



**"Shuttlebug" has a ramp on back that's raised or lowered hydraulically for wheelchair access. It has three cargo racks that can haul up to 500 lbs.**

## Wheelchair "ATV" Has A Roll-Up Ramp

"It'll go almost anywhere a 4-wheeler will go," says inventor Ron Kimball about his new ATV built for wheelchair drivers. It has a roll-up ramp on back for easy access. The "Shuttlebug", as it's called, is a front wheel drive rig. The ramp on back is raised or lowered by a pair of hydraulic cylinders, which operate off a self-contained electro-hydraulic power unit. By flipping a switch the rear axle pivots out of the way to bring the back of the machine down.

The electric-start machine is powered by a Briggs & Stratton 16 hp Vanguard twin cylinder engine that's connected to a Comet automatic torque converter and Power Tec transmission. It rides on 25 by 12 by 9-in. flotation tires.

All functions on it are controlled by a single joy stick. It has three cargo racks that can haul up to 500 lbs. "This is an off-road vehicle and can't be licensed for highway use. However, many communities do permit using it for local transportation," says



**All functions on the machine are controlled by a single joystick.**

Kimball. "No shifting is necessary. The driver selects either forward or reverse gear, gives it the gas and goes. The automatic torque converter selects the correct range and will permit speeds from 0 to 18 mph."

Sells for about \$9,000.

Contact: FARM SHOW Followup, Kimball Products, Inc., Box 792, Benton Harbor, Mich. 49023 (ph 800 358-4586; fax 616 925-9535; Website: [www.kimballproducts.com](http://www.kimballproducts.com)).

## His Tree Planter Uses Electronics, Hydraulics To Plant Accurately

A Georgia tree farmer called Jeff Dillman, Ames, Iowa, a couple of years ago for help in re-engineering a tree planter. Dillman owns a company that makes planter clutches and distance measuring wheels.

Intrigued by the request and with some tree planting of his own to do, Dillman looked into existing equipment for planting trees and other large seedlings. "I know about corn planters and planter clutches, but I was no expert on tree planting," he says.

After looking at existing tree planters, Dillman decided he could make a better machine. "I wanted to incorporate some of the corn planter technology that has been proven in recent years," says Dillman.

Dillman equipped a 5 by 7-in. toolbar with a heavy-built Kinze-type parallel linkage that supports a hydraulically-operated planting unit. A Yetter no-till coupler ripper point mount on front of the planter.

The right side of the bar is fitted with a large rubber-tired measuring wheel wired to an electronic counter. The counter hooks into the hydraulics on the planting unit. Every time the wheel moves a preset distance, it triggers the hydraulics to drop a sapling into the ground, where it opens and leaves the plant. Closing wheels behind the unit firm the soil around the seedling.

Each time the planter unit cycles, an operator riding on the planter must drop another seedling into the planter unit.

"It takes only about a second for the planter to drop down, set a tree, and recycle to the up position again.

"The machine can be set up to do check planting, like corn used to be checked,"



**State-of-the-art tree planter can be operated by a small utility tractor.**

Dillman says. "If the trees can be aligned straight across the field and at 45-degree angles from either side, you can keep most of the weeds and grass down between them with a mower or brush cutter."

Dillman says the planter can be used to plant into tilled strips or to set trees or seedlings into landscape film or biodegradable fabric over tilled soil. "With film, your weed control expenses are mostly up front, but survival rates tend to be higher."

The planter can be operated by a small utility tractor, although Dillman says a number of units could be mounted on the same toolbar.

Sells for just under \$7,500. "It would be a good machine for local conservation districts to have to rent out to farmers for reforestation," says Dillman, who's thinking about doing custom planting work with it.

Contact: FARM SHOW Followup, Jeff Dillman, Tru Count, Inc, 409 South Bell Avenue, Ames, Iowa 50010 (phone 515 232-8285; fax 515 232-8286; Website: [www.trucount.com](http://www.trucount.com)).



**ATV becomes a mini "loader tractor" when you bolt new loader onto it. Bucket is 47 in. wide and will lift up to 400 lbs. Pallet forks are also available.**

## Front-End Loader For ATV's

Just when you thought you'd seen everything, along comes this front-end loader that mounts on 4-WD ATV's. It was introduced at the recent National Farm Machinery Show in Louisville, Ky.

The "Ground Hog Loader", marketed by Smucker Mfg. of Harrisburg, Oregon, comes with a bucket as well as pallet forks. The loader is operated by an electro-hydraulic power unit that mounts on the front rack and is wired to the ATV's battery. The loader arms are secured by two pins to a permanently-mounted steel plate that bolts underneath the machine. The arms are raised or lowered by a pair of cylinders. A third cylinder is used to tilt the bucket.

Extra front end suspension - such as springs or air shocks - are required to support the weight of the loader.

"It lets your ATV do the work of a small loader tractor," says Rob Smucker. "It was invented by an Oregon apple grower who wanted a way to handle pallet-mounted fruit crates. So far we've designed mounting

brackets to fit the Polaris 500 Sportsman, Honda Foreman, and Yamaha Grizzly. We plan to offer mounting brackets for other models in the future, and we're developing a hay rake and snow plow for the loader.

"The bucket is 47 in. wide and works great for pushing feed into alleyway bunks, scraping manure, hauling dirt or gravel, etc. It'll lift up to 400 lbs. to a height of 42 in., depending on the size of the tires and the type of front end suspension. With a 400-lb. load the ATV's back end starts to get light, but the back wheels won't leave the ground."

"The loader's electro-hydraulic power unit requires more power than the ATV's original battery can handle, so the original battery should be replaced with a deep cycle gel cell battery."

Sells for \$2,599.

Contact: FARM SHOW Followup, Smucker Mfg., Inc., 22919 N. Coburg Rd., Harrisburg, Oregon 97446 (ph 800 333-4503; fax 888 605-4140; Website: [www.smucker.net](http://www.smucker.net)).



**Rock picker slips over lip of existing bucket and bolts onto each side. Teeth are moved back and forth by a hydraulic cylinder that bolts onto back side of bucket.**

## "Poor Man's" Rock Picker For Skid Loaders

"Our new hydraulic-operated rock picker is designed to be installed on any skid steer loader or front-end loader. It fits to your existing bucket," says Dan Bauer, D.K. Mfg., Mandan, N. Dak.

The rock picker slips over the lip of the bucket and is secured by a single bolt on each side. The teeth are welded onto an angle iron frame. The frame rotates freely on a steel shaft and is moved back and forth by a hydraulic cylinder. The cylinder is attached to a bracket that bolts onto the back side of the bucket and operates off the skid loader's grapple fork controls.

The unit is designed to be operated on-the-go. You lower the teeth into the ground to scoop up the rock, then raise the teeth until

the rock rolls backward into the bucket. To unload the rocks you simply lower the teeth and tilt the bucket forward.

"It's a simply designed unit that lets you pick up rocks fast. You can keep loading rocks until the bucket is completely full because as long as the teeth are in the upright position they can't roll off," says Bauer. "The unit can be used for other jobs, too, such as hauling round bales and cleaning manure out of barns. It comes in widths from 54 to 72 in., allowing installation on almost any bucket."

Sells for \$650 to \$700 depending on bucket size.

Contact: FARM SHOW Followup, D.K. Mfg., 3250 36<sup>th</sup> St., Mandan, N. Dak. 58554 (ph 701 663-9226).