

Money-Saving Repairs & Maintenance Shortcuts

Elmer Pinkerton, Elmwood, Neb.: "In a recent issue Art Gomez of Scott City, Kansas, found a way to install a fuel pump on his V-8 engine. I've been a mechanic all my life and have come up with an easier way.

"Many V-8 engines have a fuel pump that doesn't reach the camshaft so there's a short shaft between. It often is slanted and will fall out, making assembly difficult. There's usually a bolt in the front face of the engine that lines up with the shaft at a 90 degree angle. I remove that bolt and insert a longer, all-thread bolt that's long enough to hold the shaft in place and keep it from falling out. Don't forget to remove the long bolt and re-install the original bolt."

Dale Collins, LeRoy, Mich.: "I kept bruising my left arm because of the location of the gearshift lever on my Allis Chalmers WD tractor. I solved the problem by heating and bending the gearshift lever back toward the seat."

Jere Grant, Lineville, Ala.: "To free up rusted bolts and other metal parts I soak them in antifreeze."

Marty Abfall, Ag Repower, LLC, 6030 Waterside Drive, Columbus, Ind. 47201 (ph 812 342-2421; marty@agrepower.com; www.agrepower.com): Marty Abfall recently contacted FARM SHOW regarding his



new diesel engine repower business.

"I started Ag Repower in 2006 and have purchased some of the conversion kits from Hunley Sales and Service. We also offer several new conversion kits.

"We purchased the Spra-Coupe engine conversion business from Hunley Sales and Service. In addition, we offer new replacement Cummins engines and Cummins Re-con remanufactured engines, as well as Cummins power units to meet stationary application needs. Conversion kits are available for Allis Chalmers, White, Oliver, Agco-Allis/Deutz Allis, Steiger, and Versatile tractors as well as Gleaner combines. Kits come with a two-year/2,000-hour new engine warranty with access to Cummins' extensive parts and service network throughout North America.

"We can repower equipment ranging from 30 to 500 hp. Kits can be shipped direct to individuals for do-it-yourself installation. We can also do custom conversion kits."



Mel Primrose, Westlock, Alberta: Sometimes a good tool can be improved by the

way it's set up. Mel Primrose's 14-in. metal chop saw is one example of this.

He mounted a bracket between two sections of work bench. The bracket holds the saw so that it's flush with the table.

"On the right side table, I mounted a wooden straight edge with an adjustable ruler on it (slide block) that I can adjust to cut different lengths, up to a maximum of 5 ft.," he explains. "On the left side, to guide the metal into the saw, I mounted a piece of aluminum angle iron to the table. If you want to cut up 20 pieces of metal to all the same length, you don't have to guess. You just put them in and do it, and you know they'll all be the same."

Another nice feature of the setup is that the saw just sits in the bracket and Primrose can lift it out and take it to another location if he needs to.



Steve Perkins, Hammondsport, N.Y.: Faced with cutting up an old IH TD9 bulldozer for scrap because the motor was shot, Perkins decided to look for another option. He ended up installing a 1971 Pontiac 350 engine with a 3-speed transmission in the dozer.

"People told me it wouldn't be big enough, but I figured a lot of diesel engines are under 100 hp and this one was over 300 hp," recalls Perkins. "It works fine. The big car motor just has to idle. I don't even touch the throttle."

He did have to make some changes to the motor and transmission to get it to fit. He started by attaching a mid-70s Chevy 3-speed transmission. He then made and attached a flat plate on the back of the transmission to the Pontiac bell housing, cutting the tail shaft assembly off even with the plate. In place of the assembly, he mounted a chain sprocket.

He then mounted an identical sprocket on the front of the bulldozer transmission and butted the two together. A double roller chain on the two sprockets provides power transfer.

For hydraulic power, Perkins removed the harmonic balancer pulley from the Pontiac and replaced it with the hydraulic pump from the original IH motor.

"The toughest part was getting everything perfectly in line," he says. "I made my own motor mounts and did a lot of measuring."

Perkins also made new exhaust manifolds out of 3-in. square tubing since the original Pontiac manifolds didn't fit between the frame rails. He also installed a truck radiator with an electric fan, which saved him from having to connect pulleys and shafts to power it.

After six to seven years of use, the Pontiac "dozer" is still working well. Perkins uses it to move dirt, pull logs, fix driveways and even move snow after big storms. Not only does the engine seldom get above an idle, but the Chevy transmission never gets out of first gear.

"I just used the three speed to get enough power down low so the engine wouldn't have to wind," explains Perkins. "I use the IH transmission for gear selection. It has never lacked for power."



Webb's roll frame sickle sharpener lets the operator sharpen up to a 9-ft. sickle with just one setup.

Where To Find Sickle Parts (And More!)

Looking for cutterbar replacement parts? You don't have to look any farther than Webb's Sickle Service, Grand Island, Neb. John Webb carries parts for 20 different major manufacturers and 10 to 12 short line companies.

"We carry all the major wear components from stationary items to moving sickle components," says Webb. "A majority of parts are custom made, including sickles for horse drawn mowers. With enough lead time, we can make almost any component."

Webb bought the business from a couple who started it in their barn. Today the company sells through dealers across the country, as well as direct from the company's mail order catalog and over the internet. Sales methods aren't all that has changed since the company was started in 1992.

"The biggest change in the industry is the decreased number of farmers, but the biggest change in equipment is the increased size of machines," says Webb.

What hasn't changed, he says, is quality of parts. "We use cold rolled, high carbon steel on most components. We use the best grade we can. I believe parts should be hard and sharp."

Webb says the best way to save money on sickle mowers is to adjust hold-downs to maintain the scissors action. That also helps keep cutting edges sharp longer and requires less horsepower.

Anybody who's ever cut with a sicklebar knows what a hassle it is to sharpen section knives. Webb has an answer with his roll frame sickle sharpener. It lets the operator



Sickle bolt tool is designed to remove and replace section bolts while the guard remains in place.

sharpen up to a 9-ft. sickle with just one setup. The sharpener attaches to the sickle, and the operator swings the sharpening stone over the knife to be sharpened.

Another time-saving tool offered by Webb is the sickle bolt tool for removing and replacing section bolts while the guard remains in place.

Parts prices range from under a dollar to nearly \$1,000 for the full size sickle bar sharpener. Reproduction work is priced by the piece, and all prices are subject to increases in steel prices.

"We get people sending us an old part they need reproduced," says Webb. "We can do it, but that work gets done fastest during the off season."

Contact: FARM SHOW Followup, Webb's Sickle Service, Inc., 204 South Claude Road, Grand Island, Neb. 68803 (ph 308 381-7090; toll free 800 578-1480; fax 308 398-1966; john@sickleservice.com; www.sickleservice.com).

Fuel Shut-Off Switch For 4-Cycle Engines

Leaving the fuel lever in the "on" position on a 4-cycle recoil engine during transport can let fuel seep into the crankcase, which may greatly reduce engine life. This patented new fuel shut-off kit automatically turns off the fuel for you.

"It solves a common problem for anyone who uses 4-cycle engines on power washers, pumps, generators, welders, compressors, etc.," says inventor Mike Hanshaw.

"The problem happens when the operator completes a job and is in a hurry to get somewhere else. He shuts the engine down using the factory shut-off switch on the engine, but doesn't bother to slide the fuel lever over that's designed to ground the ignition and shut off the flow of fuel from the carburetor. So the fuel lever remains in the 'on' position when he loads the engine on a trailer and goes bouncing down the highway, allowing fuel to enter the engine crankcase. When he unloads the engine he often finds that it won't start. The contaminated oil can even ruin an engine."

He says the problem is particularly troublesome on Honda GX series engines since they're used on many different types of equipment.

The fuel shut-off system consists of a switch that forces the operator to turn the fuel off in order to kill the engine.

To install the kit, you unscrew a shroud that surrounds the fuel lever, drill a hole where you want the switch, then screw the switch into place and re-install the shroud.

Installation takes about a half hour, "but once you know what you're doing it's only a 10-minute job," says Hanshaw. "My kit isn't needed for every 4-cycle engine, because some of them come with a factory auxiliary shut-off switch or some other kind of additional safety switch."

Sells for \$29.99 plus \$8.95 S&H.

Contact: FARM SHOW Followup, Hanshaw Enterprise, LLC, 109 Heather Lane, Springville, Iowa 52336 ph 319 981-8171; m_hanshaw@msn.com; www.fueloff.com).