Case Crawler Modified To "Steer Like A Caterpillar"

"Like all Case 850 crawler tractors, mine was difficult to steer. I added a pair of steering levers that make it steer as easy as a Caterpillar," says Robert Gibson, Canby, Oregon.

The tractor was originally equipped with a pair of steering levers with low, neutral, and high gear speeds for each track. It also had a hydraulic valve that allowed the operator to steer with a brake pedal. The problem was that there was too much difference between the high and low gear speeds for the tractor to steer easily, and there was no way to slip the clutch in and slowly adjust the speed of the tracks. As a result, when turning with a load, the tractor tended to spin in its tracks.

To solve the problem, Gibson tapped into the tractor's existing pedal steer hydraulic valve and hooked up a pair of metal rods to a pair of homemade steering levers that he mounted in the control tower behind Case's original steering levers. He removed the hydraulic lines from the pedal steering system and installed a linkage system that pushes the pistons in gradually. The rods allow the piston to move only about a half inch instead of all at once so Gibson can release the clutch a little at a time.

Gibson tapped into tractor's existing pedal steer hydraulic valve and set up a pair of metal steering levers.

"If I want I can still steer using the original steering levers. I think the same idea would work on the Case 450 and 1150 models," says Gibson.

Contact: FARM SHOW Followup, Robert Gibson, 29176 S. Barlow Rd., Canby, Oregon 97013 (ph 503 651-2800).

Tire Sealant For ATV's

"Our new tire sealant for ATV's will seal up to a 1/2-in. puncture in the tread and 1/4-in. puncture in the sidewall," says Glen Urguhart, Tucker Rocky Distributing, Ft. Worth, Texas.

Quad Boss is designed only for low speed (up to 40 mph) applications and is inserted into the tire through the valve stem. The product is a liquid filled with fibers which instantly form a rubbery compound when exposed to outside air. Unlike with many other tire sealants, the Quad Boss sealant is water soluble and can easily be removed from a tire if you ever have to patch it.

The seal is permanent and will last as long as the tire, says the company. It will stop bead leaks and pinhole leaks in wheel rims but it won't seal "gashes." The product stays liquid down to -33 degrees Fahrenheit.

To use the product, you remove the valve core using a supplied tool, then attach a clear hose to the bottle and squirt into the valve stem. Reinstall valve core and inflate to recommended pressure.

QuadBoss is available in 8, 16, and 32-oz. bottles as well as 1 and 5-gal. pails. An 8-oz. bottle sells for $5.99.

Contact: FARM SHOW Followup, Tucker Rocky Distributing, 4900 Alliance Gateway Freeway, Ft. Worth, Texas 76177 (ph 817 258-9229; email: gurquhart@tuckerrocky.com; website: www.quadboss.com).

Quad Boss tire sealant is injected into tire through the valve stem. It instantly turns into a rubbery compound when exposed to outside air.

Toolbox Makes Combine Repair Handy

Peter Snyder of West Montrose, Ontario found a simple way to keep downtime to a minimum during harvest. He mounted a Rubbermaid box on the straw walker hood of his combine to serve as a large toolbox.

He calls the toolbox his "Rubbermaid Action Packer."

"I got the idea from semi truck drivers who I've seen use similar boxes to carry salt, sand, dirty boots, or whatever," Snyder says.

Before Snyder adapted the idea for his own needs, he says his combine cab floor was cluttered with parts and often when a breakdown occurred, the needed part was not handy or back at home.

"I carry along a jug each of engine oil and chain oil, and that got messy when it was in the cab," he says. "The parts I take along change, depending on the head I'm using. I carry corn head parts like gathering chains for corn season and grain head parts like guards and sections for the cutter bar in grain season. The box has a lid, so it keeps everything clean and dry."

Peter Snyder mounted a Rubbermaid box on back of his combine to serve as a large toolbox.

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Combine Axle Super Shop Hoist

When Glenn and Gordon Marshalek, Raymond, Nebraska, needed to pull the engine and transmission from a garbage truck, they realized their normal engine hoist might not be able to handle it.

"The truck had a 3406 Cat diesel with an Allison automatic transmission, and our little hoist wasn't heavy enough to stand that much weight," Glenn says.

He got to thinking about a home-built crane he'd seen once built out of a combine. He figured they could find more uses for a heavy-duty lift, so he located a Deere 45 self-propelled combine and the brothers went to work.

They used just the front (drive) axle from the combine and added an A-frame tongue made from two 8-ft. lengths of 6-in. sq. steel tubing. They can move the two-wheeled cart around with a tractor. They used another 8-ft. length of the same square steel tubing for an upright, and a fourth 8-ft. length of tubing to make the boom. They mounted the riser at a 12-degree angle toward the tongue from perpendicular, so the hinge point is not directly over the axle. Then they mounted a 2-stage telescoping hydraulic lift cylinder salvaged from the dump bed of a 1963 Ford 2-ton grain truck between the riser and the boom.

"Angling the riser and cylinder back slightly from perpendicular transfers more lift to the combine axle and upper end of the boom, so there's less weight on the tractor drawbar," Marshalek says.

"We reinforced the boom tube where the cylinder mounts, using channel iron and angle iron salvaged from the scrap pile where I bought the square tubing," he adds.

The boom reaches about 14 ft. high, and Marshalek figures it will pick up 10,000 lbs. or more, although he's not had a chance to test it with that much weight yet.

Contact: FARM SHOW Followup, Glenn Marshalek, 1300 W. Little Salt Rd., Raymond, Neb. 68428 (ph 402 785-5195).

Home-built crane was built out of the front drive axle off a Deere 45 self-propelled combine.

Cheap Way To Charge Older Diesel Tractors

"I came up with a way to charge older Deere diesel tractors for less than $100," says Ken Armstrong, Point, Texas.

Armstrong came up with the idea for his Deere 730 diesel tractor. The tractor was equipped with a 24-volt system. He used a 24-volt generator and four 6-volt batteries to charge it. "Unfortunately, I knocked out the regulator and couldn't keep one working. I never knew why that happened. The original Deere had a 24-volt system, but part of it was 12-volt negative and part was 12-volt positive. I scrapped the whole thing and started over."

An engineer told him he needed a 12-volt alternator equipped with a series parallel switch, but they were either too expensive or too small, so he made a parallel switch out of a 4-prong trailer connector and an old knife switch.

He made use of the tractor's original 24-volt starter and a Ford auto alternator borrowed from an old Falcon 30 car and made a heavy duty series parallel switch for it. He also installed a Ford regulator. "I removed the tractor's generator and made a bracket that allows me to hang the alternator in place of the generator," says Armstrong. "I wired the ignition switch and batteries for 12 volts, when the switch is open. When I open the switch and plug in a 4-volt trailer connector, current runs from the alternator to the battery. Closing the switch isolates the alternator and puts it on a 24-volt system.

"I think the same idea would work on any 2-cyl. Deere diesel tractor, and maybe on other tractor brands, too."

Contact: FARM SHOW Followup, Ken Armstrong, Box 340, Point, Texas 75472 (ph 903 598-2855).

"No Worry" Hydraulic Hose Holder

"Hydraulic hoses on equipment used to get pulled, dragged, or caught on my tractor tires, but my new Hose Holder eliminates those problems," says Thom Koch, Petersburg, Ohio. "Some equipment already has built-in hose holders, but they don't pivot and they aren't spring-loaded so eventually the hoses will stretch and fray," he says.

"The hose holder I invented has four parts: a base plate, spring, rod, and flange. The base plate can be cut to fit any piece of equipment."

Contact: FARM SHOW Followup, Thomas Koch, 14744 Youngstown- Pittsburg Rd., Pittsburg, Ohio 44454 (ph 330 542-9160).

Hose holder keeps hydraulic hoses from getting caught on anything. Koch built it out of spare parts in less than an hour.