## Best, Worst Tractors

(Continued from preceding page)

"It ierks when shifting from 13th to 14th gear even though all other gear shifts are smooth. Also, the remote cylinder hose ends do not slip into the remote outlets as easily as they should. Otherwise, we're pleased with it. Plenty of power and good torque," says Austin Heise, Hiawatha, Kan., about his 1983 Deere 4850 with MFWD.

John Lee Downey, Pikeville, Tenn., owns a 1978 Massey Ferguson 265. "I'm fairly satisfied with the 265 even though I have a 1974 Massey 165 that has more power on the drawbar than the 265 and is, in my opinion, a better tractor. They should change the gearing on the 265. It's always either too fast or too slow. The battery should be moved out from in front of the radiator to keep from blocking air flow. I added a Massey all-weather cab which has worked out extremely well. I can remove the doors or side and back windows in warm weather or even remove the entire cab in a matter of a few minutes.'

"If they redesigned the rear window so it sloped forward, dust would not cling to it like it does now," says Ted Zacher, Aurora, Ore., who otherwise has few complaints about his International 5288 tractor.

Paul McCool, Coon Rapids, Iowa, says problems with his 1981 International 986 tractor were traced to careless assembly line work, "Two cotter pins were not installed properly. Dealer warranty was exceptional, even to the extent of providing the use of a new loaner tractor. The only fault this tractor has is that vision over the rear fuel tank is not the best.'

Richard C. Johnson, LaCrescent, Minn., has a 1982 Massey Ferguson 2705. "Excellent handling, good power, economical to run, very comfortable to drive, good brakes, and lots of gear speeds. The dealer took care of a hydraulic pump that broke. The radio speakers were very poor and the manufacturer did not have a good warrantly service. The dealer finally bought us a new speaker with his own money. I'd like to see the manufacturer put both a 1,000 and 540 rpm pto shaft in the tractor so you don't have to change them.'

John Whalen, Avondale, Prince Edward Island, likes his 1982 Deere 80-hp 3140 equipped with a Sound Gard cab. "The tractor is the same as a 2940 in the U.S. It's very versatile and works great both in the field and around buildings. The air conditioning and radio make a long day seem short. I'd like to see them improve the fuel economy when it's not under load while retaining power in the field. Would also like to see more accurate speed and distance equipment."

Vernon Katzenmeyer, Hutchinson, Minn., owns a "best buy" 1982 White 2-110. "We're very satisfied. The last seven tractors we've owned have been Oliver or White and we find them equal to or better than any other make available. Comfort could be improved in the seat and suspension, and also the fuel economy could be

"We've had no down time in 2,000 hrs. and it has very good fuel economy. It's easily handled, and comfortable. All it needs is better hydraulic sealing to prevent leaks and a simpler design for easier maintenance." says William Ault, Greenup, Ill., about his Allis Chalmers 7040.

Sam Felter, Benton, Mo., is happy with his International 5088 purchased in 1983, "Dealer service has been good on any minor problems we've had. Good power and fuel economy. Cab is quiet and roomy, and the tractor rides well. Tilt wheel improves comfort but the hydraulic 3-pt, controls could be made easier to use. The gear shift is too far away from the operator. I would like to see manufacturers make hydraulic con-

"I would like to see manufacturers make hydraulic connectors universal."

nectors universal so the same implements could be used on different trac-

In 3,800 hrs, of use as my main tractor, all it has needed is ordinary service. I added an M & W Gear turbocharger to aid in fuel economy and fuel use dropped one gallon per hour. I also added M & W duals," says Dave Lukasiewicz, Farwell, Neb., pleased with his 1977 Deere 4230.

Oscar A. Anderson, Alcester, S. Dak., owns a 1982 Deere 4240. "I like the economy of it but I don't like the gear range. It's almost impossible to shift sometimes. I also don't like the hydraulic couplers. They are so hard to release that I broke 4 hoses. I finally added levers to the hydraulic outlets which helps release them. The pto shaft and 3-pt. sway bars are no improvement over my old 4020.

"We haven't had any downtime in 700 hrs. Very satisfied," says Mark Euclide, Sturgeon Bay, Wis., about his 1981 Long 510 tractor. "Power, handling and fuel economy are great, although I'd like to see more adjustment in the seat."

"I wish they'd raise the seat and lower the hood," says Marvin Michel, Waterloo, Wis., who's otherwise pleased with his Deere 2250 tractor. 'It's quiet and has just the right amount of horsepower. I like the fact that a light and buzzer go off if the hand brake is left on.'

"All the problems have been easily taken care of," says Larry E. Lenz, Strasburg, Ill., pleased with his International 3588 2+2. "Comfort, handling and fuel economy are all fine but it lacks power."



Shanks, 24 inches wide, inject manure 4 to 6 inches into the soil.

## **FEATURES ROTARY MANIFOLD THAT CHOPS LONG-STEMMED MATERIAL**

## "No-Plug" Liquid Manure Injector

"We've injected more than 25 million gallons of manure and haven't plugged the injector yet," reports Warren Johnson, marketing director for Farmstar, of Glenwood, Minn., about the company's new "no-plug" liquid manure injection toolbar that places manure 4 to 6 inches into the soil.

"We don't know of another injector like ours," says Johnson, who feels the injector will be popular with farmers who are already piping manure but have encountered frustrating plugging problems, and with farmers now hauling liquid manure from their lagoons in large tanks.

"A 4,000 gallon tank, full of manure, weighs about 40,000 pounds," explains Johnson. "Pulling it across a field compacts the soil, decreasing crop yields. With the injector, you virtually eliminate the compaction problem since you're only pulling the injector and dragging the hose.

Available in 5- and 7-shank models, the 3-pt, mounted injector has two key features that, according to Johnson, separate it from anything else on the market:

"The first is the new hydraulically-powered rotary manifold with a 3-blade impellor that

The second key feature is the offset shanks, spaced 24 inches on center. They're equipped with 24 inch wide sweeps and band the manure 4 to 6 inches deep. Other injectors simply place the manure in a trench deep in the soil, which doesn't make the best use of the manure," explains Johnson. He points out that the shallow

prevents plugging by spinning the

manure against a cutterbar, chopping

up straw and other long stems as they

enter the manifold. The impellor's

spinning action also acts to evenly

disperse the manure, in volumes up

to 1,100 gallons per minute, to the

shanks via 3 inch diameter hoses.

With Farmstar's Slurry King pump

you can inject material as far as 2

miles away.

placement of the manure puts it in the root zone where it's more readily available to the plants, and decomposes faster.

"Another benefit to using the new Farmstar injector is that you can use a low cost slurry pump since, unlike other injectors, you don't need an expensive pump that chops the material before it's pumped through the hose to the injector" Johnson points out.

He notes that the shanks on the injector are offset so there isn't any problem with trash buildup. The sweeps on the spring-loaded shanks can be removed and replaced with chisel points for converting the injector to a chisel plow. Likewise, chisel plows or other injectors can be converted to the Farmstar-style injector by adding the manifold, sweeps and assorted hoses and hardware, says Johnson.

The 7-shank, 14-ft. wide injection toolbar, complete with sweeps and the new rotary manifold, requires a 140 hp. tractor, and sells for \$7,885. It can also be purchased as part of a complete injection system with agitator, pump, pipe and hose.

For more information, contact: FARM SHOW Followup, Farmstar, Hwys. 55 & 28, Glenwood, Minn. 56334 (ph 612 634-4554).

Ronald Judy, Gate, Okla., has been pleased with his 1981 Deere 4440 tractor. "The cab is super. Good hydraulics, good power and I have had only a minimum of problems in 1070 hrs. The steering is so touchy, however, that traveling down the road at 20 mph the tractor weaves back and forth. This may be due to radial tires.'

"I don't think this tractor could be improved," says Vincent Erickson, Monticello, Minn., happy with his 1982 and 1983 model Allis Chalmers 6080 tractors. "We're very satisfied. Excellent fuel economy, excellent

Fillard Tolle, Otway, Ohio, likes his 1981 Long 460 "because of the price. They could make it start a little better but everything else is alright."