

SIMPLE 'ON THE GO' ADJUSTMENT

"Down Pressure" Shocks For Deere, Kinze Planters

New from Black Machine Mfg., Vinton, Iowa, is an air "down pressure" system for Deere and Kinze planters that uses regular air shocks — the same type used on passenger cars — to apply extra strength for cutting through heavy trash.

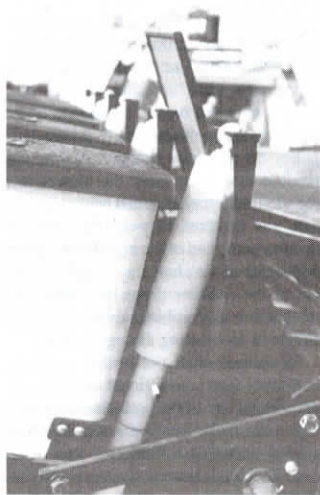
On each row unit, the standard heavy-duty springs are replaced with an air-operated shock and mounting bracket. The advantages:

- One adjustment sets down pressure for all row units.

- All row units automatically receive and hold the exact same pressure (up to 150 psi).

Once installed, the system is charged with air to provide the desired "down pressure". It can be recharged, as needed, with air from a portable air tank. For field situations requiring frequent changes in the amount of down pressure applied, an optional, planter-mounted battery-powered air compressor is available. It allows you to change the amount of down pressure for all row units "on the go" right from the tractor seat. One switch turns the compressor on to add air to increase down pressure. A second switch (Schrader valve) bleeds air to reduce down pressure.

The system is currently available for Deere 7000, MaxEmerge, MaxEmerge II (including vacuum) and Kinze planters. Air



Air shocks apply down pressure on each row unit to cut through heavy trash.

shocks, mounting brackets and air hoses sell for \$130 per row. The optional air compressor sells for \$205.

Contact: FARM SHOW Followup, Black Machine, Mfg., 609 Sixth Ave., Vinton, Iowa 52349 (ph 319 472-5541).

THEY BOOST POWER AND THE ENGINE RUNS COOLER

Home-Built Header Pipes For IH Tractors

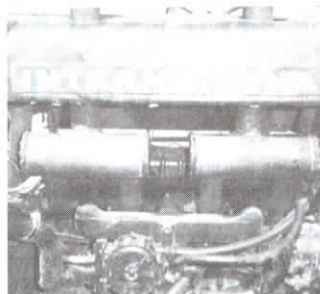
After cracking several stock manifolds on his IH 660 tractor, Bruce Klemm, Whitelaw, Wis., decided to make his own custom replacements.

"The tractor is now much quieter and runs 10° cooler. There also seems to be more horsepower," says Klemm, noting that dimensions of the manifolds he made should work on all IH 460, 560 and 660 models as well as 706 to 806 models, and any other machine with a 263-301 IHC engine.

"I used 3/4-in. flat plate steel to make manifold flanges to bolt to the head. To these I welded 6 1/2 in. long, 2-in. dia. steam pipe on a sharp angle upward. I then welded a length of 12-in. long, 4-in. dia. heavy pipe - capped at either end - to the 2-in. steam pipes to act as an expansion chamber. From each expansion chamber, a 3-in. pipe 20 in. long runs straight up through the hood, giving the 6-cyl. tractor dual exhaust with three cylinders per muffler.

"I bought the steam pipe from a local salvage yard that happened to have a scrapped steam-fired tar truck. The pipe worked well because of its thicker walls. LP gas pipe would also work.

"The expansion chambers, which have no baffles in them, serve two purposes. First, they create a harmonic pulsation between the three cylinders on each header pipe, much the way race car headers do. This pulsation effect helps pull exhaust from each port as the exhaust valves open. Sec-



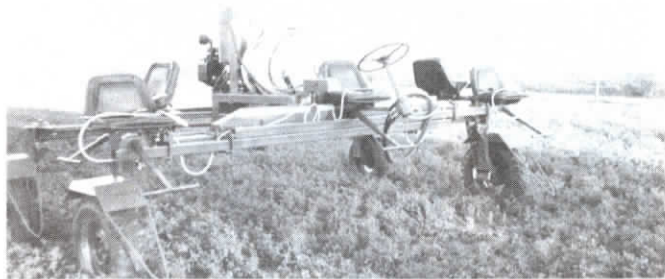
Klemm welded 4-in. dia. heavy pipe - capped at either end - to 2-in. dia. steam pipes to act as an expansion chamber.

ondly, automotive research has shown that when exhaust is routed into succeeding larger pipes, noise is reduced. Thus, the larger expansion chambers reduce noise without back-pressure.

"I calculated the lengths of pipe exactly based on engine cubic inches and working rpm's. Basically, the longer the header pipe the more low rpm torque will be produced. The shorter the pipe, the more higher rpm torque. I sized the pipes to achieve a maximum torque reading at about 2,100 rpm's.

"I would be glad to help anyone with advice on putting together their own custom manifolds," says Klemm.

Contact: FARM SHOW Followup, Bruce Klemm, 9008 Meier Rd., Whitelaw, Wis. 54247 (ph 414 732-4592).



Buggy's 14-ft. wide wheelbase runs down the slightly wider row spacing left at either end of Krohn's drill. Driver can easily see the break left between passes of the drill.

COVERS A 40-FT. WIDE AREA

First Bean Buggy Built To Run In Drilled Beans

"I built it because there was no bean buggy on the market that had a wide enough track width for our drilled beans," says Martin Krohn, Herman, Neb., who built a self-propelled bean buggy with a 14-ft. wide wheelbase that runs down the slightly wider row spacing left at either end of his grain drill.

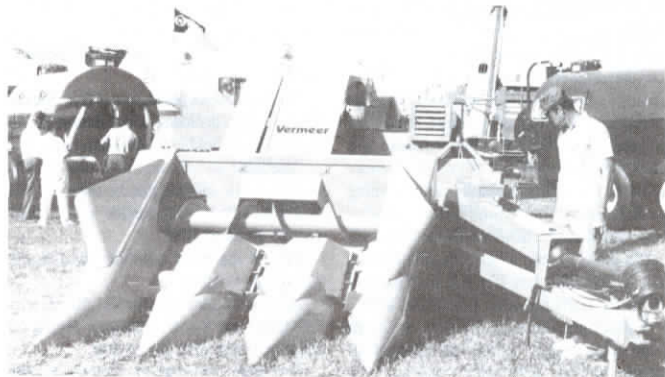
Krohn, a recently retired engineer, has started custom-building the wide-track new bean buggy.

Built from square steel tubing, the buggy is hydrostatically-driven, powered by an 18-hp. Kohler gas engine. The driver sits in the middle-front when transporting the bean buggy. He can move himself, along with steering controls, to a position over the drive wheel when running through the beans. The drive wheel position puts the driver where he can easily see the break left be-

tween passes of the drill. The five seats are positioned with one in the middle, one above each drive wheel, and two mount on outriggers that slide out when you get to the field, allowing the buggy to cover a total width of 40 ft. Since all four of the 15-in. wheels steer, the buggy is able to make tight turns at the ends of the field. Spreader bars ahead of each wheel move tall-canopied beans out of the way. The rig's 3-ft. plus ground clearance makes it possible to use the buggy all season long.

"There's less pressure to get done early," says Krohn, noting that the rear wheels on the 10-ft. long rig follow in the tracks of the front wheels. Track width is adjustable to also adapt to row beans.

Contact: FARM SHOW Followup, Martin Krohn, Rt. 1, Box 96A, Herman, Neb. 68029 (ph 402 654-2446).



The pull-type picker can be purchased with a Deere 2 or 3-row head, or you can buy it without a head and provide your own.

ONLY COMPANY STILL MAKING THEM

Vermeer Introduces New Pull-Type Corn Picker

Vermeer Manufacturing, the "one and only" company making them, has introduced a new pull-type ear corn picker.

It can be purchased with a Deere 2 or 3 row head, or you can buy it without a head and provide your own. A larger pull-type model that accommodates a 4 or 6 row head is under field test but not yet in commercial production.

Equipped with a two or three row head, the new picker will husk approximately 250

bu. per hour using a 50 hp tractor. "We think our new pull type will be of interest to farmers who want to reduce drying costs, improve corn quality and recapture the added feed value of cobs," the manufacturer points out.

Sells for right at \$17,000, not including a header.

For more information, contact: FARM SHOW Followup, Vermeer Mfg., PO Box 200, Pella, Iowa 50219 (ph 515 628-3141).