

GRINDS SHARP, NEW TEETH INTO WORN SERRATED SECTIONS

First-Of-Its Kind Sharpener For Combine, Mower Sickles

Somebody's finally figured out a practical, low-cost way to put sharp, new teeth into worn serrated sickle blade sections.

That "somebody" is Texas farmer Randy Henson, of Wheeler, who began experimenting with resharpened combine sickles about five years ago. He's perfected and is now going public with two commercial models (patents pending). To get them introduced, he's making an offer he hopes many FARM SHOW readers will find hard to refuse:

"Mail me 20 worn serrated sections and I'll sharpen them free and even pay the postage to send them back. All I ask is that you test the resharpened blades against brand new factory-made blades so you can see for yourself how old blades with new teeth will outwear brand new ones."

Henson is offering a one-disc, hand-held grinder (\$150) that grinds one tooth at a time and can be used to sharpen individual sections without removing them from the sickle, and a stationary seven-disc model (\$495) that cuts in seven new teeth per bite and requires that individual sections be removed from the sickle for sharpening.

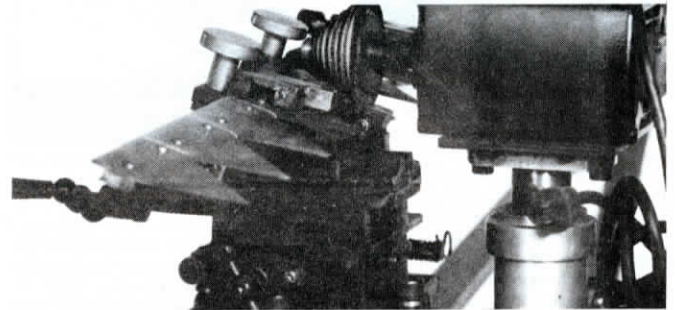
"Our experience indicates that cutting in 14 new teeth per side works best for com-

bine sickle sections. That's half as many teeth as you get with factory-made sections but the teeth we cut in are deeper. Once you get the hang of it, you can grind in a new set of 28 teeth per blade at the rate of one blade per minute using the stationary or hand-held model," Henson points out.

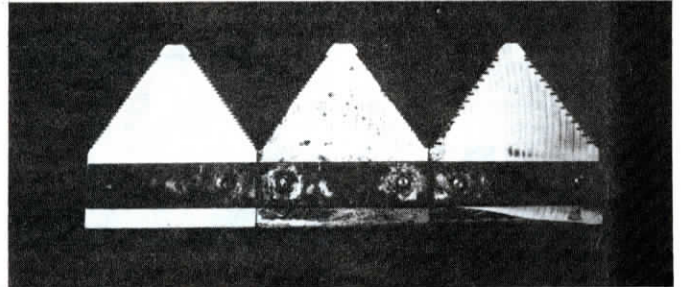
Here, according to his calculations, is how the economics of do-it-yourself sickle sharpening pencils out:

"A new 24 ft. sickle for a Deere 6620 contains 94 serrated sections or blades and retails for right at \$85. Instead of throwing it away when worn out, you can sharpen all 94 sections with our hand-held, high-speed grinder equipped a single 4-in. cutting disk that costs only \$1.13 and is readily available at most local welding shops. It pencils out to 1.2 cents per section to resharpen, versus almost \$1 per section to buy new. The resharpened sickle will outwear a new one, plus you can sharpen it a second time with another \$1.13 cutting disk for still more wear."

For more information, contact: Randy Henson, R and M Sickle Sharpener, Rt. 1, Box 195, Wheeler, Texas 79096 (ph 806 826-5665).



Henson is marketing two grinders. Pictured above is a prototype that cuts in new teeth without having to remove the sections.



Sickle section on left is a new blade. The one at center is a worn blade. Blade on the right is a worn blade that has been sharpened by cutting 14 new teeth on both sides.



Waldeck uses his up-front cultivator together with a rear-mount cultivator on fall chiseled fields before planting.

SUSPENDED FROM FRONT CARRIER FRAME

Front-Mount Field Cultivator "Floats"

An up-front carrier frame solved the problem of handling front-mount cultivators for Illinois farmer Jack Waldeck of Farmersville who pushes a 30-ft. field cultivator with his Case/IH 4890.

Waldeck says the problem with most front-mount cultivators is that they buck backwards against the tractor. He found that by suspending the cultivator from an independent floating frame, equipped with its own wheels, he could eliminate the problem.

The carrier was built mostly from scratch out of 3 by 5-in. tubing. It attaches to the tractor with just one pin which allows the frame to flex. The cultivator floats on four gauge wheels while the carrier frame has two caster wheels. The cultivator wings fold up over the center section. Two turnbuckles between the frame and cultivator

adjust the pitch of the shovels. There are two rows of tines spaced 7 in. apart. Rotating pivot arms on the carrier frame raise the cultivator out of the ground.

Waldeck uses the up-front tillage tool, together with a rear-mount cultivator, on fall chiseled fields before planting. The front cultivator smooths the field so that the rear rig can do a better job incorporating herbicides.

One disadvantage of running a front cultivator is the increased amount of dirt stirred up around the engine. Waldeck often changes direction of travel to take advantage of prevailing winds to reduce dust problems.

Contact: FARM SHOW Followup, Jack Waldeck, Rt. 1, Farmersville, Ill. 62533 (ph 217 227-4466).

SAVES YOU AS MUCH AS \$1,000

He Rebuilds Tractor Power Steering Pumps

Ohio farmer and specialty machine shop operator Lloyd Van Boven of Wellington is doing a booming business rebuilding old power steering pumps on Oliver, Ford and Minneapolis Moline tractors.

The tractors are fitted with GM "Saginaw" power steering pumps built in Saginaw, Mich. If your pump wears out, no replacement parts or pumps are available from the manufacturer. Your only recourse is to buy a replacement model made by TRW, Charlyn or other manufacturers for \$1,200 to \$1,400. Van Boven says you can sometimes find a used pump at a salvage yard but it'll probably have lots of hours on it.

"I install all new seals and replace or rebuild the cam track. Each job is different, depending on how the unit was maintained. If fluid was replaced regularly, damage is usually much less. Once the pump's rebuilt I recalibrate it so it'll work like new," says Van Boven.

The only repair he doesn't make to pumps is to replace the top spline if it's torn off. However, if the end of your steering shaft is worn, he makes a better-than-new tool steel splined insert that he can install in place of the worn-out original for \$100.

The cost of rebuilding a pump is \$300. Turnaround time is generally 3 days but he recommends you call first.

Van Boven rebuilds all Oliver 1600's through 1900's, 1650's through 1950's, 880's, and Oliver combines. He also rebuilds pumps from Ford 4000 Hi Crop from 1967 through 1970, 8,000's and 9,000's from 1968 through 1972, and 8600's and 9600's from 1968 through 1973, as well as selected Min-

neapolis Molines. The same Saginaw pump is found on a number of other tractors, backhoes, forklifts and other equipment.

"So far as I know, no one else does this type of rebuild job. I have to build all replacement parts myself. A number of tractor dealers stock my rebuilt pumps in their parts departments," says Van Boven, who also does specialty machining of aircraft gears and bearings as well as high-precision plastic moldings in his farm-based shop.

Other farm equipment repair parts that Van Boven produces include a repair of an engine casting for IH combines and heavy-duty replacement bolts on IH hydro clutches. "There's a casting at the rear of the engine on IH 615, 715 and 815 combines that wears out and has to be replaced at a cost of about \$1,500. I've got a tool that lets you bore through the existing casting and use a special driver to install replaceable bushings that can be greased so you'll never have to replace the casting again.

"The problem with hydro clutches on Case tractor models 770, 870, 970, 1070, 2090, 2290, 2470, and 2670 is that they have 3/8-in. bolts that break off. I double the strength of the clutch by boring them out and installing 7/16-in. bolts. It works so well many dealers in this area automatically send out clutches to have them modified when rebuilding them," says Van Boven.

For more information, contact: FARM SHOW Followup, Lloyd Van Boven, Van's Service Center, 42667 State Rt. 18, Wellington, Ohio 44090 (ph 216 647-2652).