Money-Saving Repairs & Maintenance Shortcuts

By replacing the 1 1/8-in. dia. exhaust pipe on his Kubota 2910 30 hp tractor with a larger 2-in. dia. glass pack, Ray Bjorgaard was able to gain 5 hp on the tractor.



Side-Mounted Muffler Gives Tractor 5 More Hp

"I've been using small Kubota tractors since 1975. In 1980 a dealer told me that if I would exchange the 1 1/8-in. dia. exhaust pipe on my Kubota 2910 30 hp tractor to a larger size, the tractor's engine would run cooler and gain power. So I switched to a 2-in. dia. glass pack and gained 5 hp on the tractor," says Ray Bjorgaard, De Soto, Kansas.

The tractor came with a muffler located directly under the hood, with exhaust coming out under the tractor, which caused the hood to get hot and the engine to lose power.

Bjorgaard unbolted the muffler and rerouted the exhaust to come out the side of the hood. A restrictor ring was molded into the exhaust manifold. He used a stone to grind the ring smooth, then sawed the muffler mounting plate smooth and welded the pipe to the plate. He converted a 1 3/4-in. dia. pipe into an L-shape that comes off the manifold. Then he welded a 2-in. dia. pipe, which supports the new muffler, on top of it. To ac-

Wood ramps are 14 ft. long, 18 in. wide, and positioned about 3 ft. above ground. A 3-ft. deep pit is dug under the ramp so there's 6 ft. of working room.



An L-shaped pipe comes off the manifold.

commodate the tractor's side panel, he cut a U-shaped notch out of the panel, then pop riveted an aluminum horseshoe over the notch.

"I paid \$18 for the muffler and \$1 for a new gasket that I bolted to the exhaust manifold. I already had the pipe," says Bjorgaard.

Contact: FARM SHOW Followup, Ray Bjorgaard, 10060 Waverly Rd., De Soto, Kansas 66018 (ph 913 583-1744).



Drive-On Service Ramp For Cars, Trucks

"I built this car ramp to do oil changes and minor repairs. It's great. I wouldn't change a thing," says Kenneth Rush, Grayling, Mich.

Rush wanted to work under cars and trucks, and he wanted to be able to do the messy work in an out-of-the-way spot so he built them into the side of a hill.

The wood ramps are 14 ft. long, 18 in. wide, and positioned about 3 ft. above ground. A 3-ft. deep pit is dug under the ramp so there's 6 ft. of working room.

An air compressor in a nearby garage supplies air pressure to a hose reel mounted underneath the ramp, for operating air tools. There are also electric outlets for operating lights or drills, etc.

"I spent only about \$200. Comparable commercial hoists sell for thousands of dollars," says Rush. "There are 2 by 8's along the side of each track that serve as guides, so a wheel can't accidentally slip off if the driver is inattentive of the mirror. Looking forward about 20 ft. in front of the left-side track is a mirror mounted on two posts. When I drive up the approach, I can see the driver's side wheel enter the ramp and watch it all the way



About 20 ft. in front of the left-side ramp is a mirror mounted on two posts. Stairway leads down into pit.

up the ramp.

"There's a landing on the driver's side so I can get out of the vehicle without difficulty, with steps at the rear of the landing that lead down to ground level."

The pit floor is lined with patio blocks which makes a good floor to walk on and yet allows rain to seep away into the sandy ground below, says Rush.

Contact: FARM SHOW Followup, Kenneth C. Rush, 2404W. Four Mile Rd., Grayling, Mich. 49738 (ph 989 348-2962; kenrush@provide.net).

Spill-Proof Oil Spout

Pouring oil from quart cans can be a messy job. The new Oil Buddy spill-proof spout keeps engines clean and dry.

The spout has a spring-loaded on/off valve that only opens when it's pressed into the fill hole. When bottle is pulled back the valve automatically closes, keeping oil from dripping. Makes it easy to stop pouring to check on the oil level. And no funnel is needed.

The spout is available in two colors. One can be used for oil, and the other for anti-freeze coolant or windshield washer fluid.

Fits standard 4 to 6-quart containers and standard 4-liter/1-gal. anti-freeze coolant and windshield wash bottles. It sells for \$2.99 and is available at most Wal-Mart stores.

Contact: FARM SHOW Followup, Masterlink Marketing, Inc., 26 Robertson Davies Drive, Brampton, Ontario, Canada L7A 119 (ph 800 667-4954; master link@ bellnet.ca; www. seat belt adjuster.com).



Oil Buddy has a spring-loaded valve that opens and closes the spout.

Where To Buy Antique Tractor Lights

American Tractor Lights has been helping tractor restorers and other owners of older tractors get it "right" when fixing broken lights.

"We're kind of the Lone Ranger for American-made lights," says Dale Smith, owner of the Ellsworth, Ill., company. American Tractor Lights manufactures lights for all tractor makes built between 1939 and 1972 - Allis-Chalmers, Case, Cockshutt, International/Farmall, John Deere, Massey, Minneapolis-Moline, Oliver and more.

"We're known for high quality and that our parts will fit right in place of the original," Smith says.

He notes that cheaper imports are available but they often don't fit as well and sometimes don't even work.

Smith takes pride in surviving the challenges of making a U.S. product. His company's website has helped grow the business beyond the U.S. to Canada, Australia and Europe, where the popularity of restoring tractors is exploding.

Besides selling complete headlights for \$63/each, American Tractor Lights sells com-



American Tractor Lights sells headlights as well as reflectors and rear lights.

ponents, reflectors and rear lights. They also do custom production work, with a minimum of 2,000 lights. They recently filled a large order for lights for Oliver tractor models, for example.

Contact: FARM SHOW Followup, American Tractor Lights, P.O. Box 112, Ellsworth, Ill. 61737 (ph 309 212-7585; www. american tractorlights.com).

Easy-To-Swing Titanium Hammer

The idea of buying a \$100 hammer seems crazy but amateur builders are discovering what professional framers and carpenters have known for several years. Titanium hammers are easier to use, with less arm pain and fatigue.

The titanium hammer was invented and designed by Mark Martinez, a third generation builder who liked using titanium golf clubs and wondered why the same technology wouldn't work for driving nails. A decade later, Stiletto Tools of Winton, Calif., offers several models of titanium hammers and nail pullers.

"Titanium has a more efficient transfer of swing energy," explains Joel Allen, director of operations for Stiletto Tool. With a steel hammerhead, 70 percent of the force goes to the nail, with 30 percent recoil going back to the person swinging the hammer. Titanium puts 97 percent force to the nail.

Allen says a 12-oz. titanium hammer delivers the same force as a 21-oz. steel hammer

Doctors also prescribe the hammers for carpenters who suffer from carpal tunnel and other repetitive motion, stress-related inju-

A framing model starts at about \$100 with



Titanium hammers transfer more force to the nail so they cause less arm pain and fatigue, says Stiletto Tools.

hickory handle. A model with a fiberglass handle sells for \$120. Options like magnetic nail starters, and smooth or milled faces, are available.

Contact: FARM SHOW Followup, Stiletto Tools, 6061 N. Winton Way, Winton, Calif. 95388 (ph 800 987-1849; www.stiletto.com).