

Big 12-bale rig was built on the frame of a garbage truck fitted with a combine cab.

LOADS, UNLOADS 12 BIG BALES

Bale Hauler Built From Old Garbage Truck

"We built our hydraulically-operated selfpropelled round bale hauler from a 1972 International Loadstar 1850 series 5-ton garbage hauling truck and a 1978 Massey Ferguson 760 combine. Ithauls 12 big round bales or 16 small round bales at highway speeds," says Norman Meyers and Roland Charles, partners in M.C. Fabricating, Wawota, Sask.

Meyers and Charles use the rig in their custom hay hauling business. "As far as we know there are no commercial self-propelled round bale haulers on the market," says Meyers. "Some pull-type round bale haulers work similar to our machine, but they're much slower. On a good day we can load, haul, and unload 320 bales, or 180 tons of hay, going two miles each way. Before we built this self-propelled bale hauler, we used trucks and wagons to haul round bales. It took five men to operate all the equipment. Now we're doing twice as much in one day with one man."

The bale hauler, 41 ft. long and 10 ft. wide, is equipped with a U-shaped bale loading arm, made from 4 by 6 by 3/8-in. steel tubing, and a bed with four parallel unloading chains along its length. The operator approaches each bale so that its end fits into the open end of the loader arm. When the bale is cradled within the arm, the operator activates a hydraulic cylinder which swings the bale up and flips it onto the opposite side of the bed. The operator lifts a second bale onto the bed alongside the first one, then depresses a foot pedal inside the cab. The pedal activates the chains which move the pair of bales back just far enough to load the next pair of bales. Once the bed is fully loaded, the operator activates a hydraulic cylinder to bring side-mounted "outriggers" in against the bales. The outriggers squeeze the bales together to reduce loaded transport width to 13 ft. To unload bales, the operator releases the outriggers, hydraulically tilts the bed until the back end touches the ground, and then uses the chains to push bales off as the truck moves ahead.

Meyers and Charles kept the truck's original 392 cu. in. gas engine, 6-speed Allison automatic transmission, front axle, differential, and steering components. They replaced the truck's original frame with the frame from another International truck equipped with tag axles. They mounted the combine cab at the front and installed the engine, transmission, and the combine's hydraulic components behind. The bed of the trailer consists of four 32-ft. long beams made from 2 by 9-in. structural tubing. The four "endless" unloader chains run along the top of the four beams and return through the middle of each beam.

The bale hauler is equipped with eight hydraulic cylinders. Four cylinders operate the outriggers, two operate the loading arms, one operates the hoist, and one operates a pair of sliding mirrors on either side of the cab. The mirrors slide along 2 by 2-in. sq. tube frame and extend 18 in. out on either side so the men can see past the bales when loading. The cab is equipped with the combine's original air conditioning system. The bale hauler is equipped for night loading with two quartz halogen headlights and three wide angle quartz halogen floodlights pointed toward the bed and loading arms.

Meyers says he and Charles spent \$5,000 for the garbage truck and about \$30,000 in all to build the bale hauler. They'd like to sell it for \$55,000. Also for sale is a bale hauler they built from a 1974 International school bus.

For more information, contact: FARM SHOW Followup, M.C. Fabricating, Box 9, Wawota, Sask., Canada SOG 5A0 (ph 306 739-2418 or 306 739-2119).



To unload, bed of truck is tipped up and four unloader chains pull bales off onto ground as truck drives ahead.



Cregger puts old tire casings over the tires on his mower to protect them.

PROTECTS INFLATED TIRE

Wrap-Around "Spare" Tire Eliminates Flats

"It's a simple idea but it works great to prevent flat tires on my rotary mower," says Irvan Cregger, Woodsboro, Md., who cuts out the bead and part of the sidewall on one side of junked out tire casings, then slips them over the smaller pneumatic tires on his mower.

"I haven't had a flat since I first came up with this idea 10 years ago," says Cregger. "The blades on my Bush Hog mower were throwing sticks and stones through the sidewalls of the pneumatic tires. The 'wraparound' tire idea should work for any kind of mower or any other implement where flats are a problem."

Cregger removes the wheels from the mower and deflates the tires. Then he cuts out the bead and 2 to 3 in. of sidewall from one side of a larger junked out tire so he can slip the casing over the deflated mower tire. The cut-out bead and sidewall goes on the

outer side of the mower while the full sidewall goes on the inner side of the mower, where it protects the pneumatic tire's sidewall and tread from flying debris. Then Cregger pumps up the mower tire and bolts the wheel back onto the hub.

According to Cregger, the add-on tire should be an inch or so larger than the implement tire. For example, if your implement has 15-in. tires, use a 16-in. casing. "As you're cutting out the bead and sidewall, make sure you leave enough sidewall to keep the casing from coming off the implement tire. Don't cut out both beads because you want the inner sidewall of the pneumatic tire to be completely protected from flying debris."

Contact: FARM SHOW Followup, Irvan Cregger, 11627 Woodsboro Pike, Keymor, Md. 21757 (ph 301 898-7200).

COST JUST \$100

"Beer Keg" Foam Marker

"I decided to build my own foam marker 5 years ago after pricing commercial units that cost \$500 to \$1,000. My "beer keg" marker cost just \$100," says Jerry Newton, Anderson, Alabama.

Newton's foam marker consists of an air compressor, air tank, regulator, solution tank (beer keg), and foam nozzles. "I used an air compressor salvaged conditioner from a Ford truck for the compressor. I added an extra pulley to the crankshaft of the engine to power the compressor and made an air filter for the compressor to keep dust and dirt out of it. A switch in the cab turns the compressor on and off. I used an air tank salvaged from a truck for the reserve air tank and fitted it with 25 ft. of coiled air hose for filling up tires and cleaning out spray tips. This is a feature that no commercial unit has.

"Air leaves the reserve tank and goes through a regulator in the cab which controls the distance between the balls of foam dropping on the ground. I made the regulator using a ball valve and two pressure gauges, one for air entering the regulator and one for air leaving the regulator.

"When air leaves the regulator it goes to the solution tank. I used a stainless steel beer keg for the tank to prevent rusting. The tank is filled with a soap-water solution. Air



cloth sack. You can vary the size of the hose to make big or small balls of foam. enters the tank from the bottom. When air bubbles hit the soapy water they turn into foam. To make more concentrated bubbles I installed an airstone from a fish aquarium

in the bottom of the tank. Two electric valves in the bottom of the tank direct foam to the right or left side of the sprayer.

"Foam travels through a hose down the sprayer boom where it enters a foam collecting nozzle. The nozzle fills with foam

until it builds up enough pressure to release one foam ball at a time. "I haven't had any problems in the 5 years

I've used the marker. Works great." Contact: FARM SHOW Followup, Jerry Newton, Rt. 1, Box 239-A, Anderson, Ala. 35610 (ph 205 247-3274).