16-Row "Fold-Forward" Planter

Tony and Jeff Larson, New Hampton, Iowa, built a 16-row front-fold planter by constructing a 35-ft. long telescoping hitch that allows them to hook two Deere 7000 Max-Emerge 8-row planters together and fold them forward for road transport.

A pair of up-front dolly wheels support the hitch's main 6 by 8-in. telescoping drawbar. The planters are folded by a pair of hydraulic cylinders near the back of the hitch. A pair of 4 by 6-in. steal beams extend diagonally from the front of the hitch to each planter's original hitch mounting point.

To fold the planter for transport, Larson puts the tractor in neutral and uses the planters' original lift cylinders to raise the planters, then unplugs the hydraulic lift hoses and plugs in the hoses that operate the folding cylinders (his tractor doesn't have enough outlets for both sets of hoses). He swings both planters inward until they're tight against the hitch, then pins on a crossbar to tie both planters together. He lowers the 3-pt. to set the dolly wheels on the ground and chains the planters' lift wheels in place. He then raises the 3-pt. to lift both planters.

"It works as well as any commercial front-fold hitch and we spent only $15,000 to build it," says Tony. "It takes about 15 minutes to fold the planters for transport. We already had one of the planters and bought the second one at a farm sale for $8,000. A new 16-row Deere planter and hitch would cost about $70,000. We could spend another $1,000 to $1,500 to totally automate planter fold-up, but we don't really need to because we can already plant 250 acres per day.

"The telescoping beam sometimes bends when it's raised, especially if the planter is loaded, but it always flexes back to its original shape."

The Larsons used heavy steel beams to make new markers and replaced the markers' original cable-lift assemblies with big cylinders. There weren't any

unused hydraulic outlets on the tractor to operate the cylinders so they use a solenoid, activated by a switch inside the cab, to direct oil flow to either marker.

A 3-ft. long, 4 by 6-in. steel beam on either side of the telescoping beam is pinned to each planter and allows it to flex indivudually forward or backward. A 2 1/2-in. dia. steel pin mounted horizontally between the 3-ft. beam and planter toolbar allows each planter to flex individually from end to end.

A pair of steel rollers inside the front and rear of the telescoping beam keep the inside 4 by 6-in. beam rolling smoothly.

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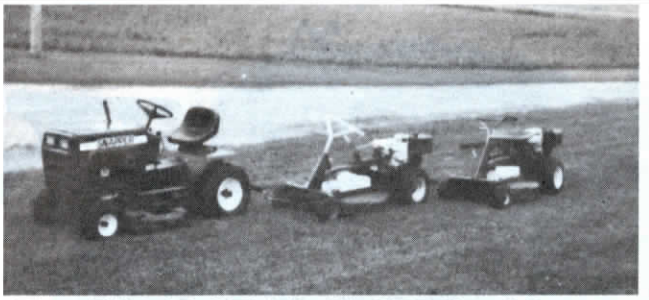

Easy Way To "Triple-Up" Riding Mowers

Faced with the chore of mowing a 3-acre lawn, Harlie Stark, Darfur, Minn., hooked three Snapper riding mowers together.

Stark rides on a 12 1/2 hp model equipped with a 41-in. deck and pulls two 8 hp models with 30-in. decks. An angle iron hitch bar bolts on back of the front two mowers, with a bolt welded onto the left side of the hitch bar. A length of flat iron, equipped with a chain and ring, welds to the right hand spindle on the back two mowers. To hook up the mowers, Stark simply slips the ring over the bolt.

"It works much better than using a big single mower because the three mowers are much more flexible and do a better job of following the ground contour. I can mow ditch banks right from the shoulder of the road," says Stark. "I start the back mowers first and put the blades in gear, then I start the front mower. I unhook the mowers by simply lifting the ring off the bolt.

"I've been pulling two or three mowers together this way for the past 8 years. The width of cut is about 68 in. with two mowers and 95 in. with three mowers, allowing for a 3-in. overlap between mowers. Using three mowers I've mowed my lawn in only 2 1/2 hours. It took my dad all day to mow it with a single 30-in. mower.

"The only modification I make to the back mowers is to remove a friction drive wheel from the drive box in order to keep the transmission from accidentally popping into gear."

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Souped-Up Case Eats Acres Economically

Gobbling up a lot of acres may require big horsepower, but it doesn't have to cost an arm and a leg in fuel.

That was the idea behind the conversion of a 1965 1200 Case 4-WD that Iowa, farmer Floyed Eiten souped up with a mega horsepower truck engine.

"I wanted high horsepower that would run cheap," Eiten says. "That engine will run as economically as one half its size with the same load."

The truck engine is a Cummins turbocharged V-8 packing 320 hp., almost double that of the tractor's original engine. He got the Cummins for $3,500 out of a wrecked International cab-over semi and bought the tractor for just $2,500 from a salvage yard because it had a blown engine.

Eiten says that size-wise the Cummins engine seemed almost custom-made for the engine housing of the Case. The clutch housing of the Cummins bolted right into the engine flywheel of the tractor, but he still had to re-machine the tractor's flywheel. That's so the Cummins' live pto would match up with the rpms of the Case.

He also had to add a lot of heavy duty springs to the clutch to accomodate the tractor's extra power.

The hardest part of the project, Eiten says, was beefing up the tractor's cooling system. "I had to keep putting bigger and bigger radiators in front of the tractor's so it wouldn't overheat," he says. Along with replacing the tractor's original radiator with a bigger one, Eiten finally mounted an extra truck radiator in front of the tractor's to keep things cool.

Eiten first took the repowered Case to the field in 1978. But continual improvements, like those to the tractor's cooling system, weren't complete to his satisfaction until just a few years ago. By that time, he had about $7,500 invested in the project.

Other refinements include an electronically coordinated steering system. It can be used to override the tractor's original hydraulic system when necessary. When activiated, it turns the back wheels the same number of degress as the front for extra tight cornering in the field. A light dimmer switch in the cab is used to turn the steering system off and on since it's too sensitive for the open road.

Eiten made the air-conditioned cab himself a few years ago out of angle iron, sheet metal and glass.

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