

Aluminum hand rails add 40 in. to the top and fit on almost any aluminum, fiberglass or wood 250-lb. rated or less ladder.

## Walk-Through Ladder Hand Rails

Getting on and off the top of an extension ladder is one of the most dangerous parts of using one.

That's why American Innovations Corp. came out with the "Walk Through" railing that adds 40 in. to the top rung so you can safely get on and off it even if you're wearing a loaded tool belt.

The add-on railing weighs about 12 lbs. and is made mostly of aluminum.

"It fits almost any aluminum, fiberglass or wood 250-lb. rated or less ladder," says Bruce

Clark, company president.

In seconds, you can slide it over the top of each ladder beam and, using the plastic knobs, attach it to the ladder without any tools.

Sells for \$325 plus S&H.

Contact: FARM SHOW Followup, American Innovations, Dept. FIN, 1865 W. Wayzata Blvd., Minneapolis, Minn. 55356 (ph 888 912-9888 or 763 479-7092; email: customer service@ladderdolly.com; website: www. ladderdolly.com).



Al Wilson bought an old Samurai, cut off the rear end, and added a 4 by 3-ft. dump bed. He then gave it a paint job and replaced the wheels with 15-in., 12-ply tires off a forklift.

## Suzuki Samurai Converted Into Low-Cost "Chore Truck"

"T m constantly amazed at the work this little vehicle can do. It works great for both hunting and farm chores," says A1 Wilson, Garfield, Ky., who converted a 1987 4-WD Suzuki Samurai into a chore truck with a manually operated dump bed.

He paid \$1,000 for the Samurai, which was equipped with a manual 5-speed transmission and had a rusted out rear end. He cut off the rear end just behind the front doors, leaving the chassis and frame intact. He built a 4 by 3-ft. dump bed with 2-ft. high sides, using angle iron for the frame and plywood and metal for the sides.

The dump bed is balanced in the middle and pivots on two pieces of angle iron welded to the frame. To dump the bed he simply removes a pair of lynch pins.

He gave the vehicle a camouflage paint job and also replaced the Samurai's original tires with 15-in., 12-ply lugged tires off a forklift.

"It works great. I've driven it through 20year-old brambles and it doesn't even slow down," says Wilson. "I spent about \$1,500 to build it, and I wouldn't trade it for a new utility vehicle. It has more power than a Gator or Mule and has enough power to pull a 16ft. flatbed trailer as well as a boat. It's also built heavier. If a cantankerous cow ever decides to come after me, I'd much rather be in my Suzuki than in a Gator or Mule.

"My wife uses it to haul garden dirt, and we also use it to haul tools and feed for our animals. It works great for hunting, because I can load two deer and all my hunting equipment in the bed. In fact, I don't believe a Gator or Mule could hold up to the stuff I load onto this little rig. Another advantage is that it's easy to repair. If it breaks down any good auto mechanic can take care of it. I don't have to worry about paying \$100 per hour for an ATV mechanic.

"It also has a heater which makes it a pleasure to drive during the winter. And when summer comes, I just take out two bolts to remove the doors. I replaced the bucket seats with a bench seat so I can take my girls along with me on rides."

Contact: FARM SHOW Followup, Al Wilson, 12628 Hwy. 690, Garfield, Ky. 40140 (ph 270 536-3321).

## Keep Your Center Pivot Nozzles From Plugging

"Partial or complete plugging of nozzles is one of the biggest problems faced by irrigators with low pressure drop nozzle center pivot systems. Our new E-Z Screen eliminates those plugging problems and allows your center pivot to operate at the optimum flow rate as it was designed," says inventor Dale Anderson, Wray, Colo.

The E-Z Screen is a plastic self-cleaning screen that threads into the base of the couplers or goosenecks (plastic or steel) mounted on the mainline of the center pivot or lateral move sprinkler system. Mounting the screen in this way keeps sand, rust particles and other foreign debris in the mainline pipe, so it can be carried to the end of the system and flushed out periodically. The screen's grid size is small enough to protect the smallest nozzle sizes against plugging, while allowing ample flow area throughout the larger nozzle sizes.

According to Anderson, nozzle plugging typically occurs during start-up of the irrigation system when the pipe is filling and water velocity is at its highest. When this occurs the system typically has to be shut down, sprinkler heads disassembled, nozzles cleaned (where plugging was visible), sprinklers reassembled and the system restarted. Then the cycle of filling, plugging and cleaning starts all over again.

"Even after the visibly plugged nozzles are cleaned and the system is operating, the partially plugged nozzles - which are visibly undetectable - continue to cost yield," says Anderson. "E-Z Screens are a one-time purchase that takes care of the problem."

The screens are available in two different patterns – a square pattern that can be used with nozzles up to 20/64 in. dia., and a hori-



Coupler installs just above main line rather than down by the nozzle.

zontal bar pattern for larger nozzles. The screens can be threaded into any 3/4-in. female couplers or we can furnish complete units with 3/4-in. couplers and close nipples," says Anderson.

The company also offers a screening device for end guns. It's 12 in. long and 1 1/2 in. in diameter. The end gun and valve is removed and the screen is screwed into the overhang pipe. The end gun and valve is then screwed into the screen. "It's very simple and extremely effective in stopping the aggravation and yield reduction of end gun nozzle plugging," notes Anderson.

Contact: FARM SHOW Followup, E-Z Irrigation, 30400 Hwy. 34, Wray, Colo. 80758 (ph 970 332-4114).



Tom Van Pelt replaced the original engine in his Deere 4020 tractor with a 466 cu. in. engine from a 7720 Deere combine.

## **Combine Engine Powers His Tractor**

Tom Van Pelt boosted power from 90 to 160 hp in his 4020 Deere tractor. He did it by replacing the original engine with a 466 cu. in. engine from a 7720 Deere combine.

"I wanted to use an engine from a 4430, but all that was available at the salvage yard was the 7720 engine," says Van Pelt. "As it turned out, I didn'thave to lengthen the frame with the combine engine."

Van Pelt did have to install a new bushing between the water pump and the fan blade. That put it ahead of the engine without hitting the water pump. He also replaced the oil pan with an M&W aluminum pan for better cooling. Additional cooling with the bigger engine was also aided by replacing the standard radiator with one that had extra fins.

"The biggest challenge was the dual remotes," recalls Van Pelt. "The hydraulic block is in front of the firewall on both engines, but with the dual remotes on the combine engine, there was a conflict between the hydraulic remotes and the manifold. Also, the exhaust manifold was a little higher on the 466."

To make room, he machined down the end plate cap on the valve. He then tapped a hole in the remote instead of putting a cap on it, and it fit fine.

"We've put about 1,000 hours on the tractor with this engine," says Van Pelt. "On the dynameter, it measures about 160 hp, but we are careful not to put all the power through the wheels. We try to use it on jobs where we can split the power between the pto and the wheels, mostly running a 3 by 3-ft. square baler."

Contact: FARM SHOW Followup, Tom Van Pelt, 2786 Lower Elkton Rd., Columbiana, Ohio 44408 (ph 330 482-4882).