



Gary Gradek repowered his 1977 Jeep CJ5 with a 4-cyl. Deere 4045 diesel engine and the turbo from a Ford New Holland tractor. He also replaced both Jeep axles and installed big 37-in. tires.

He Installed A Deere 4045 Diesel Engine In His Jeep CJ5

"It has the torque of a tractor and the maneuverability of a Jeep," says Gary Gradek, who installed a 4-cyl. Deere 4045 diesel engine off an old self-propelled sprayer and the turbo from a Ford New Holland tractor in his 1977 Jeep CJ5. He also

replaced the front and rear axles, installed big 37-in. tires, and beefed up the suspension system to support the heavier engine.

"The Jeep now weighs about 5,200 lbs. compared to 2,800 lbs. before, but the axles are geared correctly so it has plenty of torque as well as speed. It gets about 22 mpg and can go 70 mph on the highway," says Gradek. "Other drivers who see me on the road are curious and give me a thumbs up, and some have even followed me into a store to ask questions. They think I must be driving a

small Cummins engine, and can't believe it when I lift the hood to show them the Deere diesel."

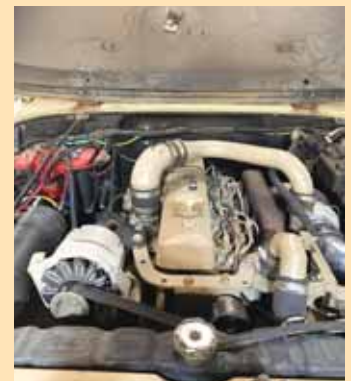
The Jeep CJ5 came equipped with a stock 304 cu. in., V-8 engine. "The engine started puffing antifreeze out the exhaust, so I knew the cylinder head was probably ruined. Deere engines are built to last," says Gradek.

"Some of the employees at my local auto parts store call it the 'Franken Jeep' because I've ordered so many different parts for it, including a Ford clutch and bell housing and large Chevrolet axles. I also turned up the fuel pump to add power. It probably has 140 to 150 hp. Yet I can start on a super steep hill and just let the clutch out in low range, and the Jeep won't even roll back."

He used a Phoenix adapter kit to bolt the engine to a Ford Mustang bell housing, and replaced the original mechanical linkage with a Toyota slave cylinder and a 10.5-in. Ford clutch. The engine is hooked up to the Jeep's 4-speed T18 transmission and a Dana 20 transfer case.

He needed a bigger front drive axle due to the increased torque so he replaced both axles, installing a Corporate 14 bolt rear axle with a Detroit locker and a Dana 60 front axle with an ARB locker off a junked late 1980's Chevy 1-ton pickup. "The front axle has power assist, which helps a lot when turning, and with the big tires it steers really nice," says Gradek.

He modified the radiator and built new water and turbo lines, and added an electric fan to cool the engine. "Because the Deere



A Phoenix adapter kit was used to bolt the engine to a Ford Mustang bell housing.

engine takes up more space, I had to mount the fan in front of the radiator," says Gradek. "I also installed bigger Jeep springs to support the engine's extra weight. And I had to increase the size of the power steering pump in order to run the hydro boost brakes and the power assist steering."

The Jeep's chassis was reinforced with new motor mounts to accommodate the larger engine, and since the Deere engine doesn't have vacuum he also installed a hydro boost brake system.

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"World's First" SP Forage Harvester

What may have been the world's first self-propelled forage harvester can be seen at the Gehl Company in West Bend, Wis. It's a prototype of a harvester built by Ohio farmer Henry Apple in the late 1940's.

Apple used a Continental engine and parts from a World War II tank half track. The rear end came from a Massey Harris 101 and the steering axle from a Chevrolet.

The forage harvesting components came from a Gehl FH84 "Chop All" Forage Harvester. To make corn silage, Apple replaced the forage pickup attachment with a TR83 2-row corn attachment. Gehl Company was so impressed that they asked him to open a new dealership. Over time, the

Apple Chopper Service grew into Apple Farm Service with 120 different brands.

"Whenever staff goes to Gehl Company for training, we make a point of visiting the prototype of the forage harvester Henry Apple built," says Ken Holmes, Apple Farm Service.

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Back in the 1940's Henry Apple built this prototype of a self-propelled forage harvester, using parts from a Gehl forage harvester and a WW II tank half-track.



"Big Thunder" Shoots Pumpkins 1/2-Mile

Jim Bendzick credits COVID-19 for giving him time to make his latest toy, The Big Thunder Monster Missile, a pumpkin shooting cannon.

"I've wanted to build one for the last 10 years. I've seen them when they have contests, and I like unique stuff," he says. His other "unique stuff" passion has been building monster trucks (Rolling Thunder and Thunder 4x4), and performing at events for the past 20 years. With no events in 2020, he had plenty of time to turn a big LP tank and a 21-ft. long, 10-in. dia. steel pipe into a cannon powered by air pressure.

Though he uses only 40 lbs. pressure, the volume of air and long barrel shoot pumpkins up to 1/2-mile away. That's a distance that lets crowds see the pumpkins crash to the ground, Bendzick says.

"There's not a big bang; it's more like a quick spurt. But we get a jet stream with white smoke," he says.

Because there aren't many of them around his home in New Prague, Minn., his giant cannon was a new and popular attraction at the mazes and pumpkin patches he visited last year.

Kids loved it and challenged him to shoot two pumpkins at once. Before he was



The Big Thunder Monster Missile is a pumpkin-shooting cannon made from an LP tank and a 21-ft. long, 10-in. dia. steel pipe powered by air pressure.

done, Bendzick dropped six pumpkins into the barrel and the cannon had no problem blasting them a long distance.

"I want to shoot one across a lake, and I want to shoot a bowling ball through an old

camper," Bendzick says of his ideas for future performances. "I love entertaining."

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