original transmission's input and shafts, so the second transmission's shafts could be welded to them. Angle brackets were bolted to the frame channels and connecting pieces were bolted to brackets and the second transmission. At the rear, angle brackets were brazed to the casing. I also ended up making 2 1/2-in. spacers with longer machine screws to bolt to the back end of the frame channel to get the transmission to fit properly.

I then mounted the hydraulic pump off the tractor's Charlyn hi-lo hydraulic pack under-



neath the driver's seat instead of behind the transmission as it had been originally. I drive it with a #60 roller chain which runs on a 1 3/8-in. dia. sprocket running on the pto shaft. The chain runs through a hole I cut in a mounting platform, which I made of 1/4-in. plate. I installed a small shelf made out of plate above the pump and mounted a single-acting valve and double-acting valve on it. I installed an oil reservoir on another plate to the right and plumbed up the system, which is complete with an oil return line and pressure gauge. (Stan Kivela, Rt. 1, Box 130, Marengo, Wis. 54855; ph 715 278-3301).

We rebuilt the pivots on the trips of this early 1980's Model 800 11-bottom (18-in.) Case-IH moldboard plow. We bought it used for \$7,000 and use it to plow most of our 1,500



acres in a typical year.

The problem was, with wear, some of the moldboards had developed a lot of play. So we turned some of the shafts in the main pivots down and put new bushings in the castings to get them true again.

The biggest improvement we made, however, was replacing the old-style two- wheel carriage on the center section with new-style Case-IH offset tandem wheels. The problem with the original solid wheels was all the weight was on the inside tire when the plow was lifted for transport. In fact, we blew that tire out bringing the plow home from the dealer's, 30 miles away. The original tires were 11L 14 or 15-in., while the new tires are bigger and mounted on 8-hole centers. The upshot of the bigger, offset tandem wheels is better flotation and a greatly improved ride.

We had the work done at a machine shop and cost was \$7,500 in parts and labor. The final touch was a new coat of paint we put on which made the plow look just like new. (Derek Eisenbeisz, 32512 127 St., Bowdle, S. Dak. 57428; ph 605 285-6738).

I've recently noticed two different individuals offering to give away their back issue collections of FARM SHOW in the reader letters section of your magazine. However, because mail service is pretty slow in our part of the country, I'm always at least "a day late and a dollar short" when I call about them. As such, I'd like to take a proactive step.

I'm asking any FARM SHOW reader who might be contemplating parting with his or her back issues to please contact me first. I'm looking for back issues starting at Vol. 18, No. 6 on back to the earliest ones. I'd be more than happy to pay postage and would consider paying for back issues in good condition. Please contact me at 409 793-4585, Email me at jjjag@tbtc.net, or write to me at the following address. (Jeffrey G. Roberts, 16707 Hubenak Rd., Needville, Texas 77461).

We modified a early 1980's 40-ft. Hiniker field cultivator we bought used so it pulls easier, levels fields better, permits better trash flow, and saves fuel.

We first cut the cultivator down 4 ft. per side so our tractor would handle it. Then we welded on three lengths of 3-in. sq. tubing in order to switch the cultivator over from its original V-



shaped configuration to rectangular, a newer design. We stretched the teeth out on the bars to 36 in. spacings, from 18 in., so we can even get through standing com stalks with ease. Getting the teeth lined up was the trickiest part of the project, requiring a lot of measuring and positioning, then remeasuring and repositioning.

We've pulled the cultivator with our Deere 4-WD 7520 over 600 acres of plowed ground for two seasons. We've been able to cut back from two passes to one because it does a much better job leveling fields so we've also been able to realize a savings of 1 to 2 gal. of fuel per acre. It doesn't work the tractor like it did before and doesn't plug at all. It just does a beautiful job and cost only \$300 or \$400 to modify.

We also came up with a low-cost, long-lasting way to replace the fertilizer auger tube on our 1980's 8-row (30-in.) Deere MaxEmerge 7000 after it rusted out for the umpteenth time. The problem is that Deere's thin gauge PVC tubing isn't built heavy enough to last for more



than three or four years, and Deere replacement parts sell for a whopping \$600.

We simply cut up an old 60-ft., 6-in. dia. grain auger we had laying around and used 20 ft. of the tube for the replacement. We had our local blacksmith shop do the work. They made new mounting brackets to replace the rusted out originals and installed the tube on them. Since they didn't like working with galvanized metal, they used 3 or 4 ft. of black tubing on the end where the fertilizer comes in. We used it for the first time this season and it works great. Only cost \$150. (James and Debra Noram, 1932 270th Ave., Currie, Minn. 56123; ph 507 859-2770).

I make a kit that lets you mount narrow front ends on 66 through 86 series IHC tractors that weren't designed to accept a narrow front. We use a double-tire front end from IHC series 460 to 560 IHC tractors on up to the 856 and 1256 tractors. Vegetable farmers around here like the converted tractors because tire tracks are evened out and greater flotation is provided in soft plowed ground.

The kit consists of an adapter plate with 3-in. dia. center shaft in a brass bushing-lined sleeve with heavy-duty thrust bearings to carry the weight of the heavier tractor. Once you've got the conversion plate mounted on



the narrow front end, you can swap out the axles in minutes.

The conversion raises the front end of the tractor 5 1/4 in. That's OK because many of these later tractors have larger, taller tires (18.4 by 38 or 42-in.) than the 460's through 560's so the kit actually helps level the tractor.

Kits sell for \$500, not including the steering cylinder. (Jeff Weitzel, 150217 Experiment Farm Road, Mitchell, Neb. 69357; ph 308 623-1128).

Our mid-1960's 85A Michigan payloader has all kinds of power and we don't have to worry about parts availability anymore since we repowered it with a big car engine. We bought the loader a few years ago. aware its straight



6-vyl. 60 hp gas Waukasha engine was on its last legs. Rather than repairing the old engine or replacing it with a diesel, we bought a 400 cu. in. V-8 out of a 1975 Mercury Marquis for \$50 and had it completely gone over.

Since both engines were equipped with automatic transmission, we had to match the ring gear on the loader's transmission with the engine and turn the transmission's adapter plate 180 degrees to get the starter positioned under the engine. We located the exact center of the engine and loader transmission and bolted the engine to the bell housing. We welded a couple extra brackets to the loader frame, but basically used the existing motor mounts to install the engine. Since the V-8 motor was 6 or 8 in. shorter than the original engine, we moved the radiator back so it lined up with the engine's fan. The whole project, including new hoses and belts, cost only about \$350. We use the payloader, which is equipped with a 3 cu. yd. bucket, all the time to load manure, move big round and square bales, do some excavating, and push snow. (Duane and Jim Hansen, R.R. 2, Box 61, Lake City, Minn. 55041-9543; ph 612 345-4808).

Building a round bale feeder with a roof has cut hay loss to a minimum. It was easy to do and is easy to load. The hay we save more than pays for the extra expense. The sides of the feeder are made from pieces of angle iron. For the room we used metal sheeting of



the kind used on metal farm buildings. One side of the feeder hinges open, making it easy

to load. Why aren't all bale feeders made this way? (Bruce A. Myer, 16130 Comer Rd., Ft. Wayne, Ind. 46819)

Three years ago we needed an irrigation system for our strawberries and bought some drip irrigation tape from a local manufacturer. The idea was great but the hose kept pulling apart and we ended up with more splices than hose. We knew there had to be a better way. We spent the following winter designing and building a machine that would glue the porous material together and after much testing we found a specialty adhesive company to supply us with a glue that has proven to be very durable.

Water oozes out of the walls of the tubing at a rate of about 1 gal. per foot per day. The maximum pressure required is 5 psi, so it can be gravity-fed. The low pressure requirement means you can eliminate the cost of expensive filters usually required for drip irrigation.

The most attractive thing about our new irrigation tape is the cost. Aside from not having to buy a filtering system, pumping requirements are minimal. A 3/4-hp submersible pump will provide sufficient water for about 10 acres of row crops. A water storage tank 5 to 10 ft. above ground is probably the most efficient. Soluble fertilizers and chemicals can be injected through the system.

The system is so simple anyone can set it up. We sell the tubing for 5 cents per foot for orders over 5,000 ft. It can be reused many times. (David G. Lepp, Earthway Irrigation, Rt. 4, 549 Concession #6, Niagara-on-the-Lake, Ontario, LOs 1JO. Canada ph 905 687-9446)

I modified the balance jacks for my pickup camper so they can be used to hang the



camper from under the roof of a shelter rather than trying to balance it on the ground. Makes the camper much easier to use. I used scrap metal and the original jacks. (J.E. Freckleton, 1651 Harris Rd., Penfield, N.Y. 14526)

We look forward to each issue of FARM SHOW. We have picked up some good ideas from other farmers. We especially like the "Best & Worst Buys" section. Over the years we have seen trends take place there that have helped us avoid potential problems and make better choices in our own purchases. (Sam Lambert, 20797 N. 2000 E. Rd., Pontiac, III. 61764)

We're proud to introduce our new "Wiser Viser", an add-on viser panel that clips onto any existing sun viser in any car, truck or tractor cab. It's unique in the way it adjusts up,



down or sideways. You can put it wherever you need it. It's 12 in. wide and 5 in. deep. A ratchet hinge holds it firmly in place at any angle. It even works great to restrict glare from your side rear view mirror. Folds up neatly behind your existing shade visor. Sells for \$14.95 plus \$3.00 S&H. (Walt Behrens, Behrens Construction & Mfg., Rt. 6 Box 227, Country Club Rd., Minot, N.Dak. 58701 ph 800 659-1268)

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