



Articulated 4-WD 4-row forage harvester is powered by a Cummins 6-cylinder diesel engine and uses a high-capacity silo blower to throw silage back into a wagon.

HIGH-CAPACITY RIG BUILT FOR \$30,000

Home-Built 400 Hp Forage Harvester

"It chops two tons per minute or up to six acres per hour and has saved us a lot of money," says Lewis Zimmerman, East Earl, Penn., who built his own articulated 4-WD self-propelled 4-row forage harvester using a 400 hp Cummins 6-cylinder diesel engine and a high-capacity silo blower. Zimmerman uses his home-built rig to chop corn silage and haylage for his 90-cow dairy herd as well as to custom chop 1,000 acres of corn silage each year.

The one-of-a-kind chopper is equipped with a 4-row New Holland header, a home-built cutterhead drum, a cab and stairs removed from a Deere 7720 combine, and high flotation tires. It uses a powerful 50-in. dia. New Holland model 25 silo blower to throw silage straight back into a trailing wagon. Zimmerman has three 18-ft. long, side-unloading 12-ton wagons.

"A comparable capacity commercial self-propelled forage harvester costs about \$115,000. We only spent about \$30,000 including the cost of the New Holland head," says Zimmerman, who operates a dairy and custom silo filling business. "Before we built this chopper, we were using a Fox three-row pull-type forage harvester and two small worn-out wagons. Now, if we have a big enough tractor at the silo blower, we can keep all three 12-ton wagons busy. Articulated steering allows the chopper to turn in a 9-ft. turning radius so we can move

around in small fields without knocking down corn. The 4-WD lets us go right through wet ground, and the high flotation tires apply less weight per square inch than a pull-type forage harvester to reduce soil compaction."

Zimmerman made the frame supporting the engine from 12 in. channel iron. He modeled his home-built chopping cutterhead after the cutterhead from a Deere self-propelled forage harvester. To build it he bolted small segmented knives to angle irons that are welded to an 18-in. dia. drum. The silo blower is mounted under the cutterhead and powered by a V-belt off the cutterhead drive, and the gooseneck spout was borrowed from a New Holland 2100 self-propelled forage harvester. The chopper's front tires, 30L by 32, are the same ones used on late model Deere combines. The front tires are slightly taller than the rear tires (23 by 26), to handle the additional weight of the header.

The hydrostatic transmission allows infinite speeds up to 17 mph. To unload, the driver presses a button in the cab which mechanically unlatches the wagon's drawbar by means of a cable extending from cab to hitch. Wagons are hooked up manually.

For more information, contact: FARM SHOW Followup, Lewis Zimmerman, Box 192, East Earl, Penn. 17519 (ph 215 445-6851).



The "Hydrojaw" is a two-part loader bucket for front-end loaders.

GREAT FOR PICKING ROCKS, PRUNING TREES, OR PULLING SHRUBS

New Loader Bucket Equipped With "Jaws"

A new two-part loader bucket that opens like a jaw to pick up objects or to load loose material while dozing, backdragging or standing still is available from W.R. Long, Inc., Tarboro, N.C.

The "Hydrojaw" is available in two models to fit front-end loaders on compact tractors with lift capacity up to 3,600 lbs., as well as skid steer loaders. You can use it as a conventional bucket, a box blade going backwards, or a jaw that opens 28 in. wide to pick objects up off the ground. The jaw is opened and closed by two hydraulic cylinders that operate off tractor's hydraulics. The cylinders retract to open the front part of the bucket. The back plate of the bucket remains stationary.

To use the "Hydrojaw" as a box blade while driving backwards, open the jaw and tilt the bucket so that the inside jaw blade cuts off high areas and the excess dirt fills in the low areas. To use the "Hydrojaw" as a bulldozer, open the jaw and drive forward.

"Bucket jaws are widely used on industrial loaders. However, as far as we know, no one else offers one for farm loaders," says Vance Long, vice president. "You can use the jaw to pick up rocks, tile, brush, trash, fence posts, stumps, and tree trunks. You can even use it to prune tree limbs and to pull up shrubs."

Two heavy duty hydraulic cylinders deliver a 5,000 lb. bite to the jaw. The open jaw dumps out the bottom, increasing dumping height by 18 inches. All of the bucket's cutting edges are equipped with high carbon steel blades. Four pins secure the bucket to the front-end loader.

The "Hydrojaw" is available in 60 to 80-in. widths. Models for small compact tractors sell for \$1,165; for mid-size tractors, \$1,370.

For more information, contact: FARM SHOW Followup, W.R. Long, Inc., 1607 Cedar St., P.O. Box 460, Tarboro, N.C. 27886 (ph 919 823-4570).

POWERED BY GAS OR ELECTRIC MOTORS

All-Terrain Wheelchair Designed For Farmers

New "wheelchair" designed for farmers with disabilities has got big tractor-type drive wheels and two sources of power - a gas engine for outside use and a battery-powered electric motor for indoor use.

Developed by Simplicity Lifts, Inc., a West Lafayette, Ind., firm that builds tractor lifts and other equipment to help disabled farmers keep farming, the new powered chair was designed specifically with farmers in mind. "Conventional wheelchairs don't work in farmyards or fields. This new tri-wheel chair can go virtually anywhere outside and yet is maneuverable enough to work well in barns, shops or other buildings around the farm," says Doug Plummer, company representative.

The new tri-wheel chair has a hydrostatic transmission to provide full power at low speeds over rough terrain and high speeds of up to 6 mph over flat terrain, even when pulling a small utility trailer. Power for the chair is supplied by a gas engine that also charges the chair's batteries. The chair can

be battery-operated inside for up to an hour of running time. When operated outside, the gas engine powers the chair and brings the batteries back up to full charge.

A joystick steers the chair. On particularly rough terrain the front wheel assembly can be extended forward to lengthen the wheelbase up to 12 in. by simply pushing a button. The seat turns 360° and is hydraulically powered to lift the rider upward as much as 8 in. for easier access to workbenches or anything else that would otherwise be out of reach.

The new chair is only 39 in. in length and 26 in. wide and it'll turn around on a dime. Both rear wheels are powered and the chair can be fitted with duals, if needed.

"It's the first wheelchair that's truly practical for use all over the farm," says Plummer. The chair sells for \$6,500.

Contact: FARM SHOW Followup, Simplicity Lifts, Inc., 345 Burnett Rd., West Lafayette, Ind. 47906 (ph 317 423-4192).



Tri-wheel chair has a hydrostatic transmission and is steered by a joystick.