

on the auxiliary pump whenever the fuel level of the main tank drops to about half full. The auxiliary tank will then transfer fuel into the main tank until the stock fuel gauge rises to about 3/4 full. The transferring of fuel at set intervals will keep occurring until the auxiliary tank is empty. Because the transferring of fuel is automatic, there's no need for a toggle switch to flip back and forth between the two tanks.

The system is available for 1990-2003 Dodge, Ford and GM short and longbed diesel pickups. Comes in your choice of bright aluminum diamond plate or black powder-coated aluminized steel.

The company also offers many other auxiliary fuel tank systems for both gas and diesel, including toolbox and fuel tank combos. An installation kit comes with every toolbox and fuel tank combo.

Prices range from \$754.75 to \$2,233.32 depending on model.

**Ag Staple Technologies, Hutchinson, Kansas (ph 620 662-4686; website: www.agstapletech.com):** This company makes a lightweight fencing tool that holds up to 48 steel fence staples at a time in a car-



tridge. The tool is equipped with a spring-loaded plunger and is designed to be positioned over the fence wire. You hold onto a handle and then strike the spring-loaded plunger with a hammer, which drives the staple into the fence post. The plunger then comes back up and is ready for the next staple.

"It's faster and safer than using just a hammer and keeps you from smashing your fingers," says inventor Ken Byard. "The staples feed into the cartridge like a desk stapler. It works on any kind of fence wire."

Sells for \$119 plus S&H.

A 5-lb. box of staples sells for \$16.45 plus S&H.

**David I. Peters, Morden, Manitoba:** "I made a 40-in. extension for my shop crane that lets me lift 4 by 8-ft. sheets all the way up to my shop's ceiling. The standard crane



wasn't able to lift the sheets more than 11 ft. high. The crane extension made putting in the sheets a one-man job instead of a two or three-man job.

"I also made an extension for my step ladder by adding wooden 2 by 2's and 2 by 4's to the bottom of the ladder and adding a step. It raised the stepladder about 18 in. and allowed me to get up high enough to do the nailing."

**Clifton Lawson, 14760 Eagle Ridge Road, Ferryville, Wis. 54628 ph 608 734-3457:** "The oil filter on my tractor was stuck and wouldn't come off with conventional filter remover tools, so I decided to make my own filter remover to do the job. I welded



six pointed metal pins in a circle onto one side of a short section of steel pipe and welded a large bolt onto the other side. A nut was then welded onto the bolt. I place the device against the top end of the filter and use a hammer to pound on the nut so the pins will make marks in the filter. I either drill or punch holes into the filter at the marked locations. Then I insert the pins into the holes and drive the device all the way into the filter. By attaching a long wrench to the nut and turning it, the filter will come off. The pins grip the outside edge of the filter and don't tear the filter up like a single screwdriver might.

"I used a 3/8-in. dia. metal rod to make the pins, which measure about 1 1/2 in. long, and a lathe to make the points. The bolt is about 7/8-in. in diameter. The reason I welded the nut onto the bolt instead of directly onto the pipe section is that it's easier to get a wrench on the nut. The pins are slanted at a slight counterclockwise angle so that as they turn, they tend to dig into the filter and won't come out. The pins are located at the outside edge of the filter and provide a grip all the way around it. I also made a smaller version of this tool for our car."

**Dennis Albright, Springfield, S.Dak.:** "I got an idea from an old plumber for cleaning out PVC sewer lines with a snake. You can cut a slot in the top of plastic pipes, work the snake in to unplug the pipe, and then use clamps to put a piece of rubber inertube over the hole to seal it back up. Works better than just welding a nut to the bolt."

**Ward Bundy, Beaver City, Neb.:** "Here's a twist on an old idea for removing broken bolts from castings. If a bolt is broken off flush in a casting, I weld a washer over the end of the broken bolt and weld it in place. Then I weld a nut to the washer. I can usually screw the piece of bolt out. Works very well."

**Glen Teel, Hays, Kan.:** "I use anti-freeze to kill rats and mice. Just cut a small hole in the side of a plastic 2 liter pop bottle, about the right size for a mouse or rat to enter, and then put a little antifreeze in the bottom of the bottle. Rodents are drawn by the sweet smell and it will kill them when they drink it. Using a bottle keeps pets out."

"Instant mash potato flakes will also kill mice. Put some water in a bowl next to the flakes. The flakes will swell up inside and kill them."

**Robert Kuehl, Davenport, Iowa:** "I save time by having special purpose tool boxes for electrical, plumbing, brakes, small engines, tires, wood working, etc. There's some duplication of tools between boxes but it's a lot easier than trying to pick all the necessary tools off my pegboard when I head to a job."

**Victor E. Jans, Cupar, Sask.:** "My grain auger got dented when someone backed into it. The flighting was rubbing on the auger tube. I didn't want to take out the flighting so I came up with another solution. I welded a large nut to the outside of the auger where it was bent and then turned in a long bolt. I pulled out the dent by pulling on the bolt, thus straightening the tube. No need to remove the flighting."

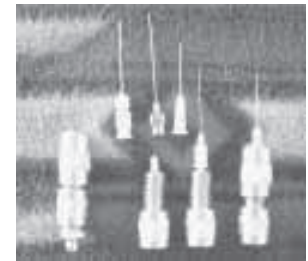
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## "Vet" Needles Used On Grease Gun

A couple of issues ago FARM SHOW published a story about a tool that holds any standard grease needle firmly in place on a grease gun, making it easy to lubricate bearings (Vol. 26, No. 5). The story prompted Alec Yeager of Hendley, Neb., to tell us about a somewhat similar tool that he thinks works even better. He designed it back in the 1980's and is now offering it for sale. It's called the "Bearing Saver."

The stainless steel tool is tapered at one end to accept veterinarian needles. A cap is then screwed over the needle to hold it in place. A zerk can be screwed into the opposite end of the tool, or the tool can be screwed directly to your grease gun.

"I have yet to find a veterinarian needle that won't work," says Yeager. "I came up with the idea because standard grease needles are expensive and don't last very long when you're trying to force them under bearing seals. Veterinarian needles don't last much longer. However, when you buy veterinarian needles in volume they're quite cheap. I buy

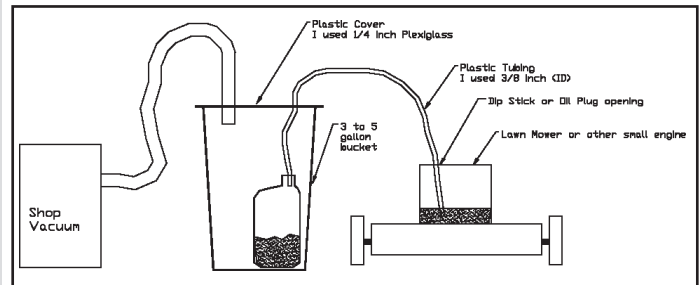


**Tool is tapered at one end to accept veterinarian needles. A cap is then screwed over needle to hold it in place.**

standard 1-in. 24-ga. veterinarian needles in boxes of 100. Another advantage is that I always have a new sharp, straight needle whenever I need one. The needle can also be used to force glue into cracked furniture."

Sells for \$24.75 plus \$2.25 S&H.

Contact: FARM SHOW Followup, Alec Yeager, Box 504, Hendley, Neb. 68946 (ph 308 265-7466; website: www.kisofroad.com).



**A shop vac, 5-gal. bucket, and 1-quart oil bottle were used to make "oil vacuum" that sucks oil out of small engines.**

## Simple Small Engine "Oil Vac"

Leland Saele, Ft. Worth, Texas, used a shop vac, a 5-gal. bucket, and a 1-quart oil bottle to make a dandy "oil vacuum" for sucking oil out of his Honda lawn mower engine.

"It was cheap to put together and makes changing oil in the mower a much cleaner and easier job," says Saele.

Saele came up with the idea after he bought the mower used and tried to change the oil for the first time. "I assumed the drain plug would be underneath the mower, but when I looked underneath it wasn't there. Instead, it was located at the base of the filler tube, on top of the engine crankcase. To drain the oil, I would've had to tip the mower over which I thought was ridiculous. So I came up with my own solution. I think the same idea could be used with any small engine."

Saele places an empty oil bottle in the bucket, then covers the bucket with a piece of 1/4-in. thick plexiglass with two holes cut in it. One hole is the same size as the shop vac hose and the other is just big enough for a length of 3/8-in. dia. clear plastic tubing. One end of the tubing is inserted into the filler tube on the mower and the other end is inserted through the hole in the plexiglass lid and into the oil bottle. The vacuum hose is inserted through the other hole in the lid.

Saele simply starts the vacuum and watches the oil go through the tubing and into the oil bottle, which has a transparent neck so he can watch it fill. When the oil level is close to the top he shuts off the shop vac and puts in a new container. He repeats the process until all the oil has been removed from the crankcase.

"It's a simple idea but it works good," says Saele. "The plexiglass came from a broken pad that had been used to protect carpet under an office chair. The plexiglass should be



**Vacuum pulls oil through the tubing and into the oil bottle, which has a transparent neck so Saele can watch it fill.**

slightly larger than the top of the bucket, and it should be thick enough so it doesn't collapse from the vacuum pressure. The tubing has to be pushed all the way down to the bottom of the crankcase in order to remove all the oil.

"Cleanup is simple. I put a plastic cap on each end of the tubing and hang the bucket, with the tubing in it, in my garage until the next time I need to use it. Storage of the bucket isn't a problem since it stays clean and can be used for other purposes," he notes.

Contact: FARM SHOW Followup, Leland Saele, 7853 Colwick Court, Ft. Worth, Texas 76133 (ph 817 346-9819).