



Hydrostatic drive, self-propelled tree pruner is equipped with a telescoping boom that rotates 180 degrees, and a self-leveling basket.

“BETTER THAN ANY COMMERCIAL UNIT”

Home-Built SP Tree Pruner

“I needed a machine that would be stable on steep sidehills in our orchards,” says Kent D. McMullen who, along with mechanic Denny Huntzinger, designed and built a hydrostatic-drive, four-wheel, self-propelled tree pruner that’s equipped with a telescoping boom that rotates 180 degrees, and a self-leveling basket.

Commercial three-wheel models he looked at were too light to use on sidehills and had to be maneuvered into trees since the booms were only adjustable up and down, notes the Eltopia, Wash., farmer whose 830-acre operation includes 52 acres of pear, cherry and walnut trees.

Before building his machine, which he calls the McSHOP (McMullen’s Self-leveling Hydrostatic Orchard Pruner), McMullen pruned trees with ladders or hired professional tree trimmers.

The men started from scratch, building an 11 1/2-ft. wide by 14-ft. long frame out of 1/4-in. thick, 4-in. sq. steel tubing. There’s just 14 in. of ground clearance under the frame so it has an extremely low center of gravity.

A flat plate, fitted with a plastic 5th wheel insert out of one of McMullen’s semi’s, mounts near the center of the frame. It serves as a base for a 1-in. thick by 32 in. dia. turret that the boom rotates on.

A 7-ft. tall mast built of two pieces of 2 by 6-in. steel spaced 6 in. apart welds to the turret. The mast rotates up to 180 degrees on a greasable bushing controlled by a large sprocket above the turret that’s turned by two opposing hydraulic cylinders connected to a roller chain.

The 8-ft. boom telescopes out 4 ft. thanks to a 2-in. dia. hydraulic cylinder with a 4 ft. stroke. The boom is fitted with a 28 by 30-in. operator’s platform with metal sides. It mounts on a yoke and bearings, which allow it to self-level back and forth and side-to-side. A control panel with a “joy stick” for steering and electric toggle switches for swing, lift and boom extension, mounts on the side of the basket. Metering valves allow the speed of movement to be permanently set,



When pruning trees, McMullen drives the machine between two rows of trees and is able to trim both sides easily with his 72-in. long hydraulic pruner.

McMullen notes.

A 20 hp Honda engine powers the machine and mounts on front of the machine to counterbalance the rig when the operator is in the basket. He also adds tractor suitcase weights totaling 1,400 lbs.

The front of the machine is fitted with castor wheels fitted with 8-ply 9L by 15-in. implement tires while the rear has larger 11 by 24.5 drive tires off a circle irrigation system. Worm gear driveboxes and hubs off the irrigation system drive the wheels. Driveboxes can be disconnected easily for towing the rig behind a pickup and the design provides it with a zero turn radius, McMullen says.

For a hydraulic reservoir and fuel tank, the men used two 32-gal. tanks off a junked Deere swather mounted on back.

Out-of-pocket expense was about \$17,000, and McMullen with a “joy stick” for steering and electric toggle switches for swing, lift and boom extension, mounts on the side of the basket. Metering valves allow the speed of movement to be permanently set,

Contact: FARM SHOW Followup, Kent D. McMullen, McMullen Farms, 4461 Ringold Rd., Eltopia, Wash. 99330.



Cutoff switch automatically shuts off power to front axle whenever you turn at end of field. Kit includes front axle-mounted microswitch and “activator brackets” that mount on steering drag link.

Cut-Out Switch For Case-IH Front Wheel Assist Tractors

“My new cutout switch kit for Case-IH 7100 series tractors automatically shuts off power to the front axle whenever you turn at the end of the field. It lets you turn shorter and also reduces tire and drive train wear,” says Greg Fujan, Weston, Neb.

The kit includes a front axle-mounted microswitch and relay and adjustable “activator brackets” that mount on the steering drag link. A 3-position rocker switch replaces the factory-installed 2-position switch on the console. The system installs in series with the existing MFWD solenoid harness.

“It eliminates the need to manually switch the front wheel assist on and off at the end of the field and results in cornering performance similar to the newer 7200 and 8900 series tractors,” says Fujan. “Cutting off power to the front wheels eliminates the dragging action of the wheels by allowing freewheeling

of the front axle. The 3-position switch lets you turn the front wheels on or off manually or set them to work automatically.

“I developed the kit for my own Case-IH 7100 tractor because I had to manually shut off power to the front wheels on corners and would forget to turn it back on once I completed the turn. As a result, when I dropped a tillage implement into the ground there wasn’t enough traction and the tires would spin.

“The kit is designed for 7110, 7120, 7130, and 7140 tractors. The 7200 and 8900 Magnums automatically shut off power to the front axle on turns.”

The kit sells for \$240 plus \$5 S&H. Contact: FARM SHOW Followup, Greg Fujan, 1636 County Road 27, Weston, Neb. 68070 (ph 402 663-4458; fax 4456).

The 3-ft. wide expanded metal catwalk, which runs the full width of the drill, makes it easy to fill seed hoppers.

Handy Catwalk Added To No-Till Drill

Dave Obrecht modified his Deere no-till drill to make filling seed hoppers easier and safer. It also lets him carry extra carry seed.

The Zearing, Iowa, farmer pulls his 3-pt. mounted 20-ft. drill behind a Yetter coupler cart equipped with flat-fold markers. He pulls a commercial two-bar tine tooth harrow behind the drill to incorporate seed and redistribute residue.

The catwalk on back of the drill is 3-ft. wide and runs the full width of the drill. He built a frame out of 1 1/2-in. sq. tubing and covered it with expanded metal. The catwalk bolts to the top of the drill frame.

“It works even better than I’d expected,”

Obrecht says. “I like having a platform on back that I can fill seed hoppers from. It reduces the danger of falling onto the harrow. And it keeps trash and mud from building up on back of the drill in muddy conditions.

“I also use the catwalk to carry extra bags of seed.”

He added a commercial extension to each of the two seed hoppers to increase the drill’s capacity. “They allow me to handle 15 more bags of seed or about 750 lbs. altogether,” he says.

Contact: FARM SHOW Followup, Dave Obrecht, 16114 710th Ave., Zearing, Iowa 50278 (ph 515 487-7447).

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