

Self-propelled sprayer, designed for smaller farms, adapts to 36 to 46-in, rows.

#### **DO-IT-YOURSELF PLANS AVAILABLE**

# Build Your Own Mini Spray Rig

University of Kentucky agricultural engineers have developed plans for a self-propelled mini spray rig you can build yourself with new off-the-shelf components for around \$2,000. Used parts, or scrap steel, would lower the price even more.

"Anyone who has the basic skills to repair his own farm equipment can easily build this sprayer," says George Duncan, who developed the plans with research associate Billy Tapp. He explains that the sprayer was primarily designed for smaller farmers and large gardeners.

Features include a 3-wheel frame, an 8hp. engine, 3 speeds forward and 1 reverse, separate foot-operated clutch and brake pedals, hand-operated throttle, 30-gal. spray tank, and a 4-row fold-away boom that adjusts in height from 20 to 72 in. The tube-steel frame forms an "arch" over the row so that two wheels ride in line on one side of the row and the other wheel rides down the other side of the row. Adapts to rows from 36 to 46 in. wide.

Detailed plans include more than 50 pages of drawings, instructions and material listings.

For a copy of the plans, send \$3.00 for postage and copying fees, to: FARM SHOW Followup, George A. Duncan, Agricultural Experiment Station, University of Kentucky, College of Agriculture, Lexington, Kent. 40546-0075 (ph 606 257-5671).

#### "EASY TO WELD IN PLACE"

# Replacement "Caps" For Drill Packer Wheels

You can rebuild drill packer wheels at a fraction of the cost of new wheels with replacement "caps" from a Waterville, Wash., manufacturer.

Dave Barnes, Barnes Machine & Welding, has been rebuilding packer wheels for 11 years. His company has tooling to handle virtually every drill built. Depending on the drill, replacement caps are supplied in 2 or 3 sections per wheel but you can also buy the rings in full diameter. Installation ordinarily requires only vice grips or clamps to hold them in place, and a welder.

"There's no gimic to installation. Anyone who can weld can install their own. When we do the work in our shop, we guarantee the results for 6 years," Barnes told FARM SHOW, noting that some of the most popular models are Deere single and split packer drills, International single and split packer drills, and Melroe and Haybuster single packer drills.

Caps are made from steel ranging in thickness from 3/16 to 1/8-in. On some drills packer "rings", which cover just one side of each packer wheel, are used in place of full caps. Packer caps can be easily shipped and, when purchased in volume, sell for as low as \$10 apiece.



Replacement caps are supplied in 2 or 3 sections per wheel or in full diameter rings, depending on make of drill.

For more information, contact: FARM SHOW Followup, Barnes Welding & Machine, P.O. Box 614, Waterville, Wash. 98858 (ph 509 745-8588).



New tiling plow is equipped with interchangeable "boots".

#### MOUNTS ON FRAME RATHER THAN 3-PT

### New Tiling Plow For Farm Tractors

"We think it's the sturdiest built tiling plow on the market for farm tractors," says Casper Green, Morgan, Minn., who teamed up with neighbor Ralph Heiling to design and develop a new-style, tractormounted tiler. The prototype was manufactured by Wayne's Welding, of Morgan.

Green notes that, unlike other tractormounted drainage plows on the market, this one doesn't tie into the tractor's 3 pt. hitch. Instead, it rests on the drawbar frame and ties into the tractor's rear frame.

"The big advantage in bypassing the 3pt is that we were able to build a much sturdier machine capable of taking virtually all the abuse you can give it," Green points out. "A disadvantage of our non 3pt. hookup is that it's not as universal. We'll have to tailor-make a machine for each make of tractor."

The prototype, mounted on a Deere 4440, will also fit a Deere 4520. It's designed with interchangeable "boots" for laying 4,5 or 6 in. dia. plastic tile.

"The advantage of interchangeable boots is that you only plow as wide a trench as you need for the size tile you're laying," Green points out. "Using a laser to maintain grade, we've laid tile up to 5-ft. deep using one or two extra tractors, depending on soil conditions."

For information on custom-built drainage plows patterned after the prototype, contact: FARM SHOW Followup, Wayne's Welding, Morgan, Minn. 56266 (ph 612 249-3176 (days) or 249-3438 (evenings).

#### **WELD IN PLACE**

## Add-On Tips Help Sweeps Wear Longer

"Usually the tip rounds off first so the sweep quits working effectively even though the wings and rest of it are still in good shape. With our new weld-on Tufmetal II attachment, the tip will last just as long as the wings," says Mike Justice, sales manager for Pacific Alloy Castings, Southgate, Cal.

Tufmetal is the same substance used to make Shin Guard strips for ripper shanks reported on in FARM SHOW Vol. 11, No. 2, 1987. It's a chrome iron that withstands wear and is commonly used on equipment in mining, and sand and gravel industries. Its wear life is up to 15 times greater than that of conventional tillage steel and 5 times greater than the wear life of hard faced tools, Justice points out.

The pointed add-on tip welds to the original sweep. It can be attached when the sweep's new, or after it's worn down. Tip thickness ranges from 3/8-in. at the front to 1/4-in at the back.



With new weld-on attachments, shovel tips wear just as long as wings.

Tips for a 12-in. or bigger sweeps sell for \$5 each, and those for 7 to 11-in. sweeps sell for \$4.

For more information, contact: FARM SHOW Followup, Pacific Alloy Castings, Inc., Mike Justice, 5900 E. Firestone Blvd, Southgate, Cal. 90280-3797 (ph 213 928-