seed boxes on the planter units, the added weight, especially on the wings, is immaterial as far as raising or folding the cultivator is concerned. Using the Cyclo units also means there are no individual planter boxes to empty or worry about when wings are folded for transport.

Mauer suggests that anyone wanting to assemble a similar rig should look for as rugged a field cultivator as possible, with the width depending on the number of rows they want to plant. Also, because there are no seed boxes on the planter units, Mauer believes that narrower row spacing could be used without imposing a serious overload on the field cultivator.

The Mauers and Stone fall plow most of their land and use either a disk harrow or another field cultivator to work the land ahead of the cultivator/planter rig. The entire machine cost them about \$18,000 — roughly half of that for the field cultivator and the rest for planter units, markers, etc.



Russian Engine In Pickup Gets 32 Mpg.

Ted Kerlin, a Belarus tractor dealer at Silver Lake, Ind., noted that the Belarus 420 model he was using on his own farm seemed to be amazingly economical on fuel. Some of his customers using 400 and 420 models told him the same thing.

He got to studying the 4 cyl., 253 cu. in. air cooled diesel engine and wondered if it would work in a pickup truck. After measuring the engine and the under-hood space in various pickups, he determined that the engine should fit into a 1980 F-100 Ford pickup. He bought one, drove it seven miles and pulled out the original engine and radiator.

He then went to work installing the Russian tractor engine. It fit, with a few modifications. He had to build a shallower crankcase pan, make a face plate spacer for the bell housing to connect the engine to the transmission, and add a pulley and belt to run the hydraulic pump for power steering and brakes. Also, he added an exhaust pipe from the manifold back to the tractor muffler under the truck.

One problem remained. Without a radiator, he had no means of supplying heat to the

cab. He discovered he could remove the engine oil cooler and run oil hoses up to the heater. Hot engine oil heats the cab.

He made no modifications whatsoever in any area of the truck. He was able to hook up all dash instruments to the diesel engine and added a tachometer.

Everything worked. The engine provides good acceleration and he says its smoothest running is on the highway at about 62 mph. "The engine sounds a bit strange for a pickup and it's noisier than usual," says Berlin.

He kept fuel consumption records for the first 700 miles he drove his pickup. The longest trip between stops was 15 miles. He averaged 32 miles per gallon, and says that with steady highway driving on a trip, he'll get well over 40.

General Manager Fred Rollins of Belarus Machinery Inc., in Milwaukee, Wis., says Belarus 420 diesel engines are available separately for stationary power, uses such as on irrigation pumps and generators, as well as for use in farm trucks.

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