out. It works better than new and I've got just $8 invested."

Mike Ruppert, Wapakoneta, Ohio: "For the times when I need an air compressor in the field, I put a valve and male air hose adaptor in the air tank on my grain truck. This gives me a portable air compressor.

"An idea I had in my shop was hanging some old school lockers on the wall, horizontally, three-high. They're excellent for power tools, cords, and other miscellaneous equipment or parts."

Toby Truex, Warrensburg, Mo.: "I have a 4-ft. tractor mower. The bottom gearbox seal was bad and needed to be replaced. I tried two gear pullers that didn't work so I heated the hub and put in melted wax. The wax ran through the hub and out of the splines. Then I put the gear puller back on and the gear came off on the first try."

John Hill, Millington, Md: "If you have a pit, or a hoist, for draining oil in your shop, put a 55 gal. drum on a set of caster wheels. Cut another 55 gal. drum in half and thread a 2-in. nipple into it. Turn it upside down into the drum on wheels. Works like a big funnel."

Tim Gest, Grafton, Ohio: "The spring clutch on our Case 970 tractor broke and we couldn't get enough leverage to attach it. So to make the spring longer, we inserted a washer on both sides. That gave us enough extra length so we could pop the spring into place. To remove the washers, we just pushed down on the clutch and they fell out."

LeRoy C. Mack, Manistique, Mich.: "When a tie rod end came apart on our Ford 7000 tractor, I found that the nylon bushing was shot. A new end would have cost $60. I cleaned everything out and replaced the O-ring with a loop of #6 copper wire. Then I reinserted the ball, set the unit level, and poured in liquid lead babitt. When it started to cool, I just tapped the end to free the ball and then drilled in a hole for a grease fitting. This fix has worked very well."

Art Skoog, Eagle River, Alaska: "The traction clutch had been sticking on my '93 Deere 5300 tractor, which I bought new. It has MFWD with a loader, low hours, and does only light duty. It's always shedded. The problem was it would stay in gear with the pedal pushed. The clutch would disengage as soon as I touched the brake. I adjusted the free travel, moved the seat closer, and checked the pedal for obstructions. I couldn't spot the problem so I guessed that maybe the clutch springs weren't able to slide the clutch plates apart on the shaft. It might be binding on the spline. Another possibility was that popping the clutch could put a slight twist on the splines.

"The pto shaft runs inside of the hollow traction shaft on this tractor. I bought a mirror and was able to peer into the clutch housing from the top. I couldn't get light in there with even the smallest flashlight so I got the idea of lowering a single Christmas tree bulb into the inspection hole. Then I could clearly see the driveshaft splines. I pushed in the clutch and saw the splines get covered with about 1/4-in. of movement.

"So I slid a small clear tube into the hole right up to the spline and sprayed in a bit of WD40. I could see it hit the target. I jacked up one tire, turned the shaft, and sprayed again. No more sticking for the past month since I did that.

"The Deere mechanic I talked to had wanted to split the tractor apart to access the clutch."

Larry Miller, Spencer, Wis.: "I bought a Delta 14-in. chop saw which lasted less than 2 years before the motor burned out. I then rebuilt the saw at about 3/4 the cost of new

only to have it burn out again 2 years later. At that point I decided to build my own. I built a frame and had a machine shop make a 1 1/4-in. arbor shaft for me. I had the

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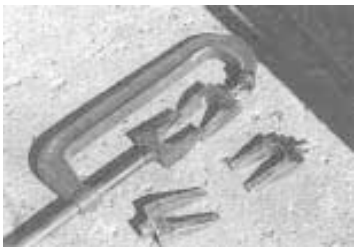

Two forks slip around shaft. The "tines" are angled so they fit together. Forks are mounted on C-clamp which holds them tightly together.

Power Take-Off Remover

You can waste hours taking off pto shafts, bearings, sprockets and other similar equipment if you don't have the right tools. And sometimes you have to resort to using a cutting torch, or you have to take the equipment to a machine shop in town to get the job done.

That's what prompted Bruce Wilson to come up with his new "Pto Remover".

It consists of two forks that slip around the pto shaft, or whatever else you're trying to remove. The fork "tines" are angled so they fit together and don't allow for any slippage. They tighten like a C-clamp so they come together from opposite sides and apply equal pressure to get the job done.

"I've used this tool on pto's, sprockets, bearings – even tie rods on cars and tractors. I had a machine shop make them in different sizes, from 1/4 in. to 8 in. so there are many possibilities for use, all over the farm," says Wilson.

He's in the process of patenting the new tool and plans to bring them to market.

Contact: FARM SHOW Followup, Bruce Wilson, 1739 Back Grove Rd., Webster City, Ia. 50595 (ph 515 543-5211).

Ultra-Wide Baler Belts Eliminate Plugging Problems, Save Leaves

If you own a belt-type round baler, you'll want to take a look at what Manitoba farmer Jake Wiebe has been doing to his baler.

Wiebe called FARM SHOW one day to tell us about the idea he came up with for his New Idea soft center 484 baler. "A couple 4-in. wide belts went bad. I replaced the two belts with a single 10-in. wide belt. I had to take out the divider between the two belts. It worked so well I decided I might as well go wider. I just replaced all the belts with a single 5-ft. wide strip of rubber belting.

"My dealer looked at me funny when I told him I wanted a 5-ft. wide baler belt. But after he thought about it, he said he figured it just might work."

The belting Wiebe used is the same material as regular belts are made of. The material is made in wide strips and then cut to size for each particular baler. You just have to request full-width strips.

He installed the wide belts himself using regular lacing on the ends. The only modification he had to make to the baler was to take off the spacers that go between the belts.

"Hay no longer can get stuck between the belts and I'm loosing less leaves out of the baler. It seems to run smoother and the repair was quick and easy to make," says Wiebe.

His New Idea baler has several sections of belt. He is gradually replacing each section as they go bad. He's looked at other belt-type balers and says he sees no reason why the idea shouldn't work on them, too. He says the wide belts were no more difficult to handle and he feels the wide belt is stronger and should last longer than individual belts.

If you decide to try it, Wiebe suggests you shop around for belting. He got widely different prices from different dealers.

Contact: FARM SHOW Followup, Jake Wiebe, RR1, Winnipogis, Manitoba R0C 2G0 Canada (ph 204 656-4468).

Drain pan mounts on end of pipe so you can easily extend it under oil pan.

Low-Profile, Portable "Oil Changer"

After he built a new shop, Scott Smith, Blue Earth, Minn., didn't want the mess that comes with changing oil and catching it in buckets or trays. So he built a low-profile, portable "oil changer" that drains away used oil and also disposes of it using compressed air.

He used heavy, 3/16-in. thick steel plate to make a 16-gal. tank, adding caster wheels to each end. A 6-ft. long, 2-in. dia. pipe extends out one end of the tank. A drain pan equipped with a quick-tach adapter fits into an elbow at the end of the pipe.

When changing oil, Smith rolls the tank under the vehicle and pulls the drain plug to drain oil into the pan. After the oil drains into the tank, the pan is removed and replaced by a pressure regulator, also on a quick-tach fitting.

He then rolls the tank over to an air compressor, stands the tank up on end, and hooks a hose to a fitting on the regulator. The hose leads to a 300-gal. tank outside the building, where oil is picked up for recycling. The last step is to hook an air hose up to a fitting at the top of the tank. Air is forced through a tube that extends from the fitting almost down to the bottom of the tank. It takes only a few pounds of pressure to force the oil out of the tank.

Contact: FARM SHOW Followup, Scott Smith, 33080 50th St., Blue Earth, Minn. 56013 (ph 507 464-3390).

Oil drains out of pan into this reservoir, which is fitted with caster wheels.

To empty used oil out of reservoir, Smith takes off drain pan and stands unit up straight next to valves by wall. Drain pipe hooks to reservoir (above right). Air hose hooks to fill pipe (below).