

Ford Explorer Powered By Combine Engine

Micah Hege of Richland Center, Wis., has had a lot of fun with his unique 1995 4-WD Ford Explorer which he re-powered with a combine engine.

The engine he used came out of a 1975 Deere 3300 which he used to run on his dad's farm.

"I now work as a logger, and I acquired the combine from my Dad by trading a pile of logs for it," Hege says. "The 4-cyl. non-turbo, 219-cu. in., 3.5-liter, Deere engine was rated at 70 hp and still ran well. It had about 3,100 hours on it when I started the project in the spring of '06. Adapting everything to fit took a lot of time."

He added a turbo charger from a log skidder and figures the engine now has around 90 hp.

Hege also converted the Ford Explorer's original automatic transmission to a manual 5-speed transmission out of a Ford Ranger. As a result, he had to design a 3/4-in. steel adapter plate to hook up to the combine engine. This took many hours of fabricating.

"I had the original Deere flywheel machined down so as to remove the equivalent amount of weight that the Ford gas engine flywheel added," he explains. "Then I had an adapter piece made so I could bolt the Ford flywheel onto the Deere flywheel."

With the manual transmission being lighter than the automatic transmission, and the Deere diesel engine being heavier than the original gas engine, the conversion still added a significant amount of weight onto this vehicle, according to Hege. He weighed everything before and after, to learn that the vehicle gained around 350 lbs.

"I've been driving it ever since, and have put on over 7,000 miles," he says. "So far, so good. It's the type of vehicle that I'll probably never be done working on because there are always little things that I want to modify. I love mechanical work and fabricating. My dad dairy farmed and when I was working with my dad, we always had Deere equipment. For some reason, I just always had this drive to re-power a truck with a Deere engine. I wanted to see what fuel economy I could get with a diesel powered engine."

So far, Hege says his average fuel economy is 23 mpg for local driving. He thinks he could improve that if he lowered his engine rpm's by putting a higher gear ratio into the rear end.

"The current rear end gearing ratio is 3.55. At 60 mph, my engine's running at 2,000 rpm's. My top speed with this thing is 78 mph," he says. "My total expense to this point is about \$3,500, which is what I'd expect to



Hege stripped the truck down to the frame.

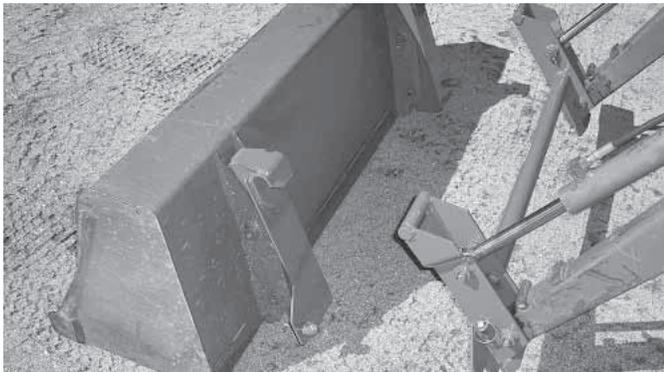


Then he installed the combine engine and new transmission and put the body back in place.

pay for that vehicle with a gas engine. If for no other reason, the time I put into this project has been worth it for the novelty of having a Deere engine - like the looks and the comments I get. It sounds like a tractor coming

down Main Street."

Contact: FARM SHOW Followup, Micah Hege, 24332 County Hwy. D, Richland Center, Wis. 53581 (ph 608 604-3492).



Versa-Daptor quick-tach loader adaptor works on all the new loader attachments made by Deere and aftermarket companies.

Quick-Tach Adaptor For Older Compact Tractors

Larry Ashwill likes his 955 Deere compact utility tractor, but newer quick-tach buckets wouldn't work on it. Instead of investing in a new tractor, he and his son Tony designed Versa-Daptor, a quick-tach loader adaptor that works on all of the new loader attachments made by Deere and aftermarket companies.

Tony owns Ashwill Industries, Inc., an abrasive waterjet cutting and fabrication business in Hutchinson, Minnesota. He uses the waterjet for precision cutting of the 1/4-in. steel plate used on the hitch adaptor.

"We came up with this out of necessity," Tony says. Shortly after they started using the adaptor, a neighbor ordered one for his tractor.

The Versa-Daptor works on the 755, 855 and 955 on Deere tractors with a 70 or 70A loader.

The adaptor mounts to existing holes on the original bucket, with no cutting or welding required. The adaptor picks up the attachment by scooping from underneath. Tony is also working on making an adaptor to fit Bobcat loader attachments.

Besides the Versa-Daptor, Tony makes the Versa-Hitch receiver hitch attachment which accommodates loader attachments such as a pallet fork or bucket on the rear of the trac-



Adaptor mounts to existing holes on the original bucket, with no cutting or welding required.

tor. It comes with a compact weight rack that can hold eight 42-lb. suitcase weights for ballast. Two receiver tubes offer the option of moving both gooseneck and standard bumper pull trailers. The Versa-Hitch easily drops off onto its built-in stand without having to unload all the weights. It works on any Category I, 3-pt. hitch Deere compact utility tractors. Hitches for other make tractors are in the works, Tony says.

He plans to make and market the adaptors through his shop. Cost for the Versa-Daptor starts at \$400. The Versa-Hitch starts at \$500.

Contact: FARM SHOW Followup, Tony Ashwill, Ashwill Industries, 945 5th Ave. SE no. 10, Hutchinson, Minnesota 55350 (ph 320 234-8331; ashind@hutchtel.net; www.ashwillindustries.com).



To build wire unroller, Robert Hittle started with the wheels and front spindles off a 1973 Ford Pinto, welding a length of tubing between the spindles to serve as the axle.

2-Wheeled Wire Unroller

"It trails behind my pickup at highway speeds, and through mud behind my ATV," says Robert Hittle, Liberal, Kansas, about a 2-wheeled wire unroller he built from scratch.

He started with the 14-in. wheels and front spindles off a 1973 Ford Pinto, welding a piece of metal tubing between the spindles to serve as the axle. There's a trailer ball hitch on front. The reel is held inside a rectangular metal frame that bolts to the axle.

A homemade brake is used to adjust tension on the reel so the wire doesn't unwind too fast and get tangled up. The brake consists of a double V-belt and a long metal handle attached to a pair of pulleys, one for each belt. Both belts ride on a double-groove pulley that's attached to the axle. Car brake pads weld to each end of the handle. Pushing on the handle allows the reel to rotate faster; pulling on the handle slows the reel down.

The spool can be easily removed from the trailer, making it possible to load the reel and trailer separately into the back of a pickup.

"I came up with the idea because we had a very wet spring last year and there was no



A double V-belt brake is used to adjust tension on reel so wire doesn't unwind too fast and get tangled up.

way to unroll wire with a pickup without getting stuck," says Hittle. "The top end of the handle has a spring on it that's attached to a chain. I hook the chain on a hook to keep the belt tight. Then I use the brake handle to adjust the reel speed."

Contact: FARM SHOW Followup, Robert Hittle, 1731 Road P, Liberal, Kansas 67901 (ph 620 624-3112).