

Money-Saving Repairs & Maintenance Shortcuts

new socket die wrench. It consists of a standard 1 1/4-in. deep well socket with the sides notched out, which allows access to oiling of the cutter and visibility of the work being performed. The socket is welded onto either an existing tap wrench or a bearing collar tightener with a set screw on the side.



"I use a 1 9/16-in. bearing collar. A thin shim can create a tight fit along with the tightened set screw for 1 1/2-in. round dies. I welded a small washer between the socket and top side of the collar to allow for various sizes of dies. The die set I use is a Pittsburgh 45 piece. The dies I use are 1 1/2-in. round adjustable. Whether SAE or metric, the tool can be used for most rounded die sets. You could easily use a socket wrench or a sliding tee bar-handled 1/2-in. drive wrench set to fit onto the tool. You could also use extension bars to get into tight areas. Most of the time I use a tee slider wrench as it works similar to the die holder wrench, with positive back and forth action. A 3/8 or 3/4-in. version could also be used, depending on the job size.

"I also have another version for use on 1-in. hexagon dies. It consists of a 1-in. deep well socket with a washer welded just above the die and a set screw to hold the die in place. It can be used the same way as the other tool."



Charles Stradtman, St. James, Minn.: "I used to have outside hog waterers that

would freeze up in extremely cold weather. The problem was that the vertical pipe under the waterer froze up due to frost in the ground. I was able to solve the problem inexpensively



using hot water and a pump-up, hand held weed sprayer.

"I removed the cover from the waterer to expose a valve that's mounted above a 1/8-in. dia. pipe, which is housed inside an underground tube. I took the valve apart to expose the top of the pipe. Then I attached a 3-ft. length of flexible, automotive-type copper tubing to the end of the sprayer line and inserted it into the pipe. I put hot water in the pressurized spray container and then squeezed the trigger to send the water down into the pipe and melt the ice. It took only a few seconds to melt all the ice."

James R. Wambeke, 503 East 5th St., Box 314, Minneota, Minn. 56264 ph 507 872-5108: "I've been in the plumbing business for more than 40 years and recently came up with a patented machine designed to clean and polish copper tubing and fittings before



soldering. It's a lot faster than doing the job by hand. One side of the machine is equipped with four different size brushes and is used to clean the inside of elbows and fittings, etc. The other side has four different size holes with brushes inside. You insert the tubing into the holes and polish the outsides.

"I hope to manufacture this electric-powered machine within a few months. I expect it to sell for about \$250."

(Continued on next page)

Convert Old Engines To Electronic Ignition

Got an old gas engine that's hard to start? Why not convert it to electronic ignition?

Any engine with a distributor and points can be converted to a Pertronix ignition system, says the company, based in San Dimas, California. Pertronix makes electronic ignition kits for just about all automotive, industrial, agricultural and marine engines and for either 6- or 12-volt systems.

FARM SHOW reader John Ruff, Logan, Kansas, put a Pertronix system on his John Deere 40 2-cyl. tractor. "I can only describe the improvement in performance as unbelievable," he writes. "It was like putting a 6-cyl. engine on the tractor."

He adds that while his Deere 40 starts easier, he does have a bit of a problem with the 6-volt Group I battery on the tractor.

"The electronic ignition needs at least 4.5 volts, so if the battery is a little low, or on cold days in the winter when the starter takes more power, there's not always enough power

in it to run both the starter and the ignition," he says. "What I really need is a battery with technology advanced enough to provide sufficient power under most normal operating conditions." He's looked all over for a Group I battery that can consistently deliver enough power, but so far has had to resort to using his battery charger a lot during the winter.

Changeover from points to the Pertronix electronic ignition was easy, he says, since the kit fits into the old distributor in place of the points. A new electronic coil may be needed for best performance. The company sells Flame-Thrower™ coils designed specifically for use with their electronic ignition system.

Contact: FARM SHOW Followup, Pertronix, Inc., 440 East Arrow Highway, San Dimas, Cal. 91773 (ph 800 827-3758; fax 909 599-6424; Website: www.pertronix.com); or John Ruff, 963 W. Big Bear Lane, Logan, Kan. 67646 (ph 785 689-4323).

Wayne Moore put together a portable heater (left) and air conditioner (right) to use in his farm shop.



Portable Heater, Air Conditioner

"One keeps me warm in winter and the other keeps me cool in summer," says Wayne Moore, South Haven, Kansas, who built "roll-around" portable heating and cooling units.

The portable heater consists of a 40-gal. liquid propane tank that mounts on four wheels with a tongue on front. A radiant heater on top of the tank is supported by a 3-ft. length of 1/2-in. dia. pipe. There are two valves on the tank.

To operate the heater, Moore opens the gas valve and then uses a match to ignite the pilot light. Athermocouple ensures that if the pilot light accidentally goes out, the supply of propane automatically shuts off. The tank is also equipped with a safety pilot and pop-off valve.

"It warms up only the area where I'm working and therefore eliminates the need to heat the entire shop," says Moore. "The radiant heater is up in the air so the heat comes down toward me as I work. It also warms up the shop tools I'm using." The portable cooler consists of an old window air conditioner mounted on a metal table with wheels.

"I move it around to my shop wherever I'm working," says Moore. "It puts out a lot of cold air and keeps the air moving around. I removed the cover on front of the air conditioner to get maximum cooling."

Contact: FARM SHOW Followup, Wayne Moore, Box 37, 109 S. Kickapoo, South Haven, Kansas 67140 (ph 620 892-5548).

More Tractor Restorers

After our report in the last issue on "whole tractor restorations", we heard from several tractor restorers who were not included on the list. Here's how to contact them:

Doyle McFerrin
McFerrin Tractor Company

Lubbock, Texas
Ph 806 762-4343 or 888 551-0076;
Fax 806 740-0554

Website: www.mcferrintractor.com
E-mail: doyle@mcferrintractor.com
Specializes in 1939 to 1965 Fords,
Massey Fergusons but works on other
models, too.

Don Frier
45876 - 300 St.
Wakonda, S.Dak. 57073
Ph 605 267-6861 or 605 552-2604

Restores tractors during winter months.
Has worked on everything from a
Waterloo Boy tractor to a 1915 Case car.

Doug Hitt
Doug Hitt Repair
W8792 County Road W
Antigo, Wis. 54409
Ph 800 992-1513

Website:
www.rainbowtractorparts.com
New and used tractor parts and also
rebuilds older tractor engines.

Matthew Throener
Matt's Ag Service
Rt. 2, Box 55
Carnegie, Okla. 73015
Ph 580 654-1212
Specializes in Farmall H's & M's and
Deere 60 & 70 tractors. Used parts, re-
pairs, and complete restorations.

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