



Gerber's repowered 4-WD pickup is equipped with a 50-ft. sprayer and 500-gal. tank.

## 1-TON CHEVY REPOWERED BY 200 HP DIESEL

# Deere-Powered Pickup Works Like A Tractor

"It makes a great self-propelled spray rig that works like a tractor yet rides like a car," says Paul Gerber, Gadshill, Ontario, about the 1986 Chevrolet 1-ton, 4-WD pickup that he repowered with a 200 hp turbocharged Deere diesel engine.

Gerber, who runs a custom spraying business, uses the 4-WD pickup with a 50-ft. sprayer and 500-gal. tank. His father and brother also use the pickup to haul straw, pulling 30-ft. long wagons loaded with 40 big square bales that weigh a total of 9 tons.

The 359 cu. in., 6-cyl. diesel engine came out of a Deere industrial loader that had been rebuilt. Gerber paid \$2,600 for the engine which had a broken crankshaft.

"The pickup's original 292 cu. in. gas engine was underpowered, especially on hills and soft ground. This industrial-type engine is heavier built and much more reliable than the diesel engines found in new pickups," says Gerber. "My neighbor Doug Roth helped me. The extra power combined with the weight of the sprayer make an ideal match. I mounted a big 4-in. dia. chrome muffler off a semi tractor behind the cab so the pickup is

also very quiet. It's a pleasure to drive."

He bolted a 4-speed Allison automatic transmission out of an old school bus to the new engine. The turbocharger wouldn't fit under the hood, and he didn't want to make a "bubble" in the hood for it, so he raised the cab 10 in. by making new cab mounts out of square tubing. "The extra cab height really improved visibility in all directions," notes Gerber. He had a big new radiator custom built for the diesel engine. The radiator, grille, and bumper had to be moved forward and up 4 in. He also had to add extra leaf springs on front to handle the extra weight of the bigger engine.

Along with the 4-speed automatic transmission Gerber installed an independent transfer case (off a 205 Dodge) that has a 13-in. long driveshaft. To install it he had to shorten the rear driveshaft and lengthen the front driveshaft. He installed the automatic transmission's gear shifter inside the pickup next to the steering wheel. Custom made exhaust tubing runs from the engine back to the muffler. A 4-in. dia. air cleaner - which came off a Deere 7700 combine - mounts behind



Pickup was repowered with a 359 cu. in., 6-cyl. diesel engine out of a Deere industrial loader. Gerber didn't want to make a "bubble" in the hood so he raised the entire cab.

the cab and is connected to the air filter under the hood.

"It looks sharp and has unbelievable power," says Gerber. "I could've sold it many times. I spray a few thousand acres every year, using dual wheels for general field work and single wheels for row crop work. Top speed on the highway is about 40 mph.

"I didn't want to use a diesel engine designed for commercial pickups because in my opinion those engines aren't built for field work. They lack reliability because of all the electronic stuff on them. They work great on the highway but not in the field.

"My total cost was about \$6,000, including the cost of repairing the crankshaft. It saves money because I can run the pickup hard all day long on an 18-gal. tankful of fuel whereas the gas engine needed about three tankfuls per day.

"The diesel engine starts easier in cold weather than any gas engine I've had, and I don't know why. Last winter it started right up even in temperatures as cold as 10 or 15 below. It also runs quieter than commercial diesel pickups because of the modified exhaust system. It runs so quiet that some people



Pickup features a custom-built radiator.

don't even think it's a diesel engine until they look under the hood. The radiator is bigger than necessary but I like knowing the engine will never overheat. A pair of electric cooling fans out of a Chevy Camaro car also help cool the engine. The power steering pump supplies the hydraulic spool valve that's used to fold the boom and to raise and lower it.

"The transmission came out of a gas-powered bus. The rpm's in a gas engine run a lot higher than they do in a diesel engine, so we had to weld weights on the governor to get the transmission to shift properly."

Contact: FARM SHOW Followup, Paul E. Gerber, Rt. 1, Gadshill, Ontario, Canada NOK 1J0 (ph and fax 519 656-3424).



Conveyor belt, which is 8 in. wide, is enclosed in a 6-in. dia., 15-ft. long auger tube.

## Make Your Own Low-Cost Bulk Seed Handler

If you've got an old gravity wagon that's too small to be practical any more, you can give it new life by converting it into a low-cost bulk seed handler, says Convey-All USA, Hamilton, N. Dak. The company sells a belt-type conveyor that can be mounted on any side-unload wagon.

"It eliminates the need to handle bags and makes it much easier to load your planter. The belt conveyor is very gentle on seed," says Lee Becker, company representative.

The 8-in. wide conveyor belt is enclosed in a 6-in. dia., 15-ft. long auger tube. There's a 4-in. dia., PVC discharge spout on top that telescopes out from 8 to 14 ft. for filling plant-

ers. The conveyer bolts to the wagon frame and is raised or lowered by a hand-cranked winch. Power is provided by tractor hydraulics or by a self-contained hydraulic pack (not supplied). A hydraulic valve mounted on top of the auger is used to operate the unit and is activated by pulling on a rope located next to the discharge spout. The auger stores alongside the wagon for transport.

Sells for \$1,895 plus S&H.

Contact: FARM SHOW Followup, Convey-All USA, Box 175, Hamilton, N. Dak. 58238 (ph 800 454-3875 or 701 454-3875; fax 3456; E-Mail: conveyall@polarcomm.com).

## Telescoping Marker Saves Room During Transport

This new telescoping, hydraulically-operated marker for air seeders, field cultivators, planters, drills, etc., folds up tight against the side of the implement, saving room during transport. It's also built lighter but stronger than conventional markers, says Mandako Agri Marketing Ltd., Plum Coulee, Manitoba.

The marker is built in two sections and uses a hydraulic cylinder to swing the marker out. At the same time, an orbit motor is used to extend a 4- to 12-ft. long telescoping section. The orbit motor is connected to a ball screw that rides along a worm gear drive mounted inside the telescoping section. As the cylinder swings the marker out, the motor drives the screw to fully extend the telescoping section. The process is reversed to bring the marker back in for transport. There are no cables or hinges and fewer parts to wear out than on conventional markers, says the company.

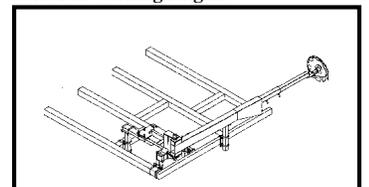
Models are available to fit implements up to 62 ft. wide.

Sells for about \$2,000 per marker depending on size.

Contact: FARM SHOW Followup, Agri-Business Associates, Inc., 1740 West Main Ave., West Fargo, N. Dak. 58078 (ph 701 277-1022).



An orbit motor "telescopes" marker out to its full working length.



Marker folds tight against planter for transport.