

Garage Door Opener Powers Sliding Gate

"It looks great and works great," says Justin Herron, Constantine, Mich., who built a 24-ft. sliding metal gate that's opened by a garage door opener.

The opener and other components are housed under a 2-ft. high cover made from cedar shake shingles.

The entire gate is 24 ft. long, but only 15 ft. of it extends across the driveway. The gate slides back and forth on four wheelbarrow wheel rims mounted on a pair of 6 by 6-in. wood posts, which serve as the main supports for the gate. The rims are bolted to the top and bottom of each post. The opener belt-drives a small metal bracket that bolts onto the gate to move it back and forth. Electricity is supplied by underground wiring from the house.

"It's an inexpensive way to keep from having to get out of the car and open our front gate," says Herron. "I came up with the idea because we breed 140-lb. bull Mastiff dogs and have a fenced-in front yard.

"I looked at automatic gates on the market but the cheapest model I could find sells for \$1,000 to \$2,000. Also, most commercial automatic gates swing out so in deep snow

I'd still have to go out and shovel the gate area, which defeats the purpose of an automatic gate."

Herron can open and close the gate with a push button by the front door of his house, and from remote openers in his vehicles. He even mounted one opener with a code on the post outside the gate. "If the power ever goes out I can just pull a string to release the gate," says Herron.

"Because of the opening distance I had to order a commercial grade opener designed to open and close a 24-ft. door. It came equipped with an enclosed belt drive system. One advantage of the belt is there's no chain to keep lubed," says Herron. "The opener came with a track guide that was already 80 percent enclosed to protect the belt.

"I paid \$300 for the opener and made the gate out of sq. tubing. I covered the bottom with a hog panel to keep my small son and dogs from getting out. I painted the gate with rubberized outdoor paint to prevent rust."

Contact: FARM SHOW Followup, Justin Herron, 66018 M-40, Constantine, Mich. 49042 (ph 269 435-7001; Herroncon@aol.com).



Herron's 24-ft. sliding metal gate is opened by a garage door opener. The opener and other components are housed under a 2-ft. high cover made from cedar shake shingles (above). The entire gate is 24 ft. long, but only 15 ft. of it extends across the driveway.



What makes tires last longer? It all has to do with weight ratios, says Edmond Somerfeld.

The Secret To Long-Lasting Tires

Edmond Somerfeld has gone through several 391 Ford gas engines on his 1968 125 Versatile, but only one set of tires. Most surprising of all is that those nearly 40-year-old tires are still in great shape, showing little wear, and it's not because he has babied them.

"I run the Versatile at 4 1/2 mph pulling a 28-ft. wide chisel with duckfoot points or a 16-ft rototiller with grain drills behind," says Somerfeld.

The secret to the long wearing, hard working tires is simple, he says. It all has to do with weight ratios. You need weight on the rear axle with a 4-WD, so it can do the pulling, he advises, letting the front do the guiding.

"When I first bought the Versatile, I could hardly turn it," recalls Somerfeld. "It had 59 percent of the weight on the front and 41 percent on the rear axle."

He started out by adding fenders to all four wheels. They not only cut down on dust, but by making the rear fenders out of 3/4-in. sheet iron plate, they added needed weight. He also added a Versatile heavy-duty, 3-pt. hitch and a pto, both with substantial amounts of steel. With both installed behind the rear axle, the impact is even greater.

"The fenders alone are heavy," says Somerfeld. "It takes four strong men to lift one into place. With the added weight on the rear axle, it will turn in a 16-ft. radius."

While the weight ratio is important, where the weight goes is equally important, he adds. He notes that too many farmers and even machinery companies put weights on the wheels. This creates more problems than it solves.

"The weight is hard on the bearings, and I have even seen axles snap under the load," says Somerfeld. "Weights need to ride over the top of the axle housing."

He has worked with large Deere, New Holland and Cat 4-WD's and seen similar problems. All too often they're engineered with more weight on the front axle.

"I once told a John Deere engineer they didn't know how to build tractors," he says. "There was only 45 percent of the weight on the rear of a new 8760. They added 1,500 lbs. to each side. With the new John Deere's, they have 55 percent on the rear axle."

Contact: FARM SHOW Followup, Edmond Somerfeld, 1120 Anderson Rd., Power, Montana (ph 406 463-2544).



American Eagle windmills can be purchased with either 18 or 23-ft. towers.

Pond Aerating Windmill

Keeping oxygen flowing into the bottom of a pond keeps pond life healthy and maintains better water quality. Sue Weisenbach and her husband found out the hard way how quickly fish can be killed without aeration in their own pond.

To solve the problem, they bought a windmill-powered aeration system for their pond. They liked it so much they became dealers. That ended when a Chinese company bought out the windmill company.

"My husband didn't like selling windmills made outside the country," she says. "One day he got talking with some Amish fellows who used to install the windmills we sold, and they began brainstorming about building windmills."

Today, instead of selling windmills, the retired bookkeeper and her retired postal worker husband manufacture them. Their American Eagle windmills can be purchased with either 18 or 23-ft. towers. The 6-spoke welded wheel starts up in 3 to 5 mph winds. It automatically turns out of the wind when it reaches 25 to 28 mph.

The simple design uses greaseable bearings designed for heavy-duty use and long life, says Weisenbach. The Goodyear bellow air compressor also has a long life expectancy. The four-leg tower uses anchor rods designed to handle high winds.

"Every revolution forces air through the check valve and into the air hose," explains

Joe Mescan, American Eagle's U.S. distributor. "We use an aeration stone in the water to create oxygen bubbles. They clear out the ammonia, hydrogen and sulfide gasses that build up."

Mescan explains that surface aeration doesn't reach stagnant bottoms. A wind-powered aerator not only keeps ponds open in the winter, it also maintains plenty of oxygen in the hot summer weather when water holds less oxygen naturally.

The American Eagle comes with 100 ft. of airline and a stone diffuser. Weisenbach suggests it can handle two diffusers without difficulty. Windmill location isn't a problem, according to Mescan.

"They can be erected as much as 500 ft. from the pond," he says. "The ideal depth for the aeration stone is 8 to 12 ft."

Mescan notes that the American Eagle windmill has a 22-month payback compared to the average electric-powered aeration system. The 18-ft. tower model sells for \$1,195 and \$130 shipping, and the 23-ft. model sells for \$1,295 and \$140 shipping. An assembly and installation DVD accompanies the windmills.

Contact: FARM SHOW Followup, Joe Mescan, American Eagle Windmills, 27162 Capel Rd., Columbia Station, Ohio 44028 (ph 440 236-3278; fax 440 236-5496; joem@pondaeration.com; www.pondaeration.com).