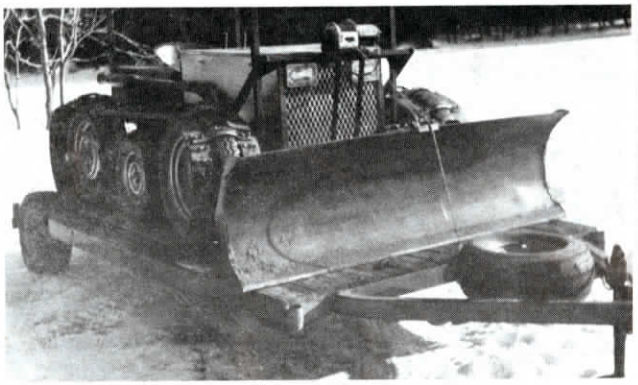

"Go Anywhere" Machine

"You wouldn't believe where I've been with this machine," says Denis Desjardins, Alcove, Quebec, who combined a 1972 Volkswagen car engine with an old Case tractor transmission and rear end, and home-built tracks made from two sets of rubber conveyor belts.

Desjardins uses the "track machine" to plow snow and to winch trees from swampy woodland. "The home-built tracks work just as well as conventional bulldozer tracks and cost far less to build. They're wide enough to provide good flotation and are plenty strong. I've driven through swamps where water was up to the top of the tracks, as well as over trees and woodpiles, with no problem. The heavy rear end provides plenty of traction and the 36 hp engine has power to spare. It doesn't have to work hard because it's driving 15-in. car tires instead of large rear tractor tires, which reduces the transmission gear ratio. I can go real slow at 1/2 mph in first gear, and planetary gears, which double the speed of the opposite axle when you hit one of the brakes, let me turn on a dime."

Each side of the "track machine" is equipped with a pair of 15-in. dia. car wheels with a 12-in. dia. free-rolling "bogie" wheel between them to keep the track tight. The 15-in. dia. wheels were removed from the Volkswagen car and the 12-in. dia. wheels were removed from an Austin Mini car. Desjardins installed 4-in. wide conveyor belts on each side of the tires and bolted each set of belts together with fifty 12-in. long steel cross-over bars. The bars are U-shaped to fit over the tires and are spaced about 1 ft. apart. Each track is 12 in. wide. Desjardins mounted a 6-ft. wide blade and a 2,500 lb. winch, powered by a 12-V battery, on the front of the tractor.

The 36 hp, air-cooled Volkswagen engine faces backward. "The rear end and transmission on a tractor turns in the opposite direction of transmissions on cars and trucks, so when the Volkswagen engine faces backward it matches the rotation of the tractor's transmission," notes Desjardins, who adds that the hood over the engine flips up for easy access.

Desjardins tightens the tracks by tightening two Volkswagen jack screws which move the front spindles, mounted inside 4-in. sq. tubing, back and forth. He welded a 1/8-in. steel plate to the entire bottom of the frame to protect the suspension system from rocks.

Desjardins built the 1/8-in. thick dozer blade from a 200-gal. oil tank, reinforcing it with steel plates in back.

Contact: FARM SHOW Followup, Denis Desjardins, RR 1, Alcove, Quebec, Canada J0X 1A0 (ph 819 459-2548).

"Doubled-Up" IH Planter

By Becky Ohlde

Matt Hansen plants soybeans in 15-in. rows for the potential of higher yields and better, less costly weed control.

This Dorchester, Neb., farmer had previously planted split rows with a double-pass operation with a 30-in. planter. In 1988, however, he joined two planters, one behind the other, which allowed him to plant 15-in. rows in one pass.

"I had heard of increased yields by splitting rows from 30 in. down to 15 in.," Hansen explains. "I also heard that the plants will canopy over (cover) the rows sooner to better control weeds."

Hansen made the split-row planting job a little easier by hitching together a 500 Series IH planter and a 900 Series Case-IH planter (both are air planters). By connecting the 12-row planters, one behind the other, so that the rear planter planted between the rows of the front planter, Hansen was able to plant 24 15-in. rows with one pass. He connected the two planters with five 30-in. sections of 5-in. by 7-in. tubing. He welded heavy plate-steel to the ends of each piece of tubing and drilled holes in each plate. U-bolts are used to clamp each end of the tubing sections to the planters. The sections run perpendicular to the planters' toolbars.

Of the 150 acres of split-row soybeans Hansen planted last year, 100 acres were under pivot irrigation, while the remainder were dryland. His pivot-irrigated, narrow-row soybeans made 31 bu. per acre last year.

"I didn't get a good check of whether the yields were better because I didn't plant any comparison (wide row) beans under pivot irrigation or on dryland," he explains. "So I really couldn't compare yields."

He also says he can't document whether the narrow rows help with weed control.

"We didn't have to walk our narrow-row beans, though," he explains. "I think it was partly because the narrow rows shaded the ground sooner." He adds that pre-emerge and post-emergence herbicide treatments were used on the soybean fields.

Hansen plans to continue with narrow-row soybeans for at least a couple more years.

"I'll stay with them because of the theory of the (soybean) canopy closing sooner and that we should be able to get by with less chemicals," he explains. "We want to see how they (narrow-row soybeans) do for a couple more years."

Hansen plans to continue using his planter setup. He adds, however, that he wants to do some reconditioning on the 500 Series planter because seed placement isn't as good as that of the 900 Series planter.

Contact: FARM SHOW Followup, Matt Hansen, Dorchester, Neb. 68343 (ph 402 946-2022).

"Fold-Up" Rear Truck Bumpers

Thomas Wagner, Fisher, Minn., and Bill Olson, Alvarado, Minn., built "fold-up" rear truck bumpers that comply with new state laws requiring rear truck bumpers and yet fold out of the way so the box can be dumped normally. The primary purpose of the bumpers is to prevent a vehicle from sliding under the truck box frame during a rear end collision.

Wagner made his bumper from 1 1/2-in. dia. double strength pipe. The rear section is 5 ft. wide and has two 24-in. lengths welded to it to fit the frame width.

Wagner welded a short length of 2 1/2-in. dia. pipe across the end of each arm. The 2 1/2-in. dia. pipe fits over a smaller diameter pipe that's welded to a flat iron bolted to the truck box frame. This provides a hinge to allow movement up or down.

Wagner welded two short chains to the bumper and truck box frame to hold the bumper at the required 30-in. height. He attached a 5/16-in. cable to one side of the bumper. It's threaded through two pulleys and the end of the cable is attached to the main truck frame. As the hoist is raised, the cables pull the truck bumper up and out of the way for unloading.

Contact: FARM SHOW Followup, Thomas Wagner, Fisher, Minn. 56723 (ph 218 281-2035).

Olson's bumper (pictured) is made from channel iron and hinged at the truck frame. Olson made the hinge from a 1/4-in. plate and welded it to the frame which he drilled to receive the 1-in. shaft as a pivot. Welded to the shaft are two 2 by 3/4-in. flat irons long enough to keep the channel iron bumper at the height required by law. Stops welded to the hinge plate keep the bumper assembly from moving. Olson built brackets to accept a single action cylinder which is plumbed into the hydraulic system of the truck. He uses a flow control valve to limit oil flow to the bumper lift cylinder.

As hydraulic pressure is applied to the system, the bumper cylinder, which requires less pressure to activate than the box lift cylinder, is activated first, pushing the bumper back and up against the truck box floor before the box is lifted.

The reverse is also true. As the box drops, the bumper remains in the lifted position until the box is down and the return spring on the bumper lift cylinder returns it to the closed position, returning the bumper to the lowered position.

Olson says the total cost of materials was $125 to $150.

Contact: FARM SHOW Followup, Bill Olson, RR 1, Alvarado, Minn. 56710 (ph 218 965-4847).