



Original two and a-half ton military trailer equipped with tall 11.00 by 20-in. tires.

“High Clearance” Gravity Wagon Built With Military Trailer

High school students taking part in an educational job training program in Benton, Ill., discovered an unusual way to make use of military equipment. They mounted a used 175-bu. gravity wagon onto a 2 1/2-ton military trailer equipped with tall 11.00 by 20, double grooved tires.

“With the 20-in. high tires and high-clearance axle it rolls easily and won’t get stuck in mud,” says Burl Boren, director of Boren’s Franklin County Farm Corporation (BFCFC), a high tech, ag-related educational training program for high school students with special needs. “The trailer has an 8-ft. long hitch which allows the driver to turn short. It can be pulled by either a tractor, pickup, or truck and is equipped with air-over-hydraulic brakes, lights, reflectors, and a slow moving sign.”

Boren and the students bought the gravity wagon from an implement dealer for \$100. To mount the wagon they welded



Crane lifts gravity box onto trailer.

lengths of angle iron onto the trailer frame, then used a military crane to lower the wagon onto the frame and welded it to the angle irons. They also welded steel brackets already on the front and back of the wagon to the frame. The last step was to paint the wagon and trailer red and the wheels yellow.

Contact: FARM SHOW Followup, Burl Boren (BFCFC), 5726 Bethel Rd., Benton, Ill. 62812 (ph 618 439-3850).

Versatile 4-WD Tractor Repowered With Military “Multi-Fuel” Engine

When Vernon and Luzella Evel, Utica, Kan., bought a used Versatile 145 4-WD, articulated tractor they got a good deal because the older tractor had a worn out engine. Vernon and his son Jim quickly remedied the problem by installing a 465 cu. in. “multi-fuel engine” out of a 2 1/2-ton 6-WD military truck.

The Evels bought the Versatile from a neighbor for \$2,500 and the military engine from a friend for \$1,000. They lengthened the tractor frame by 9 in. in order to make room for the engine and used 1/2-in. thick steel plate to make new engine mounts. The tractor still has its original transmission and clutch linkage. They were able to bolt an adaptor ring already on the engine to the tractor’s clutch housing. The pilot bearing in the flywheel was too small so they replaced it with a bigger one. The water pump fan was mounted off center and in the way of the tractor’s radiator. They had a machine shop make a new spacer for it, allowing them to remount the fan and direct-drive it off the crankshaft.

The original muffler was rusted out so they installed a new 4-ft. long muffler designed for a semi truck. The muffler is on the left side of the tractor just like the original one. An exhaust pipe comes out of one side of the engine and runs down under the frame and back up to the truck muffler.

“We’re very happy with it,” says Jim. “We use it as our main tillage tractor. We figured that buying a used tractor and military engine was the least expensive way to get a tractor with the horsepower we needed. Our total cost was only about \$5,000. We got a good deal on the engine - a military



Designed to run on gas, jet fuel and diesel, the engine is comparable in horsepower to White’s 2-155, the Evels note.

engine like ours in general sells for \$1,200 to \$2,500. It’s the same engine used in White’s 2-155 tractor which is rated at 155 hp. The only difference is that this engine has a different manifold and water pump.

“It’s called a ‘multi-fuel’ engine because it’s designed to run on gas or jet fuel as well as diesel. We go about 6 mph in the field with the engine running at 2,400 rpm’s whereas the original Cummins engine runs at about 3,000 rpm’s. The difference in engine rpm’s would reduce ground speed by 15 to 20 percent, so in order to boost ground speed we replaced the tractor’s small 18.4 by 30 tires with taller 18.4 by 38 tires.

“We lengthened the tractor frame by cutting a section out of another junked Versatile and welding it into the frame on our tractor.”

Contact: FARM SHOW Followup, Vernon Evel, RR 1, Utica, Kan. 67584 (ph 913 391-2428).



A pair of 2 1/2-ton steering axles from old Army trucks provide 4-wheel steering. 4-WD, 4-Wheel Steer “Utility Truck”

Robert Mahany, Dansville, N.Y., used the frame and engine from a 1979 International school bus, the cab from a 1985 International 2 1/2-ton truck, and a pair of 2 1/2-ton steering axles from old Army trucks to build a 4-WD, 4-wheel steer “utility truck” for jobs around the farm.

Mahany paid \$900 for the bus which was equipped with a 392 cu. in. V-8 gas engine and a 5-speed transmission. He paid \$2,500 for the truck cab and frame and \$5,000 for the two Army truck steering axles as well as a transfer case and winch. He doubled up the truck frame and mounted a steel platform on back. The Army truck axle’s remote transfer case splits the driveshaft to go to both axles.

“It’s a handy rig and cost only about \$15,000 to build. If we’d have known it would work as well as it does we’d have looked for a bus with a 466 cu. in. diesel engine to provide more power,” says Mahany. “We grow about 600 acres of potatoes scattered across several farms and use the truck to tow hose reel irrigators and other heavy equipment from farm to farm. It goes a lot faster than a tractor and lets us reduce road wear on tractor tires. The rig’s 12.00 by 20 all-season 12-ply tires are spaced 72 in. apart so we can drive right down the rows. Also, the truck body is high enough that we can pull a hose cart through the field without damaging the crop.

“We also use it in winter to plow snow. We can mount a blade on back of the truck as well as on front so we can push and pull. Both blades are raised or lowered by a hydraulic cylinder attached to the blade mounting bracket. Power is supplied by a hydraulic pump that mounts under the hood, controlled by a toggle switch in the cab. The rear blade works great for removing snow



Hydraulic operated hitch and 20,000-lb. winch mount on back.

in an enclosed area or next to a garage door or wall, etc. The operator simply backs up to a wall, drops the rear blade, and goes.

“The rear axle turns independent of the front axle so it turns very short. The front axle is controlled by the steering wheel while the rear axle is controlled by a hydraulic cylinder that’s hooked up to a remote valve. A cable-operated gauge in the cab tells us where the rear wheels are positioned. The Army truck axles have a load rating of almost 18,000 lbs. The bus’s 5-speed transmission and Army truck axle’s 2-speed transfer case provide 10 forward gears and two reverse.

“The hydraulic-operated hitches allow the operator to hook up to an implement hitch regardless of its height. The hitch can be lowered to within 2 in. of the ground or up to 28 in. high. A 20,000-lb. winch on back lets the operator pull the truck out if he ever gets stuck.”

Contact: FARM SHOW Followup, Robert Mahany, 10046 Rt. 36 South, Dansville, N.Y. 14437 (ph 607 295-7298).

Where To Go For Army Trucks, Parts

Memphis Equipment of Memphis, Tenn., bills itself as the “nation’s largest army truck and parts dealer.”

“We specialize in rebuilding Army trucks to like-new condition,” says Asbury Jones, sales manager. “We purchase surplus 4 and 6-WD trucks from a military truck pool and dismantle and reassemble them. The engines are disassembled down to the bare block. We install new pistons, sleeves, bearings and seals. Transmissions, transfer cases, differentials, drive trains, axle parts, brakes and steering systems are all inspected for replacement or renewal.”

Contact: FARM SHOW Followup, Memphis Equipment, 766 S. Third St., P.O. Box 99, Memphis, Tenn. 38106 (ph 901 774-0600; fax 946-1919).

Naglich’s of St. Mary’s, Pa., sells sur-

Surplus Army trucks are available from several suppliers.

plus Army trucks reconditioned or “as is”. Reconditioned models sell for \$12,500 to \$14,500.

Contact: FARM SHOW Followup, Naglich’s, 237 Grandview Road, St. Mary’s, Pa. 15857 (ph 814 834-1018).