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ALBERTA FARMER MOUNTED SECOND STEERING WHEEL ON SIDE OF CAB

"Side-Steer" Tractor Makes Fieldwork Easier

Here's the first "side-steer" tractor we've ever seen. Alberta farmer Larry Empey mounted a second steering wheel on the side of the cab and modified the seat so it swivels toward either steering wheel, allowing Empey to do fieldwork without ever looking back over his shoulder.

Empey uses the side steer Massey Ferguson 18004-WD articulated tractor for all his field work. With the exception of a throttle pedal, there are no extra controls for the second steering wheel. Whenever Empey wants to use the tractor's original brakes, clutch, or hydraulic controls he simply swivels the seat toward the forward steering wheel.

"I originally got the idea as a way to reduce neck strain with my pull-type combine, but it worked so well I now use it for all my field operations including planting, field cultivating, and plowing," says Empey. "By facing the side of the cab I never have to turn my neck more than 90 degrees to look toward the front or toward the rear. It's hard to believe how well it works. There's no neck strain at all, and the ride over rough fields is more comfortable because the forward-pitching movement of the tractor causes my body to move sideways instead of forward and backward.

"I face forward to start the tractor, set the throttle, depress the clutch, put the tractor in gear, then swivel the seat toward the side steering wheel. I use my left hand to operate all of the controls on the dash. The controls are as close to my left hand as they are to my right hand when I use the forward steering wheel. Once I begin using the side steering wheel I generally leave the throttle and gear settings alone so I seldom have to switch seat positions in the field. I use the throttle pedal beside the side steering wheel only when I need extra power during combining. When I want to switch to the forward steering wheel I pull a T-handle on the dash to activate the orbital steering valve that controls forward steering, then tilt the side steering wheel against the cab to make room for the seat as I swivel it forward. I use the front steering wheel only when I drive on the highway and when I field cultivate diagonally. If I used the side steering wheel while cultivating diagonally, on the return trip I'd have to turn my neck 180 degrees to look out the opposite side of the cab.



Seat swivels 360°. It attaches to 3 spindles and hubs mounted on offset pivot arms.

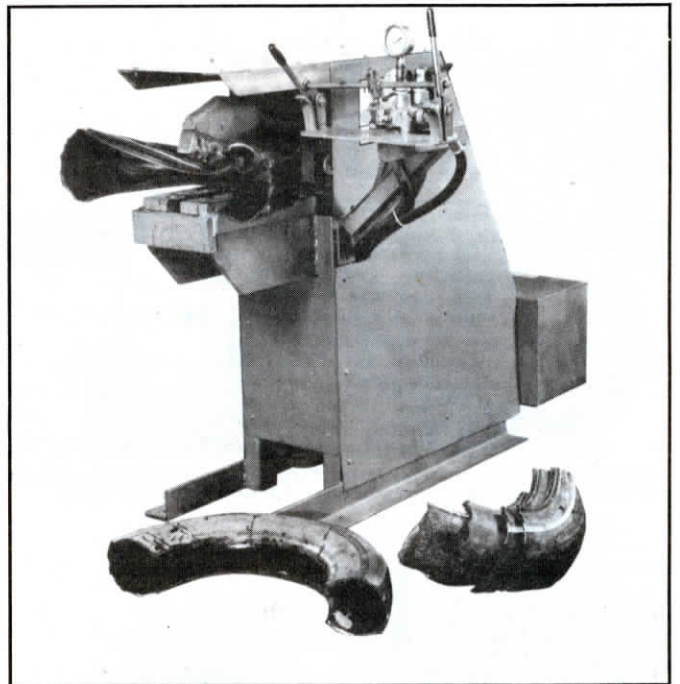
"My home-built side-steer system would probably work on any tractor equipped with hydraulic steering."

The second steering wheel bolts directly to the cab framework. A shaft with two universal joints runs from the steering column to a steering valve mounted on the tractor frame. Empey salvaged the valve from another Massey Ferguson 1800 tractor. Hydraulic hoses connect the valve to the tractor's steering cylinder. A T-handle on the dash controls a selector valve positioned between the tractor's original orbit steering valve and the add-on valve for the second steering wheel. "By pushing or pulling the T-handle I divert oil from one valve to the other depending on which steering wheel I want to use."

Part of the tractor's fuel tank originally extended inside the cab. Empey repositioned the tank outside the cab to make room for the second steering wheel. He made the 360° seat swivel out of three spindles and hubs mounted on offset pivot arms. That lets him move the seat in and out as well as turn freely in any direction. A roller chain sprocket attached to the top hub locks the seat into any position.

Empey spent \$500 to build the side-steer cab, including \$300 for the steering column and \$100 for the selector valve. The remainder was for hoses and spindles.

For more information, contact: FARM SHOW Followup, Larry Empey, Box 83, Swatwell, Alberta, Canada T0M 1Y0 (ph 403 546-2574).



The "Fuelmaker" cuts tires into 1/4 sections that can be nested together for easier storage or to make them more compact for burning.

LET YOU USE OLD TIRES FOR FUEL

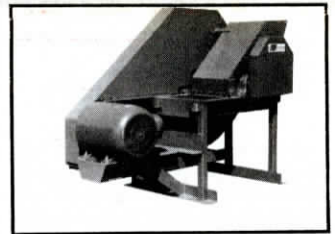
New Machines To Cut, Chip And Burn Old Tires

We first told you about this tire "fuelmaker" four years ago (Vol. 10, No. 5) when it was built in a farm shop by Minnesota inventor Arnie Hoppe. Since then it has been taken over by a manufacturer who turned it into an easy-to-operate production machine and developed two new machines to go along with it - a tire chipper, and a special tire furnace that'll burn either the tire "logs" produced by the "fuelmaker" or tire chips produced by the company's new machine.

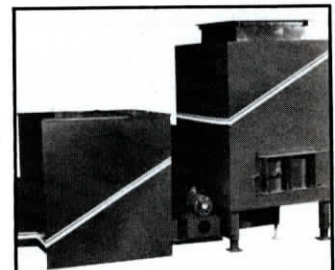
Wes Sprunk, director of sales for Tire Service Equipment Co., which is headquartered in Phoenix, Ariz., but has engineering and manufacturing facilities in Buffalo, Minn., says reaction to the new machines has been tremendous. "It's state-of-the-art machinery for disposing of tires or turning them into fuel. Businesses all over the country pay to get rid of tires. Farmers have the land to store tires for processing and can use the heat they generate when burned."

The TC-50 tire "fuelmaker" cuts tires into sections that can be nested together to reduce storage requirement or make them more compact for burning. It's powered by a 2-hp., single-phase motor with hydraulics. It has a patented shear blade that cuts a car or truck tire into 4 pieces in less than a minute. The tire cutter is 32 in. wide, 60 in. long and 45 in. high. Sells for \$3,995. A smaller model is available for \$2,995.

The TC-400 tire chipper is designed to accept the 1/4 tire chunks produced by the TC-50 "fuelmaker" and produces 1-in. long or smaller chips. Large diameter tool steel cutters can be sharpened or replaced. Capacity is 100 tires per hour. Can be powered with either a 40-hp. electric or 75 hp. gas engine. The chipper is 43 in. wide, 56 in. high, and 76 in. long. Sells for \$17,900 with electric motor.



New tire chipper cuts tires into 1-in. long or smaller chips.



This 450,000 btu hot water furnace with automatic stoker burns rubber chips produced by the company's chipper.

The TC-500 450,000 btu hot water furnace and stoker is designed to burn the 1-in. rubber chips. An auger transfers chips from large hopper to burning chamber. An adjustable speed gearbox chain-drives the auger. Has a large firebox for easy cleanout. Feeder auger and combustion fan are controlled thermostatically. The 90 in. long, 40 in. wide, 67 in. tall furnace sells for \$9,095.

For more information, contact: FARM SHOW Followup, Tire Service Equipment Co., Rt. 1, Box 238A, Buffalo, Minn. 55313 (ph 612 682-2833 or 800 223-4540).