## He Doubled The Power Of His IH 706

A gas-powered, 65 hp 706 Farmall is a good tractor, but a 130 hp diesel-powered 706 is even better. Brian Tworkoski says converting a 706 to diesel power is a snap. All you need is a 400 Series International diesel engine and a clutch and flywheel to match.

"Any of the International 400 series, the 414, the 436 or the 466 diesels, will fit the Farmall 700 or 800 series tractors," says Tworkoski. "I repowered a 706 about five years ago and then did a 766 two years ago. It was even easier to do as the engine fit the existing frame rails."

The 706 was a little harder, but not much. Tworkoski had been thinking about swapping engines on it and had spent some time checking measurements. When the clutch went out on the 706, he decided it was time. He pulled out the original gas engine, replaced the stock frame rails, clutch and flywheel, and made a few more minor modifications.

"I could have cut down the engine mounts to fit the existing frame rails, but I don't like to modify something that doesn't need to be modified," says Tworkoski.

Instead, he bought Farmall 966/1066 frame rails from a salvage yard and bolted them right to the 706 housing. To reattach the narrow front end, he needed to add two small steel plates as spacers on the new wider rails. He also had to cut down the 1066 fan to fit the 706 hood, which he also had to extend by about 5 in.

Everything needed to do the repower was available from Case IH dealers or from scrap dealers. The 1066 flywheel cost less than \$300 from a scrap dealer, while having a new one made would have cost \$1,400.

"The stock 1066 flywheel and clutch fit right on the 706," says Tworkoski. "Hydraulic lines had to be extended, and the 1066 throttle linkage had to be trimmed a little. Even the stock 1066 starter fits right on."

The used diesel cost him \$2,000. With new and used parts, the total cost of the repowering came to less than \$3,500. To Tworkoski, it was money well spent.

"When you can take tractors that have been



Brian Tworkoski says converting a gas-powered Farmall 706 to diesel is a snap. All you need is a 400 Series International engine and a clutch and flywheel to match.

around for 35 years and still use them, it's foolish to go spend a bunch of money on new ones," says Tworkoski. "We can use it for anything, including running our ag bagger and a liquid manure pump. With the narrow

front end, it's great for baling and spraying and as a chore tractor." Contact: FARM SHOW Followup, Brian

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## 4-WD Wood Box Gets Job Done

"I needed a driveable wood box to carry 2-ft. logs to my wood stove," says Arvin Maitland of LeRoy, Mich., who built his own powered wood hauler.

"I took a 10 hp Tecumseh engine out of a Sears garden tractor and mounted it on a square tubing frame that I made from scrap material," he says. "It has a 37 by 48-in. dump box over the top of the engine. The box sides are removable."

The unit has a hydrostatic transaxle drive out of a Cub Cadet garden tractor, and this is what drives all four wheels with chain drives. The wheels have 8-in. rims with a sprocket on each of them. Two of the wheels come from the Cub Cadet and the other two from another garden tractor, he says.

"There's a 3/4-in. axle that goes across the back with a sprocket drive. The axle turns on the pillar blocks to make it drive easier and last longer," Maitland adds.

The unit has handlebars off an old exer-

cise machine, which Maitland says "looks kind of goofy, but works." When he pushes them forward, the unit moves forward and when he pulls back on the handlebars, the vehicle moves backward. Maitland made sure that the rig stops and automatically goes into neutral when the handlebars are released.

New hand grip Tekiro bicycle disk brakes are used to steer the machine.

"The bicycle disk brakes should be bigger because it doesn't steer as well as I'd like on bare ground," he points out.

Maitland built his motorized wood box in his spare time over a six month period, and it cost him about \$200 in parts and materials. He purchased two new V-belts and pulleys, four new 18 by 850-8 tires and two new bike disk brakes. He already had the used engine and the used transaxle drive.

"I sit on the box with my feet sticking out and ride it to get the wood, but once it's loaded, you have to either walk behind it or

## **Backhoe Added To Farmall A**

Farmall tractor enthusiast Reginald Suan had a lot of fun turning an old Farmall A tractor into an all-around chore tractor. It's equipped with a hydraulic-operated Kubota backhoe, belly-mount blade, and front-mount log splitter.

All the attachments are powered by the tractor's original pto-driven hydraulic pump.

"I use it to do everything from digging trenches to grading my driveway to splitting firewood. People tell me they've never seen anything like it," says Suan. "My father bought the Farmall A new in 1945 for \$749.60, plus 2 percent sales tax. I still have the original plow, rear mower, and cultivator attachments for the tractor."

He installed the backhoe first. Suan made brackets and then bolted the backhoe to the tractor around the drawbar and also to a steel frame that extends under the tractor.

By flipping the tractor seat forward and dropping a backward-facing seat down in its place, Suan can operate the backhoe without ever getting off the tractor.

To add stability, he moved the tractor's rear wheels out and used the extra space to add a metal platform on one side of the tractor seat, which makes it easy to turn around and get on the backhoe seat.

He already had the log splitter, which was also originally designed as a 3-pt. model. He used 2 1/2-in. sq. and 2 by 3 box steel to make brackets and then bolted the splitter to the tractor frame.

The 4-ft. blade bolts on using the same holes originally used to attach a bellymounted cultivator. The blade is raised and lowered by a short hydraulic cylinder attached to a homemade, scissors-type mechanism. The blade's angle is adjusted by changing the position of a steel pin.

A pair of hydraulic control valves, located next to the tractor seat, are used to operate both the backhoe and also the cylinder that raises and lowers the belly blade. "To operate the splitter, I put both levers up which delivers oil to the splitter's hydraulic pump."

Suan says the chore tractor gets a lot of use. "My sons and nephew borrow it all the time. My nephew used it recently when a sewer line collapsed and he had to dig up the line to his septic tank. Many times my sons have used it to dig water lines for their cattle."

The tractor still has its original generator, starter, and battery box. "My dad took good care of the tractor, Over the years I've had to replace only the muffler, tires, and brakes. I've never totally rebuilt the engine. However, now the sleeves and pistons are showing wear so it probably should be rebuilt."

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Dump-style wood hauler is powered by a 10 hp Tecumseh engine. The hydrostatic transaxle drive out of a Cub Cadet garden tractor chain-drives all four wheels.

pull it toward you. It's not much longer than it is wide, so I can drive it right in near the stove. The short wheelbase makes it highly maneuverable," he says. "It's a handy-dandy thing to have around when you want to move something, and it'll haul about a 1/2 cord of

wood and works well anywhere, including in snow, hills, mud, etc."

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Reginald Suan fitted this old Farmall A with a hydraulic-operated Kubota backhoe, belly-mount blade, and front-mount log splitter.

All of the attachments are powered by tractor's original ptodriven hydraulic pump.

