Spring-loaded counterbalancers attach to pickup tailgate, making it easy to close.

"Lift Assist" Pickup Tailgate

Steve Nichols built an inexpensive "lift assist" system for his pickup tailgate using spring-loaded counterbalancers that he bought at a garage sale for 25 cents apiece.

"When I bought them I figured that some day I'd install them on a utility trailer to help lift a swing-down loading ramp. I kept them for 4 or 5 years and finally hit upon the idea of installing them on my pickup tailgate.

"I fabricated some mounting brackets, attached the cables to the tailgate, and adjusted the tension of the springs.

"The counterbalancers are especially helpful when my hands are full and I need to close the tailgate. A slight lift with my elbow or knee and the counterbalancers take over. They close the tailgate with enough force that it latches securely.

"I talked to the company that originally manufactured these units and found out they're no longer making them."

Contact: FARM SHOW Followup, Steve Nichols, 1248 N. Seminary St., Galesburg, Ill. 61401 (ph 309 337-7141; stevelola77@gmail.com).

Bruce Richardson says he saves 3 to 3 1/2 gal. of fuel per hour running a big irrigation engine fitted with HydroStar units.

Hydrogen Helps Power Irrigation Engine

Bruce Richardson's big Cat 3406 diesel engine runs about 1,000 hrs. a year on an irrigation system. The last two years he says he has saved between 3 and 3 1/2 gal. of diesel fuel an hour with the help of HydroStar hydrogen generators. The hydrogen helps fuel burn more completely and cleaner and at little additional cost.

"I run four of them on the engine, and they last about a year," says Richardson. "At $125 each, they pay for themselves many times over. The lye and distilled water mixture used in them costs about $40 a year."

When FARM SHOW first wrote about the HydroStar units (Vol. 33, No. 3), Andy Herold had sold just over 100 systems. Three years later he says his sales have reached 4,200 generators.

"All the units are prewired, tested and set up and ready to go," says Herold. "I even label the wires. All buyers have to do is hook them up and fill them."

HydroStar generators are only 5 in. wide by 7 1/2 in. long and 2 1/2 in. thick. There is plenty of room for four of them to hang on the radiator of Richardson's big Cat engine. He puts them there so they always have air being pulled past them. He says he has had no problems with them since he got the lye-water mix figured out.

"Initially I added too much lye, so the units were putting out too much hydrogen," explains Richardson. "It pipes into the dirty side of the air cleaner, and I was getting buildup from the lye."

Richardson settled on a diluted solution of half a teaspoon of lye to a gallon of distilled water or a quarter teaspoon per liter.

"The units run about 12 hrs. without a refill, so I fill them up in the evening and again in the morning," says Richardson. "I tried propane injection, too, but it saved only about a gallon and a half an hour."

Contact: FARM SHOW Followup, Bruce Richardson, 50 Node Rd., Lusk, Wyo. 82225 (ph 307 340-0670) or Andrew Herold, 11402 Westview Ct., Beltsville, Md. 20705 (ph 240 715-5000; aheroldsr@yahoo.com; www.makehydrogenerators.com).

Pvc Pipe Makes Great Electric Fenceposts

Ken Godwin hated to see used pvc pipe go to waste, so he turned lengths of it into electric fence posts.

"It works great," he says. "Just cut the pipe to the lengths you want and cut a slot in one end for the poly wire."

Godwin used to raise chickens under contract. When the contract ended and the barns were torn down, lots of pvc pipe was left.

Godwin uses 1/8-in. electric tape fencing for his horses and realized the pipes would be ideal for holding it in place. He uses a jigsaw to cut the slot or groove about 1 1/2 to 2 in. deep. He drills a hole in the ground with an auger bit about 12 in. deep and slides the pipe in.

"I put a piece of tape over the top of the slot so the wind doesn't pull it out," says Godwin. "I've been using the same ones for three years. When I want to move the fence, I just pull up the post, drill another hole, and drop it in."

Contact: FARM SHOW Followup, Ken Godwin, 3805 Nathan Jordan Rd., Millry, Ala. 36558 (ph 251 846-2559).

Ken Godwin turns lengths of pvc pipe into electric fence posts, cutting a slot in one end for the poly wire.

He Makes His Own "Tire Slime"

Elwood Tainter is semi-retired and living on a fixed income. He's always looking for ways to save a few bucks and he found a good one when he figured out how to make his own tire slime.

"I fix a lot of tires for my part time lawn mower repair business," Tainter says, "and I used to go through a lot of commercial tire slime that cost more than $20 a gallon. One day I figured there had to be a way to make my own slime for a lot less money."

Tainter mixed up his own tire sealer using corn starch and water. He heated water on the stove and added starch until the mixture was the consistency of oatmeal. When the mixture turned thicker, he added a small amount of ground black pepper.

"The pepper serves to plug a tiny air leak in a tube or a tire," Tainter says. "If you don't put that in, it's probably not going to work."

Tainter stores the mixture in a jug and pumps it into a tube or a tire with a hand held pump. The mixture also works as a sealant around the edges of tires.

On most tires that he fixes Tainter removes the valve stem, cleans out the tire and then roughs up the inside surface. He puts the slime over the roughed up surface, then installs the tube or fills a tubeless tire with air. "It works well just about every time," Tainter says.

He's also used his home-brewed mixture on 28 in. tall tractor tires that are cracked, well worn and don't hold air very well. "I put enough in the tire so it will flow around the tire as I'm rolling it," Tainter says. "Then I bounce the tire on the ground so the cracks open slightly and the slime finds its way in. Instead of fluid I can add water here in California, where it doesn't freeze, and the tires don't leak. It's a very good product."

Tainter says his homemade slime also works on tubes that have small holes. "This stuff has saved me a lot of money. I can make a gallon for less than a buck, and the commercial stuff would cost me more than $20 a gallon. It's not 100 percent perfect, but it's darn good."

Contact: FARM SHOW Followup, Elwood Tainter, 5913 Highway 99, Yuba City, Calif. 95991 (ph 530 329-6764).

Jack Up Your T-Posts

Old car bumper jacks work great for pulling T-posts out of the ground, says John Stover, Harrisonburg, Va.

He recently sent photos of how he used a 1970's bumper jack to pull T-posts out of the ground. "I was replacing the steel posts in my fence line with wooden posts. I thought there had to be an easier way than pulling the posts out with my bare hands, and I didn't want the hassle of getting on and off a tractor all the time. The bumper jack is small enough that I can haul it around on my ATV."

He cut a V-shaped slot in the jack's base plate to fit around the post, and then tack welded a 1/4-in. thick steel plate onto the bottom of the base plate to reinforce the area where the slot had been cut out.

To pull the post out, he simply wraps a chain around the post and hooks it to the jack.

Contact: FARM SHOW Followup, John Stover, 5177 North Valley Pike, Harrisonburg, Va. 22802 (ph 540 438-5656; danas7959@gmail.com).

V-shaped slot cut into bumper jack's base plate allows it to fit around T-post.