



"I got the idea after seeing combine conversion stories in FARM SHOW," says Kevin Sundquist, who spent just \$500 to make this versatile chore "tractor".

## "PLENTY OF SPEED AND POWER"

# "Forkbine" Built Out Of IH 403 Combine

As the owner and operator of a welding shop located on his farm, South Dakota farmer Kevin Sundquist wanted a farmyard "chore machine" that would be more versatile and maneuverable than a tractor and front-end loader. He got what he wanted by converting an IH 403 combine into what he - and many of his customers - jokingly call his "forkbine".

"I got the idea after seeing all the combine conversions in FARM SHOW. Old combines are plentiful, cheap, and there are a lot of things they can be used for," notes Sundquist.

"I started by removing the cab, motor and operator's platform and setting them aside, and then stripped the rest of the combine down to the frame. I boxed and plated the original frame to give it the needed strength for heavy lifting, then reinstalled the operator's platform, reworking the original linkages so all controls could be used in their factory positions. The original header lift control is used to raise and lower the mast - which came off an old Hyster forklift - and I added an extra spool valve to control the lift.

"An auxiliary hydraulic valve was added to run other machinery, such as an angle dozer blade which can be installed in minutes by dropping off the teeth and hooking up four pins. The combine's original 3-speed transmission and variable speed drive has plenty of power and speed to operate the



The original header lift controls are used to raise and lower the forklift mast.

dozer blade. Blading gravel or pushing snow is simple and easy with the blade mounted on the forkbine. Great visibility and variable speed make it easy to operate.

"My forkbine's been trouble free since I built it five years ago. It took four months to build in my spare time and about \$500 for materials, not including the mast and teeth. I've since added a foot throttle and moved the steering axle ahead 12 in. for more maneuverability."

Contact: FARM SHOW Followup, Kevin E. Sundquist, P.O. Box 212, Dallas, S. Dak. 57529 (ph 605 835-9327).



Gilbert & Riplo's 36-in. wide rubber tracks mount in place of the rear wheels on most any tractor or combine.

## EQUIPPED WITH LUGS FOR NO-SLIP DRIVE

# Add-On Rubber Tracks Fit Any Tractor, Combine

The latest new rubber track system for tractors and combines comes from Gilbert & Riplo, a long-time leading manufacturer of add-on steel half-tracks.

The 36-in. wide rubber tracks mount in place of the rear wheels and use a "positive cog drive" system which means lugs built into the underside of the belt match up with cogs on a 3-ft. dia. drive sprocket that bolts onto the axle. The new tracks were tested last spring by L & M Industries, Black Creek, Wis., which mounted them on a Case-IH 7140 front wheel assist tractor that was used to pull a 3-pt. liquid manure injector for custom application work.

"We used it for over 200 hours in extremely wet soil conditions without getting stuck even once," says Noel Marcks, of L & M. "We went into fields far too muddy for a tractor equipped with conventional rear tires. Soil compaction is minimal because each track applies the same amount of ground pressure as six rear tractor tires. Even in the wettest conditions the tracks never went more than 6 in. deep.

"The problem with conventional rubber tracks found on the Caterpillar Challenger tractor or Case-IH's prototype tracked tractor is that they rely on friction drive, with a

smooth belt riding over a smooth drive sprocket. Mud that gets between the track and drive sprocket can cause the tracks to slip. Gilbert & Riplo's cog drive system is similar to the drive system on snowmobile tracks. It eliminates slippage and is self-cleaning. Mud that goes through the cogs on the drive sprocket is pushed out the inside part of the wheel. The rubber tracks should last about 2 1/2 times as long as conventional tires. We paid \$25,000 for the tracks. Gilbert & Riplo sells steel tracks for about \$21,000.

"The drive sprocket on the tracks is only half as big as the drive sprocket on the front wheel assist so the tracks turn only half as fast as the front wheels. That reduces the tractor's speed by 50% when the front wheel drive is engaged. We left the front wheel assist disengaged most of the time. We plan to install a different ring and pinion gear on the front axle or mount a gearbox in the driveline to slow the front wheels down to match the speed of the tracks."

For more information, contact: FARM SHOW Followup, Gilbert & Riplo Co., 4865 S. Ravenna Rd., Ravenna, Mich. 49451 (ph 616 853-2284)



Kit sells for just under \$6,900 with exchange of old parts.

Contact: FARM SHOW Followup, Rick Sazama, 2660 Boss Rd., Abbottsford, Wis. 54405 (ph 715 223-3865); or FARM SHOW

Followup, John Pamperin, Superior Diesel, 1632 N. Stevens St., P.O. Box 1187, Rhinelander, Wis. 54501 (ph 800 521-0956).

## Repower Kit For Deere 30 Series Tractors

"We bought our 1970 Deere 3020 gas tractor in 1988 from a local dealer. After a few years, at 3,700 hrs., the engine started running bad and lost most of its power. We decided to repower it with a different engine," says Rick Sazama, Abbottsford, Wis.

"All the Deere dealers we contacted said there were no diesel repower kits available for 3020's so I called Superior Diesel in Rhinelander, Wis., and after a few months of discussion and drawing up plans, I took the tractor to their mechanic, Tom Stilen of Tom Stilen Repair in Shiocton, Wis.

"Our tractor is now the first 3020 ever repowered with a 4045D 80-hp. diesel engine with a 540 rpm pto. Tom Stilen converted the engine to fit the 3020 and

repower kits are now available to fit Deere 3010 and 3020 tractors. You can get either a 4-cyl. 239 cu. in. or a 276 cu. in. Both engines are non-turbo. Both install with no hood or other sheet metal modification.

"I'm happy with my 'like new' tractor. It starts easy and has lots of power with less fuel consumption. Even though the original gas engine went bad, the rest of the tractor was still in good condition. At a fraction of the cost, we have a new engine in a very good tractor with a 2-year or 2,000 hour warranty on the engine.

"The repower job can be done in about 8 hrs. with all-new components including the engine, water pump, fuel injectors and pump, alternator and starter. The tractor looks great and runs great, too."