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THEY HAVE FEATURES FOUND ONLY ON THE MOST EXPENSIVE TRACTORS

Loader Tractors Built From Old Combines

Nebraska farmer Burdette Priefert runs one of the world's smallest tractor factories on his farm near Belvidere. So far he's built two loader tractors and he says they're as good as anything on the market but at no where near the price.

Priefert built both of his tractors out of old Case combines and other miscellaneous parts. The first one worked out so well, he built a second, incorporating luxury features into the machine that you could only find on the most expensive of commercial tractors.

The first loader was built out of a 600 Case combine using the 4-cyl. Case engine. "I cut the combine down to the chassis. which was not strong enough, so I installed two 5-in, channel irons for the frame. I lowered the engine, keeping it in the rear so the same belts could be used. It has mechanical steering plus power assist. It works great for all kinds of general loader work, hauling round bales, and as a platform for painting high buildings. The variable speed we used the original combine transmission - is nice for maneuvering big bales around the farm yard. It has a self-leveling bucket and the loader is over the drive wheels for good traction, although it's not strong enough for dirt work," says Priefert.

He took what he learned building that first tractor loader and applied it to the construction of his second machine, a 4-WD, articulating rig made out of two Case combines - a 600 and 660.

"It took me two years to build, in my

spare time, and I have around \$5,000 in it," says Priefert, noting that he'd have to spend many times that to get a commercial tractor with similar features. "It has full hydraulic steering. I narrowed the axles to 7 ft. (outside measurement) and cut down two Ford LTD car rear ends to fit between the final drives of the combine axles. I built a 4-in. channel iron frame that hinges in the middle using two ball bearing combine cylinder bearings as a center pivot point. Two header cylinders from one of the combines are used to control the articulated steering. The rear axle oscillates for smooth riding over rough and uneven ground.

"I overhauled an LTD V-8 engine and hooked up the Ford's automatic transmission to a 4-speed Dodge Command car transmission. I used double 60 roller chain between the transfer case and drive shaft. The 4-speed is great for selecting speed range and 3-speed automatic works great for automatic forward and reverse shifting.

"I bought a Stanhoist loader for \$1,700. Hydraulic power is furnished by a 2-stage gear pump driven off the crank shaft pulley by belt. A 3-spool control valve is used to raise and lower the loader. The third spool can be used for a grapple fork or posthole digger.

"It has great traction and a 20 mph road gear."

Contact: FARM SHOW Followup, Burdette Priefert, Rt. 1, Box 47, Belvidere, Neb. 68315 (ph 402 768-2256).



Small trees and brush pass through wide openings at front end of teeth and then get jammed in narrow openings at rear end.

SHIFTS TRACTOR REAR END BACK AND FORTH

Simple Guidance System "Works Better, Costs Less"

"It sells for less than half the price of other guidance systems and outperforms them all," says Eugene Anderson, Nevada, Mo., about the uncomplicated new guidance system he developed for use on his own farm after being dissatisfied with a commercial system he purchased.

"It surprised us by working much better than we ever thought it would. It does what other systems said they would do but never did - lets you operate the tractor without having to think about it," says Anderson, who's already sold 60 of the units, along with partner Gary Balk, and is currently negotiating with a major manufacturer who plans to put the system on the market nationwide.

The biggest problems with conventional guidance systems, says Anderson, are too many electronic controls and the fact that they move the hitch point back 4 to 6 in. from the tractor.

Anderson's system is simple. It consists of a channel iron bracket that slips over the drawbar and pins in place. It supports a double-acting 8-in. stroke hydraulic cylinder that mounts between the drawbar bracket and one side of the 3-pt. Row sensing fingers, mounted below the tractor, sense the location of the row and send signals to a "mechanical" control box mounted on top of the 3-pt. The control box works off mechanically-triggered micro-switches because Anderson says they're much simpler and easier to work on if anything goes

"These units contain no circuit boards or computers. Virtually every part is available off-the-shelf with the exception of the valves, which are made in Kansas City, Mo. Total weight of the system is less than 100 lbs. and it can be used with or without a quick hitch. Mounts easily with two bolts, two hydraulic connections and one electric plug. Doesn't interfere with shields or other equipment on toolbar and works with open or closed hydraulics," says Anderson.

Rather than shift the toolbar back and forth constantly like other systems, the new AB Guidance System shifts the tractor rear



Channel iron bracket supports doubleacting hydraulic cylinder that mounts between drawbar bracket and 3-pt.

end back and forth. "It corrects in less than 3 ft. at normal field speeds. The sensors have 1 in. tolerance to prevent constant corrections. The effect in the field is that the toolbar runs straight with the rows while the tractor rear end shifts constantly. Meanwhile, the control cylinder compensates and then relaxes when the correct position is reached. There's no pressure on the cylinder unless it's making a correction.

"One key feature is that this system selfcenters when you raise it at the end of the field. Getting back on the row has been a major problem with some other guidance systems. Total range of correction is about 11 in. or 5 1/2 in. to either side. Whenever corrections are being made, an indicator light in a control box in the cab signals the operator which direction to steer to correct, which is a real aid on terraces or curved rows."

Anderson says he's field-tested the unit on 12-row cultivators over thousands of acres in all kinds of crops and conditions with near perfect results. "It's been nearly trouble-free and in 10 years it'll still be working because there's little to wear out. Works particularly well on terraces and hillsides. We feel it's the next step forward in guidance systems. Can also be used on sprayers and we plan to adapt it to planters and drills."

At a price of less than \$2,000, the new AB system costs less than half of many other systems.

Contact: FARM SHOW Followup, AB Company, Rt. 3, Box 457, Nevada, Mo. 64772 (ph 417 398-2636).

SPECIALLY DESIGNED TEETH PULL OUT SMALL TREES WITH ROOTS ATTACHED

Loader-Mounted Brush Remover

"Our new loader-mounted brush remover lets you pull out brush and small trees up to 4 in. in diameter with the roots attached. Lets you remove, transport, and pile brush all from the tractor seat," says Diane Scissons, Lombardy, Ontario.

The "Brush Brute" mounts on the loader arms in place of the bucket and is equipped with specially designed teeth. You drive forward and raise the loader at the same time. Small trees and brush pass through the wide openings at the front end of the teeth and then get jammed in the narrow openings at the rear end.

"Pushing and lifting the tree at the same

time requires less power than simply lifting it," says Scissons. "A 30 to 40 hp tractor can operate it. It works great for clearing brush from fence rows and pastures. Works above the ground and pulls trees out with little soil disturbance. Bulldozers require much more horsepower and fuel and leave small stumps that can injure cattle, puncture tractors tires, and allow brush to grow back even worse than before."

Fits any loader model. Sells for \$1,689 (Canadian).

Contact: FARM SHOW Followup, Diane Scissons, Rt. 1, Lombardy, Ontario Canada K0G 1L0 (ph 613 283-2082).