



This 1947 Allis Chalmers WC tractor was repowered with a bigger engine and equipped with a set of half tracks to handle logs in rough terrain.

Old WC Turned Into Super Skidder For Logging

Over the years, Terry Emmerton has been able to solve most of his equipment problems in his shop.

So when he decided he needed a skidder to drag logs in from the woods, he figured he could make one himself. Sons Brad and Matt helped.

They started with a 1947 Allis Chalmers WC tractor. The engine block was cracked, and they needed more power anyway, so they repowered it with a bigger engine and also equipped it with a set of half tracks to handle logs in rough terrain.

After some searching, a set of Arps half-tracks were chosen. These tracks run around the rear tractor tires and a set of idlers mounted to the frame about halfway to the front wheels. Mounting the idlers was a fairly simple task, as the WC frame is made from heavy channel iron.

The second step was to install a Chevy 305 V-8 engine together with a 4-speed GM truck transmission that bolts up to the rear axle. Since the splines on the GM transmission are the same as the Allis Chalmers transmission, the stock coupler could be used.

Along with these changes, other minor modifications had to be made. With the half-tracks installed, the fenders need to be removed to provide adequate clearance. The gas tank had to be moved back a few inches

in order to make room for the bigger engine, and an electric fuel pump was installed to satisfy the demands of the V-8 engine.

The WC's pulley drive and pto were eliminated during the conversion.

Since the truck transmission is geared almost identically to the WC transmission, no major changes were needed. However, since the new engine runs at much higher rpm's, Terry put a block on the throttle linkage to keep it from opening up all the way.

"In second gear, it's perfect for skidding logs in the bush, and third gear is just fine for skidding logs along trails. The hand brakes also make it convenient to steer in the bush," says son Brad.

Emmerton uses the tractor to skid logs out of his own and customers' woodlots. He cuts hardwood trees for firewood and pine, spruce and hemlock trees for lumber. He uses a pto-powered sawmill to provide rough-cut dimension lumber for local residents who use it for barns and sheds where graded lumber isn't required.

In the summer, the half-tracks are removed and the old WC is used for chores around the farm and sawmill.

Contact: FARM SHOW Followup, Terry Emmerton, R.R. 2, Harriston, Ontario, Canada N0G 1Z0 (ph 519 335-3814).

Deere Tractor Cab Warms Up Caterpillar Dozer

Running his D-7E Cat in the cold and wet weather could be a real bear, so Steve Vogel, Yale, Iowa decided to add a cab. He had an old Hiniker cab off a Deere 4520 tractor that he decided would look just fine on the Cat. "There are a few companies that make aftermarket cabs for Cats, but nothing with the visibility and ease of getting in and out that the cab offered," explains Vogel.

Of course it wasn't just a matter of setting the cab on the Cat platform. The cab had to be torn apart and then reconstructed inside an existing ROPS structure. Then there was the shape. The original cab was too narrow at the bottom and taller than needed. Substantial re-working of the cab was needed.

"The toughest part of the process was trying to keep physical dimensions of the corner posts and window frames small enough so we didn't lose visibility," reports Vogel.

The front window became the back window, and while the side windows stayed the same, a new, shorter front window was made

to accommodate the control panel. Front side windows were made larger to increase visibility of the dozer blade and the ground.

Where the original cab was narrower at the bottom than the top, Vogel reshaped not only the front side windows but the bottom sides as well, swelling it out to fit the Cat platform.

Rubber bushings insulate the cab from the vibration of the tractor. A rubber floor mat helps absorb a lot of the engine and transmission noise that comes up through the floor.

The entire project cost less than \$400 out of pocket and most of that was for window glass and welding supplies. His project isn't finished yet. Although he can pop the windows in and out in five minutes, he's looking for an air conditioner from another 1300 Hiniker cab to install on his modified Cat.

Contact: FARM SHOW Followup, Steve Vogel, 1813 A Ave. Yale, Iowa 50277 (ph 515 439-6661).

Rubber Tracked Crawler Built From An Allis Chalmers C

It doesn't look like an antique tractor, but buried in Frank Schackmann's home-built crawler tractor is a C Allis Chalmers.

"Another fellow started this project several years ago but couldn't make it work and finally gave up on it," says Schackmann, of Newton, Illinois. "I bought the remains of it out of a fence row, hauled it to my shop and worked on it off and on the whole winter."

Schackmann, who retired from his job at Caterpillar a few years ago, paid \$50 for the tractor.

That was two years ago. When he got it together, not only did he have a working rubber-tracked crawler, but he also had a prize winner. His favorite use for it is taking it to parades where he usually wins ribbons with it.

But it was no prize when he pulled it out of the fence row. "It had an old 32 hp. air-cooled Wisconsin V-4 engine in it and the pistons were frozen. I couldn't get them to break loose so I had to find another engine. The pistons were frozen in that one, too, but I was able to get them out so I could rebuild the engine," he says.

The rear end and transmission in the crawler are all that's left from the old C Allis Chalmers. Frank thinks the tractor was a 1946 model. He used the frame that he got with the tractor, which was made of junked channel iron, mostly. "It's put together so the sides can flex independently. That way if you run over a log or a rock with one side, it doesn't lift the other side off the ground, too," he explains.

Frank made rubber tracks for his machine by cutting the sidewalls out of a pair of used 15.5 x 38 tractor tires. The track runs on 24 in wide hubs made from well casing. "I used 24 in. casing for the back and 16 in. casing for the front," he says.

He welded brackets inside the rear hub casings so they would bolt onto the tractor hubs in place of the wheel rims. He used the front axle from an old Ford truck for the front end of his undercarriage, and bolted the casing hubs to a couple of wheels he found that fit on the spindles from the truck. The idler sprockets between the front and rear hubs are the rims from a 1949 Ford car.

The homemade track wouldn't stay on the



Schackmann takes his working rubber-tracked crawler to parades where he usually wins ribbons with it. Rear end and transmission in crawler are all that's left from the old C Allis Chalmers.

flat well casing hubs, so Frank welded a 2-in. wide strip of iron cut from old pipe all the way around each hub. "This made enough of an arch in the center of the hub that the tracks can't slide around and slip off any more," he says.

The seat was missing when Frank bought the tractor, so he built one to his liking. The engine doesn't have a fuel pump, so Frank had to build a bracket to mount the fuel tank in front of the operator's station and above the engine so fuel would flow in by gravity.

The C Allis had a hand clutch and individual rear wheel brakes. He rebuilt those, too, because they were frozen up. Squirrels had actually built nests inside the brakes. He couldn't find brake bands for a tractor that age, so Frank made his own. Since he steers the machine with the brakes, his homemade bands get a good workout when he takes it to parades.

He completed the project by adding a bumper on the front and painting it Allis Chalmers orange and silver.

"I use it for light work. I have a grass seeder that mounts on the back and a harrow for the garden. It'll go through mud that you can't hardly walk through," he says.

Contact: FARM SHOW Followup, Frank Schackmann, 10727 N. 1650th., Newton, Ill. 62488 (ph 618 455-3560).



To add comfort to his D-7E Caterpillar, Steve Vogel of Yale, Iowa, added an old Hiniker cab to it. The cab had originally been mounted on a Deere 4520 tractor.