

## 4-WD Tractor Built From Two Farmall F-30s

"It's no raving beauty to look at, but it's a real tiger in the field," says Slim Hodel, Roanoke, Ill., about his one-of-a-kind 4-WD tractor built from two 1930's-era International Farmall F-30 tractors and miscellaneous junk parts.

Hodel cut off the two F-30's behind the engines and faced the two rear ends toward each other. He made an articulation joint out of 3-ft. lengths of 18-in. dia. oil well pipe. He cut a slot in one pipe, squeezed it together, and slid it inside the other. A 30-in. hydraulic cylinder controls the joint, bending the tractor as sharply as 40°. The tractor is powered by an industrial-type 200 hp Caterpillar engine. Each of the F-30 transmissions has four forward gears and one reverse.

"It's a junkyard special. My brother and I built it in 1961 before 4-WD tractors were introduced," says Hodel, "We originally installed a Mann German diesel engine, but it was short on power so we replaced it with the more powerful Caterpillar diesel DC 330 engine. It has a 5 1/ 2 in. bore by 6-in. stroke for tremendous lugging power. The belt-driven drop box is geared at a 1:1 ratio which gives it tremendous torque. I used it to plow 300 acres each year for nine years and never had a problem. Now I use it to pull a 25ft. field cultivator, 25-ft. disk, and 12-ft. chisel plow. It weighs only about 12,000 lbs. but has plenty of traction and never slips while pulling implements. It goes 2 1/2 mph in first gear and 12 mph in fourth

## **Garden Tractor Service Lift**

"Makes working on garden tractors easy," says Gordon Snickers, Alborn, Minn., who designed a nifty service lift that lets him manually raise the front end of small tractors.

The "Snick Lift" consists of two short ramps and a pair of lift handles connected to nylon straps that wrap around the front axle. You drive the tractor up to the front of the ramps (which are adjustable to different size wheel widths), attach the straps, and pull back on the lift handles until the front wheels raise up on top of the ramps.

"It's great for removing blades for sharpening and for cleaning or removal of the mower deck, as well as other rou-



tine under chassis work," says Snickers. He built the lift for his own use but is looking for a manufacturer.

Contact: FARM SHOW Followup, Gordon E. Snickers, 8882 Swan Lake Road, Alborn, Minn. 55702 (ph 218 345-6411).

#### Double Torch Combo

"I run both oxygen/acetylene and oxygen/propane torches off the same torch cart," says custom manufacturer Vince Koebensky, Buffalo, Minn.

"Key to success of the system is the 'Y' tubing coming out of the oxygen tank with two separate shut-offs. The first controls the oxy/acetylene torch which is mainly used for pre-heating large areas. The second controls the oxy/propane torch which does most of the work because of the cost savings over oxy/acetylene.

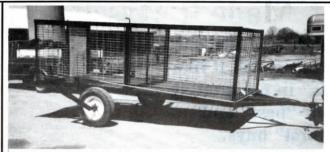
"Propane burns a bit cooler than acetylene but I can overcome the problem if I pre-heat work areas. Thus I have a very portable set-up that gives me complete versatility without having to constantly disconnect torches. The setup is definitely more expensive initially but the cost is more than offset by the benefit gained. An example of that is that in the past 6 years I've filled the propane tank twice while replacing dozens of oxygen tanks. If I had been using straight oxy/ acetylene it would have been just about a



one-to-one ratio.

"I use my torch setup every day in my shop so I've had plenty of time to give it a good evaluation. Everything's mounted on an easy-to-handle cart equipped with 15-in. car tires."

Contact: FARM SHOW Followup, Vince Koebensky, Rt. 1, Box 126-1, Buffalo, Minn. 55313 (ph 612 682-



## Hog Cart Made From Old IH Cyclo Planter

Illinois hog producer Clifford Belsly made a slick hog-moving cart using parts from a junked IH Cyclo 8-row 400 planter.

The 6 by 14-ft. cart carries as many as 25 market hogs. It raises up to 30 in. high and lowers to ground level. "I salvaged the axle, wheels, hubs, hydraulic cylinders, angle iron, square tubing and box tubing from the planter. It has 1/8-in.

thick metal plate flooring supported by four 3-in. I-beams. I used Behlen corn crib panels to make the 50-in. sides," says Belsly.

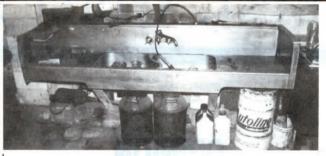
The trailer cost about \$1,200 to build. Contact: FARM SHOW Followup, Clifford Belsly, Rt. 5, Metamora, Ill. 61548 (ph 309 383-4847).

gear. I installed an old Behlen road gear in the front axle that allows it to go 30 mph on the road. I put both transmissions in neutral, then flip a lever so that only the front axle pulls."

A belt runs from the engine driveshaft to a pulley on the two drive shafts coming out of the tractors' rear ends. Hodel connected the driveshafts together with a knuckle coupler removed from a Fox forage chopper. The pulley is ahead of the knuckle coupler so the belt never twists or vibrates. An 18-gal. hydraulic pump powers the 5 1/2-in. dia. steering cylinder and a gear-driven hydraulic pump coming off the camshaft that's used to raise

and lower implements. The top of the radiator (removed from an old earthmover) is 8 ft. above the ground and the platform is 6 ft. above the ground. The original 38-in. wheels would've held the tractor too high so Hodel cut them down to 28 in. and welded them onto rims from an International utility tractor. He used an old anhydrous tank for a fuel tank. The 5-gal. oil reservoir is off an old cattle oilscratcher. The ladder was salvaged from an old Deere 55 combine.

Contact: FARM SHOW Followup, Slim Hodel, Roanoke, Ill. 61561 (ph 309 923-7041).



# "Old Sink" Recirculating Parts Washer

Ivan Zimmerman, Denver, Penn., made an inexpensive recirculating parts washer by bolting an 8-ft. long, 2-ft. wide nickleplated steel sink removed from an old house to a concrete wall inside his shop.

"It's big enough to wash engine heads and blocks and cost almost nothing to make," says Zimmerman.

He installed a pair of milk cans, as well as a water pump removed from an old pressure system, under the sink. One can is on the pressure side of the pump and the other is on the intake side. A hose equipped with a brush runs from the pressurized tank to the sink. Dirty parts cleaning fluid drains from the sink into the intake side can where dirt settles out on the bottom. Clean solvent is then pumped into the pressure side can which charges the system, When the pressure gets low the water pump starts up automatically.

Contact: FARM SHOW Followup, Ivan Zimmerman, RD 1, Box 408, Denver, Penn. 17517 (ph 215 267-2459).

### "No Hands" Control Of Combine Header

A pair of dimmer switches installed on the floor of Paul Deatz's combine cab let the Rock Port, Mo., farmer control his header without using his hands.

One switch turns the header's float control on and off. The other switch controls the electric clutch for the feeder-house and header. As Deatz approaches the end of the field, he clicks the float control off, then turns the header off with the other switch as he makes the corner.

"Disengaging the equipment prevents

extra wear to the header," says Deatz.
"The switch that controls the electric clutch for the feederhouse and header is really handy because my right hand is already busy when I turn around at the end of the field. I wired the switches so I can still use the original electric clutch button."

Contact: FARM SHOW Followup, Paul Deatz, Rt. 4, Box 117W, Rock Port, Mo. 64482 (ph 816 744-5595).