#### DESIGNED FOR OVERHEAD TANKS

# First-Of-Its-Kind Fuel Tank Gauge

New fuel gauge eliminates the need to climb up on top of overhead gravity-feed fuel tanks with a measuring stick.

Invented by Alberta farmer Jim Bergeson, the new "Fuelevel" simply taps into the outlet valve at the bottom of the tank. It reads like a gas gauge in a car. Fits any size tank and works with any liquid.

Bergeson tested a lot of designs, including sight gauges and pressure-filled liquid tubes. He finally developed a mechanism that uses a piston and needle that measures the pressure that fuel exerts inside the tank. "The first one I built used a diaphragm from a Holly carburetor. It worked good but then it took a long time to get the parts I needed to make production models. Now I've got a simple gauge that works on all gravity-fed tanks."

When the gauge gets down into the "red" zone, that means there's 8 in. of liquid left in the tank. That's true whether it's mounted on a 1,000 gal. tank or a small 5-gal. pail. "Eight inches of liquid always exerts the same amount of pressure," he notes. The gauge actually measures inches of pressure and is designed so that when there's 48 in. of liquid it reads full. Most 500 gal. tanks are 48 in. in dia., so the gauge will read "full" when the tank is filled. On a 1,000 gal. tank, the gauge will read "full" until liquid in the tank gets down below the 48 in. level. On a 300 gal. tank, which is usually



"Fuelevel" taps into outlet valve at bottom of tank and reads like a gas gauge.

40 in. dia., the gauge will never read "full". To manufacture the guage, Bergeson searched all over the world for a plastic that would stand up to wide range of liquids. Initially he sold the gauges himself at farm shows but now he has sold the rights to Westeel, which is distributing it throughout the U.S. and Canada. Sells for \$29.40 (\$33 in Canada). Takes just minutes to install, fitting between the valve on the tank and the refill hose.

Contact FARM SHOW Followup, Westeel Inc., 803 25th St. N., Fargo, N. Dak, 58102 (ph 701 232-3201), In Canada, contact: FARM SHOW Followup, Westeel Inc., P.O. Box 792, Winnipeg, R3C 2N5 Canada (ph 204 233-7133).

### MALATHION DRIPS ONTO ENGINE MANIFOLD. CREATING INSECT-KILLING CLOUD

## Mosquito Fogger

"Anyone can make one. Gets rid of mosquitos, gnats, flies and other flying pests," says Kevin McWilliams, who came up with an easy-to-build design for a mosquito fogger that lets him control the serious insect problems he has on his farm near Hempstead, Texas

"We've got a lot of rice fields around here and a river nearby. We've also had a lot of rain this year so insects have been bad, tormenting both people and livestock," says McWilliams, who simply pulls his homebuilt fogger around the farmyard every few days to keep insects at bay.

He says his idea would work with any small gas engine. He used an 8-hp. Briggs & Stratton engine taken from a junked riding mower. The engine mounts on a small trailer. The only modification to the engine is a 3-ft, length of 1/2 in, steel pipe attached to the exhaust manifold. The pipe is bent in an "S" shape. It heats up as exhaust shoots out of the engine and through the pipe.

A 1 1/2 gal, chemical tank is filled with an equal parts mixture of Malathion, diesel fuel and water. A length of copper tubing runs from a petcock at the bottom of the tank to the modified manifold. It wraps around the manifold to preheat the chemical mix and then drips it into the upper part of the heated-up manifold. The liquid turns into fog that comes shooting out of the tube about 10 ft., fogging the surrounding area.

"It's simple and it works. Nearly everyone has an old engine around not being used. Takes very little time to construct at

almost no cost. Commercial foggers are cost prohibitive so there's nothing else on the market for farm use that'll do the job like this," says McWilliams.

He pulls the fogger around his farm with a garden tractor. One-half quart of Malathion will fog a 5-acre area. (Malathion sells for about \$12 a gal.) The water-dieselchemical mix doesn't seem to bother plants and shrubs, although McWilliams says he's careful not to get too close to shrubs or small trees because the heat of the steam can burn leaves. He also stays far away from his bee hives since Malathion kills bees.

In addition to mosquitos, the fogger also kills buffalo gnats which are particularly hard on both people and livestock. McWilliams raises cattle and sheep and says that by running the fogger around his farm every few days, he's able to keep the livestock relatively insect free.

When McWilliams and his family want to spend the evening on their open deck, they fog the area around it at about 5:00 and can then dine in peace throughout the entire evening without seeing an insect. "It seems to keep them down pretty good for about 3 days, then we have to spray again.

Before building his tow-behind fogger, McWilliams first built a smaller version using a gas-powered sidewalk edger.

For more information, contact: FARM SHOW Followup, J. Kevin McWilliams, P.O.Box 617, Hempstead, Tex. 77445 (ph 409 826-2421).

#### "MOST FLEX-FOLD PLANTERS 1 YEAR OLD OR OLDER HAVE LEAKY HYDRAULICS"

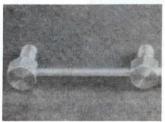
## Hydaulic Repair Kit For Deere Flex Planters

An Illinois specialty manufacturer is doing a booming aftermarket business retrofitting Deere 7200 flex-fold planters with a hydraulic repair kit that replaces the manifold system that feeds oil to lift wheels.

"I've talked to Deere dealers in 22 states and they've all got the same complaint," says Joel Taylor of Danville Rubber Industrial Pipe & Supply (D.R.I.P.S.), Danville, Ill. The problem part is a hydraulic manifold inside the toolbar on 16-row front-fold planters and even on some 12-row. Hydraulic hoses connect to the manifold which then directs oil to cylinders on the lift wheels. Until 1986, all such manifolds on Max-Emerge planters were made out of seamless tubing with welded joints. In 1986, the company switched to a new multi-piece compression fitting that uses a variety of rubber, nylon and other compression-type parts. Since then, all new planters have the new system as do replacement kits for older model Max-Emerges built in 1985 and

"The joints generally don't start leaking until the second year when the rubber dries out and other fittings weaken. Then you start losing anywhere from 1 gal. of fluid a day up to 7 or 8 gal. of fluid, depending on how bad it gets. Many farmers don't even realize they have a problem - they just keep replacing the fluid - but if you look at the bottom of the toolbar you can usually spot the fluid leakage," says Taylor. "Deere doesn't acknowledge the problem because it generally shows up after the 1-year warranty period has expired, but if you talk to dealers, they'll tell you another story.'

D.R.I.P.S. first got exposed to the problem when a Deere dealer asked the company to help one of his customers, who owned over a half million dollars of Deere equipment and was threatening to switch to Case/IH if the dealer couldn't solve the leakage problem on his 16-row 7200. D.R.I.P.S. took a look at the planter and put together a kit made out of seamless steel



These single-piece fittings replace Deere's standard multi-piece fittings on manifold system inside box beam.

tubing with welded joints that's much like the system Deere itself had been using.

"Deere's manifold today has 199 separate pieces inside the box beam. Our manifold has just 8 pieces with socket weld fittings. Deere's replacement parts take about 6 hrs. to install. A farmer can install our kit in just 2 hrs., using a special wrench we supply with the kit. We guarantee the manifold for 2 full seasons," says Taylor.

"One dealer I talked to told me he'd sold six 16-row flex-fold planters but that none of them have a problem. I suggested he take a closer look. He called me back soon after and said he'd looked at four of the planters and they all had leakage. Nationwide, 80 to 85 percent of the dealers we've talked to have had flex-fold planter manifolds that have begun to fail after one year.'

Deere's replacement parts - identical to the original parts - sell for \$637 (approximately \$800 installed). D.R.I.P.S. sells its kit for \$809 directly to farmers or dealers. Comes with complete do-it-yourself instructions. Although Taylor says the problem has been most severe on Deere 16-row flex planters, the company will custom-assemble manifold kits for other models.

Contact: FARM SHOW Followup, Danville Rubber Industrial Pipe & Supply, P.O. Box 0094, 703 E. Williams, Danville, III. 61834 (ph 217 443-0269).

#### TAKE UP NO BED SPACE

# Slideout Toolboxes For Farm Pickups

Tools are always at your fingertips with the new slideout toolboxes for pickups, introduced by K & M Mfg.

The twin toolboxes (one for each side) are 32 in. long, 12 in. wide and right at 7 in. high. They slide to the pickup's sides on a common mounting rail for easy access to tools. The boxes can be lifted off the track and carried to the job site. Thanks to their low, slanted-lid profile, the boxes don't block rear vision. Center opening between boxes provides clear view of ball hitch when making 5th wheel hookups. Rubber mat in bottom keeps tools from rattling.

Closing the lid on a box automaticlly locks it on the rail so it can't slide on turns, or when traveling bumpy roads. The box lids can also be locked to discourage thieves.

A retail price for the twin boxes hadn't been established when this issue of FARM



Twin toolboxes slide to the pickup sides on a common mounting rail for easy access to tools, says inventor Harold Fratzke.

SHOW went to press.

Contact: FARM SHOW Followup, K and M Mfg., Box 409, Renville, Minn. 56284 (ph 1 800 328-1752, 612 329-3301).