PTO Wrench Speeds Equipment Hook-Ups

When Roy Noel traded an older tractor for a new 6230 Deere five years ago, he found out he also got a hard-to-turn pto shaft. When hooking the tractor up to the mower/conditioner, baler or Bush Hog mower, it could take half an hour to line up the splines.

"I designed a wrench that gives me the leverage I need to turn the tractor's pto shaft," says Noel.

The wrench has a clevis-shaped mouth with a set screw that adjusts to grab a spline. Once the implement shaft is lined up with the splines on the pto shaft, Noel turns the set screw to remove the wrench.

"The wrench lets me line up the splines in a few seconds," he says.

Noel has a patent pending on the device. He has had 30 of them made and has given 3 away for testing. He also sent one to FARM SHOW to review. It worked as described on a late model Deere utility tractor. It slipped on easily and provided plenty of leverage for turning the shaft.

"I sold 22 of them through a local equipment dealer for $24.95 each," says Noel. "If you have a free moving pto shaft, you won't need it. But if yours is hard to turn, this gives just the leverage needed."

Noel isn't interested in manufacturing the wrench and doesn't plan to make more. He is interested in selling the patent and all manufacturing rights.

Roy Noel designed this wrench that gives him the leverage needed to turn a tractor's stubborn pto shaft.

Contact: FARM SHOW Followup, Roy Noel, 14 Dutch Run Rd., Piketon, Ohio 45661 (ph 740 289-2851).

Robert Hanke can charge a dead battery anywhere, quickly and inexpensively, with this home-built gas-powered battery charger.

Gas-Powered Battery Charger

With his home-built gas-powered battery charger, Robert Hanke can charge a dead battery anywhere – quickly and inexpensively.

The Amsterdam, N.Y., welder built his first prototypes out of lawn mower engines and car alternators to charge batteries for his camper. But they were heavy and gas-guzzlers.

His latest version only weighs 15 to 20 lbs. and charges a 12-volt battery in less than 20 min. on about half a weed whacker tank of gas.

"It works great," says Hanke. "It's like a rapid charge."

He started with the 31cc engine from a broken weed whacker. He removed the shaft and head and fabricated an aluminum plate to bolt on a magneto from a 1973 Honda CB350 motorcycle.

"The biggest challenge was the magneto part that spins had to be perfectly lined up and couldn't wobble," Hanke says. "I used feeler gauges to shim it."

Once the magneto was mounted, he fabricated more mounts for the voltage regulator and rectifier from a 1986 GM alternator. He created a shroud by wrapping it with aluminum tape, which pulls air through to keep the engine cool.

Hanke says he hooks up the battery and starts up the weed whacker engine. He added a throttle that can be set at different speeds and runs it at full throttle at first, then slows it down. He isn't certain if it would overcharge the battery, so he keeps an eye on it. After about 15 min., he checks the battery with a pocket voltage meter.

Contact: FARM SHOW Followup, Robert Hanke, 97 Hewitt St., Amsterdam, N.Y. 12010.

Sprayer lift is designed to operate off tractor hydraulics and is equipped with slots that also fit a forklift or front-end loader.

"Safety Lift" For High Clearance Sprayers

"Our new lift for high-clearance sprayers works great for changing tires and doing other maintenance work. It's the safest jack system on the market for sprayers," says Dan Waldner, RockPort Welding, Magrath, Alta.

The sprayer lift is designed to operate off tractor hydraulics and is equipped with slots for a forklift or front-end loader. Or, optional wheels can be attached to roll the unit around your shop floor. It has a lift capacity of 36,000 lbs.

Hydraulic cylinders are used to raise or lower a pair of telescoping tubes that lift the entire front end or back end of the sprayer, allowing you to change 2 tires at a time. Once the sprayer is fully raised you install a steel pin through each tube.

"Changing the tires on a high clearance sprayer can be a dangerous job," says Waldner. "With bottle jacks and blocks you're lifting only one side of the sprayer, and changing only one tire at a time. Our sprayer lift is much more stable and it lets you change two tires."

A bolt-on kit is available for Deere 4940 high clearance sprayers. It fits the sprayer's front end and provides 4 lift points. Also optional is an air bag kit that attaches to the sprayer's air bag cylinders.

The sprayer lift can be ordered in any color, and custom designs are available for most sprayer brands.

It sells for $2,000 to $2,300 depending on options.

Contact: FARM SHOW Followup, Dan Waldner, RockPort Welding, P.O. Box 871, Magrath, Alta., Canada T0K 1J0 (ph 403 758-3077, ext. 604).

Pure Power! filter uses deep-pleated, 2-ply stainless steel filter media to keep oil clean.

Stainless Steel Oil Filters Improve Engine Performance

Kelly Tidwell is a world champion drag racer who's been working on engines for more than 50 years. Today he's head of research and development for Pure Power!, the company he co-founded in the late 1980's to produce premium quality filtration and lubrication products. He holds multiple mechanical and liquid process patents.

The Pure Power! Filter stainless steel oil filter is a lifetime product for passenger vehicles, trucks, stationary engines, industrial and agricultural equipment, including over-the-road semis. It's a spin-on style filter with a removeable and cleanable stainless steel filter element. The billet-aluminum housing is burstproof up to 1,000 psi and virtually leakproof because of the Viton seals. Tidwell says a Pure Power! oil filter improves engine performance by reducing the drag created by poor oil flow.

The filter has deep-pleated, 2-ply stainless steel filter media. "Using stainless shows a 90 percent improvement in debris removal compared to other media," Kelly says. "Those numbers aren't just a sales pitch on my part. They've been authenticated by several independent tests.

"All of our filters are cleanable and reusable, so they're not ending up in the garbage every few thousand miles," Kelly says. More important to consumers, however, are the performance advantages gained from the stainless filters. "They maintain high oil flow through 2-ply, 45-micron stainless steel media," Tidwell says. "They even attract ferrous particle matter with the proprietary Neodymium magnets inside the media." The filters provide maximum filtered oil flow to the engine at all times and incorporate a patent pending full-flow bypass for emergency oil requirement.

"Clean oil improves engine performance, improves fuel economy, improves torque and horsepower," Tidwell says. "We've been involved in many independent tests that show a 10 to 15 percent gain in torque and horsepower with Pure Power! filters."

Pure Power! filters are easy to clean with hot soapy water and don't require any modifications for installation. They just screw on in place of the existing filters. They sell for $200 to $259, depending on the engine. Check website for dealers.

Contact: FARM SHOW Followup, Pure Power! Inc., 17731 Sampson Lane, Huntington Beach, Calif. 92647 (ph 714 894-2994; www.gopurepower.com).