

## Cub Conversion Triples Versatility

An IH 154 Cub is a handy little tractor, but it has its limits. When Marion Schultz was offered one for \$200, he snapped it up and began converting it into a handy chore tractor.

"The engine worked great, but it only had live hydraulics, and it came with a weak starter/generator," says Schultz. "I wanted to put a loader on it and knew I would want power steering if I did that. I also wanted a 3-pt. hitch on the rear."

He installed a Farmall Cub starter. This required modifying the frame some and adding a ring gear to the flywheel as well as an alternator. To get the hydraulic power he would need, he added a 5 gpm pump and replaced the mechanical worm gear steering with a hydrostatic control for a cylinder he mounted under the front axle. Mounting the cylinder required adding brackets to the front axle and making other changes.

"I knew the front axle couldn't handle a loader, so I rebuilt the front end," says Schultz. "I put an extra stabilizer on the center pivot pin and made heavier steering arms."

Knowing he would want slower speeds for tight loader work, Schultz also slipped an old Model A transmission ahead of the original Cub transmission. This gave him three reverse speeds and a slower forward gear.

To fashion a quick-tach loader, Schultz copied a loader on an International 706, though not to scale. He fabricated everything from scrap except for the four cylinders. Mounts are placed so they don't interfere with checking oil or changing oil filters. The loader itself quick attaches with two bolts to either side of the frame and slides off the tractor with the aid of its own hydraulics. A subframe on the tractor's front end seats the loader without bolts when in use and lets it slide away when unhooking.

"The main loader frame just tips down, and the grill guard supports it on the ground. I can put it on or take it off in 10 minutes," explains Schultz. "The 48-in. bucket is quick-tach too. The loader has picked up 700 lbs. and can raise the bucket 6 ft., 2 in. off the ground."

Schultz had a local machinery shop make the bucket and then added sides himself. He also has a pallet fork for the loader. Everything was made heavy duty. Even the grill guard is made from 1-in. sq. tubing.

"The bucket is 10 gauge steel with reinforcing strips around the back and as skids underneath," says Schultz. "The cutting edge is from a cutting edge of a grader blade."

To power a rear 3-pt. and provide rear remotes, he rerouted the hydraulic lines



Marion Schultz converted this IH 154 Cub into a handy loader tractor.

that had serviced a mower deck. Schultz installed standard remote couplers so he can use the Cub for raising and moving full size implements.

The 3-pt. was made with Cat. III top links for the lift arms, as they were the right length for space and travel needed. Everything else was Cat. I parts. For lift, he installed a hydraulic cylinder with two-way pressure so he can have down pressure too.

Schultz replaced the existing turf tires and

rims with a set of ag wheels he picked up from a friend. The wide tires had been intended for rear wheels of a combine. Schultz put new centers on them to fit the hub. The diameter was close enough to the old tires that the front wheels were unaffected. Like much about the entire project, they're oversized, which is fine with Schultz.

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## 'Endless' Cutterbar Fails On The Job

When Harold Gleason read a story in FARM SHOW about an endless chain cutterbar (Vol. 24, No. 1), he thought it made great sense. So he built his own, with a few design changes. The first time he tried it, it worked great. Later, however, he hit a snag.

"I finished it in the winter and took it out into a field with some tall hay standing in four to five inches of snow," recalls Gleason. "I dropped it into the snow and started cutting. It sailed through and cut like crazy, leaving the hay laying in the snow."

The snag came when he pulled it into a field of green alfalfa later that year. It immediately plugged up. The same thing happened in slough grass and prairie hay. Anything that was green would plug in seconds.

"I tried going fast, and then I tried going slow," he recalls. "I pulled out every other section, turned every other section upside down. It didn't matter. I

couldn't go a foot without plugging up."

Gleason's endless cutter consists of knife sections attached to a conveyor chain. The chain of sections slides through a 9-ft. cutterbar from an old Case mower.

After leaving the bar, it runs around a large drive sprocket and then up and over an arch. As it returns to the bar, it goes around a second 8-in. sprocket. Gleason made a U-shaped channel to keep the chain on track through the cutter bar. Everything works smooth as silk, except for the cut.

"I still can't believe it won't cut," says Gleason. "I've had different people look at it, and they were all as baffled as me that it wouldn't cut."

Gleason is open to suggestions from FARM SHOW readers.

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Endless cutterbar consists of knife sections attached to a conveyor chain. The chain of sections slides through a 9-ft. cutterbar from an old Case mower.

## Bracket Makes Post Installation Simple

Installing a post into a concrete floor has never been easier. Just slip the Perma Column bracket with its four rebar studs into the wet concrete and let it harden before inserting the post.

"It used to be thought that encasing posts in concrete would make them last longer, but instead they rot faster," explains Phillip Stoller, Perma-Column, Inc. "The Sturdi-Wall Plus has also become very popular for replacing rotten posts."

Perma-Column markets the brackets in multiple sizes and quantities.

"The six models handle everything from 4 by 6-in. posts to 4 ply 8-in. laminated columns," says Stoller. "They can handle about 98 percent of post frame construction. They were designed for do-it-yourselfers, but we get all kinds of customers. We sell them in quantities of a few at a time

to truckloads."

People keep finding new uses for them, adds Stoller. Builders in hurricane prone areas and flood zones are using them to build homes on stilts. Others are using them for decks, porches and even to fasten fence posts in place.

"One reason they're so popular is that the brackets are lightweight, but use high strength quarter inch steel," explains Stoller. "You could have a local blacksmith make them, but the cost of labor would kill you. We manufacture them domestically with robotic welders and from all U.S. steel. We powder coat them and price them at around \$32."

Contact: FARM SHOW Followup, Perma-Column Inc., 400 Carol Ann Lane, Ossian, Ind. 46777 (ph 800 622-7190; fax 260 622-7192; www.sturdiwall.com).



To install post, slip Perma Column bracket with its four rebar studs into the wet concrete and let it harden before inserting the post.