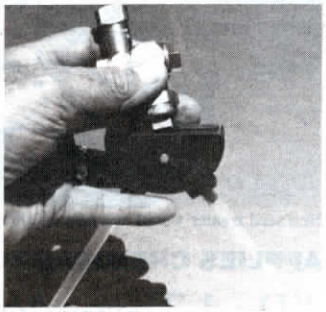
DUPLICATES NOZZLE SPRAY PATTERN SO YOU DON'T HAVE TO TURN THE SPRAYER ON

"No-Mess" Spray Angle Setting Device

If you've ever been frustrated by the time and mess it takes to set spray nozzles at the proper angle to get full coverage, you'll like a new device called "Accu-Set" made by Automated Agricultural Systems, Monroe, La.

"Accu-Set" duplicates the nozzle spray pattern, allowing you to set spray nozzles for height, angle and proper coverage without even turning on the sprayer. You simply slip the reusable, plastic device over the tip of any flat fan nozzle. Adjustable arms extend downward from the nozzle tip. To see what the width of the spray pattern will be, you set the angle formed by the adjustable arms to duplicate the angle of the spray nozzle.



"Accu-Set" duplicates the spray pattern so you can set nozzles for height, angle and proper coverage without turning on the sprayer.

"Without this device you have to turn on the spray rig, set all of the nozzles, then drive forward and spray as someone walks behind and adjusts the nozzles until all spray patterns and settings are correct," says Laurel Koll, who along with John Watts invented the unit. "It can take three hours to set an 8-row spray rig. Meanwhile you can be exposed to toxic chemicals, and vegetation in the area may receive a massive overdose of chemical that sterilizes the ground for years. Accu-Set eliminates those problems by allowing you to set nozzles in a dry environment before you go to the field."

Koll says Accu-Set works great for resetting nozzles that have become plugged up or knocked out of alignment in the field. "You can stop and line the nozzle back up without leaving the sprayer running. That's easier on you and your pocketbook because all that chemical isn't running out on the ground."

Accu-Set works on all types of spray rigs, including directed pre-emergence and post emergence. A package of two Accu-Set devices sells for $15.

For more information, contact: FARM SHOW Followup, Automated Agricultural Systems, Inc., P.O. Box 2452, Monroe, La. 71207 (ph 601 756-2430).

LETS COMBINE RUN AT SPEEDS UP TO 7 MPH IN NARROW ROW BEANS

Combine Sickle Replaced With A Rotary Mower

Harvest speed in soybeans is limited by the cutting ability of the cutterbar, not by the capacity of the combine. Replacing the sickle bar with a rotary mower might be the best way to boost combine through-put, say a pair of researchers looking at the idea.

"Combines are built to handle 150 bu. corn so when they get into soybeans there's just too much capacity," says John Hummel, an ag engineer at the University of Illinois, who along with graduate student Greg Stuckey, replaced the sickle bar on a Deere 4400 combine with a Vicon 10-ft. wide rotary mower. They harvested narrow-row beans at speeds up to 7 mph with losses no greater than at 3 mph with a conventional header. "The cutting discs rotate at 3,000 rpm's and are aggressive enough to cut through even the toughest, viniest crop with ease. You can cut at whatever speed you can stay in the seat," says Hummel.

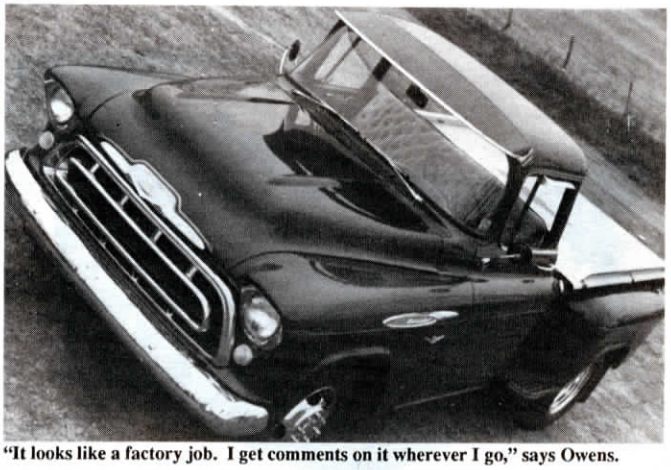
The rotary disc cutterbar was tested at speeds of 3, 5, and 7 mph. Although Hummel says it'll cut any crop at speeds as fast as you can travel, the rotary cutting method does have problems with shattering. At slower speeds, shattered beans drop onto the cutting discs rather than the platform and get thrown back onto the ground. To solve the problem, the researchers mounted air jets in "guard nozzles" positioned about 1 ft. ahead of the cutterbar. The nozzles blow jets of air back into the header, keeping crop material and shattered grain on the platform. Hummel says the addition of air works great until you get up to the highest speeds of 7 mph or more. Then the force of the air combined with the higher travel speed throws beans against the feeder auger so that they bounce back out. The solution, Hummel says, is to activate the jets at low speeds and turn them off at higher speeds. He is working on an automated control system.

The rotary cutterbar is powered off the feederhouse countershaft. The blower for the air jets mounts at one end of the header and is powered by the reel motor. It blows air into a flat chamber mounted on the floor of the platform that funnels air to the up-front jet nozzles.

One advantage of boosting cutting capacity is that combines could be fitted with narrower heads. "A narrower combine head is more effective on uneven ground, and it's much easier to transport on the road," notes Hummel.

The experiments are funded by the USDA. Equipment was donated by Deere and Vicon. If tests prove successful this year, Hummel hopes to take the idea to a manufacturer.

Contact: FARM SHOW Followup, John Hummel, University of Illinois, 376 Ag. Eng. Bldg., 1304 W. Pennsylvania Ave., Urbana, Ill. 61801 (ph 217 333-0808).



"It looks like a factory job. I get comments on it wherever I go," says Owens.

"THERE'S NOT ANOTHER LIKE IT"

"Dually" Pickup Built Out Of A '57 Chevy

When Lynn Owens drives into town, he gets lots of strange looks and comments from people who want to know where in the world he bought his pickup. If he's in a playful mood he'll say he got one of only a handful of 1957 "Duallies" built by Chevrolet. No one ever guesses he built the pickup himself.

"I like old pickups but I also like the dually pickups Chevrolet builds today with dual tires and flared fenders. So I decided to make my own using an older truck," says Owens, who started with a '57 1-ton fitted with a flatbed.

"The truck was very clean with only 72,000 miles on it and drove like new. It was already fitted with dual tires. I took off the flatbed and shortened up the frame and driveshaft about 9 in. I found a short bed box from a 1956 Chevy, removed the wood floor, and split the box up the middle and moved both sides out so they would fit over the wider frame and cover the duals. The box is 16 in. wider than the frame.

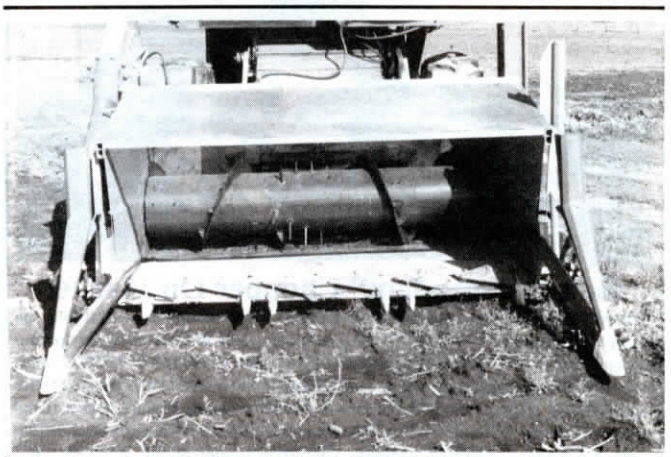
"Next, I took the metal floor and fender wells out of a junked 1974 Chevy and welded them inside the widened-out short box. It fit great and needed only little trimming. I then mounted a tailgate from a 1966 Chevy on the back of the box. It fit perfectly.

"This was a simple project that took only about 2 hrs. once I had the parts assembled. Once it was painted, it looked like a factory job and I get comments about it wherever I go. Some guys tell me they've seen trucks like it before but when I ask them where, they don't know! Then I tell them there's never been another pickup like it."

Owens fitted his home-built pickup with the floor and fender wells out of a 1974 Chevy and the tailgate from a 1966 Chevy.

Owens says the conversion would work with any 1955 to '57 pickup fitted with duals but notes that the truck is hard to find. He's already bought two more, though, which he plans to convert and sell.

For more information, contact: FARM SHOW Followup, Lynn Owens, Rt. 8, Box 172, Sulphur Springs, Tex. 75482 (ph 214 885-9874).



Cutting discs rotate at 3,000 rpm's. Air jets from pointed fingers ahead of cutterbar keep shattered grain from falling off platform.