

The nitrogen-charged cylinder taps into the lift side of the hydraulic lift cylinder and absorbs the shock of sudden bumps or jerks of the loader.

"HYDRA-SMOOTH" CYLINDER CUTS MAINTENANCE COSTS

New "Shock Absorber" For Tractor Loaders

"It'll pay for itself the first year in reduced maintenance costs," says Kelly Brow, inventor-manufacturer of a "shock absorber" for tractor loaders.

Called the Hydra-Smooth, it's a nitrogen-charged cylinder (22 in. long and 2.5 in. in dia.) which you tap into the lift side of the hydraulic lift cylinder. "By dampening the shock of the hydraulic system, the Hydra-Smooth takes stress off the tractor and the loader itself," says Brow. "For example, suppose it's taking 800 lbs. of hydraulic pressure to support the load the bucket is carrying and you hit a bump, causing a sudden 500 lb. boost in pressure. Normally, the tractor and loader have to absorb this sudden jolt, causing undue wear and tear, and possibly equipment breakage. Hydra-Smooth solves the problem by absorbing

the shock of the jolt so it doesn't transfer to the tractor, or to the loader frame. The shock absorber also works as a safety device by keeping the front end of the tractor down."

Comes with brackets for easy do-it-yourself mounting on virtually all make and model tractor loaders. A turn of a ball valve lets you turn the shock absorber on or off. "Once installed, there's a brief split-second hesitation in the hydraulic system. But it's so slight you hardly notice it once you get used to it," notes Brow.

Sells for right at \$340, including mounting brackets.

For more information, contact: FARM SHOW Followup, Kelly's Mfg., 12 Division St., Toppenish, Wa. 98948 (ph 509 865-4446).



"Bender" lets you turn old pipe into livestock gates and corrals.

Hand-Operated Pipe Bender

If you've been looking for a low cost "bender" to turn old water pipe into livestock gates and corrals, take a look at this new hand-operated machine introduced from Australia by importer B.J. Tools, of Freedom. Cal.

It sells for \$525 and comes with six dies (1/2, 3/4, 1, 1-1/4, 1-1/2 and 2 in. dia. pipe), a hand-operated 4 by 18 in. hydraulic cylin-

der, and a caster-wheeled bending frame with adjustable pegs and stops to accommodate different diameter pipe. A smaller machine (for bending pipe up to 1 in. dia.) sells for \$280. For more information, contact: FARM SHOW Followup, B.J. Tools, P.O., Box 1916, Freedom, Cal. 95019 (ph 408 722-9120).

"DEFENDERS" TURN WITH YOUR FRONT TIRES AND ARE STRONG ENOUGH TO STAND ON

New-Style Front Fenders Keep Tractor Mud-Free

New-style high-clearance tractor fender turns with your front wheels to keep mud off your tractor's windshield even in the muddiest conditions.

Inventor Michael Dick calls them "Defenders". "They're made with 1/2-in. thick super tough plastic supported by two pieces of heavy flat iron. They'll easily support a 600-lb. load so you can stand on them. Unlike rigid mount fenders, Defenders turn with the front wheels to catch mud as you turn. They bolt to the bearing housing and can be removed with two bolts to mount saddle tanks."

The fender, which fits both 2- and 4-WD tractors, comes with a convenient step for refueling.

"Defenders" sell for \$275 a pair. Optional floodlights are available.

For more information, contact: FARM SHOW Followup, Midwest Fender and Supply, 104 Main St., Schaller, Iowa 51053 (ph 712 275-9910).



Fenders attach with two bolts to front axle bearing housing. They're strong enough to stand on and can be fitted with optional floodlights.



Rolling Incorporator is made of eight star-shaped wheels (8 1/2 in. dia.) grouped in two 4-wheel clusters. Slots in center mounting bracket allow angle of each cluster to be adjusted for desired intensity of incorporation. Spring-tension arm controls incorporation depth.

ROLLING WHEELS THOROUGHLY MIX CHEMICAL, SOIL TOGETHER

New Planter-Mounted Chemical Incorporator

Latest new device for incorporating herbicides into top soil when planting corn, soybeans or other row crops is the Rolling Incorporator invented by Nebraska farmer John Benzel, of Scotts Bluff.

"Instead of simply scratching or stirring the surface, this incorporator thoroughly mixes soil and chemical," says Benzel. It's made of eight star-shaped metal wheels (8.5 in. in dia.) per row.

The wheels are grouped in clusters of four, with two side by side clusters serving each row. Both clusters roll on sealed bearings.

"Mounting the eight wheels per row in

two groups of four allows them to be angleadjusted for the desired degree of incorporation," explains Benzel. "Incorporation depth is controlled by adjusting tension of a spring-loaded control arm."

For trashy conditions, Benzel is perfecting a set of mechanical "clean out" fingers that prevent stalks, straw or other debris from building up on the star-shaped wheels.

Sells for \$250 per row.

For more information, contact: FARM SHOW Followup, John Benzel, 2501 5th Ave., Scotts Bluff, Neb. 69361 (ph 308 632-2326).

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