### Money-Saving Repairs & Maintenance Shortcuts

## Where To Get Spreader **Chains And Paddles**

More than 30 years ago Hank Van Bochove started making apron chains and spreader paddles for manure spreaders at a large feedlot near his Inwood, Iowa farm. By experimenting with different metals he was able to develop paddles and chains that are stronger and last much longer than the OEM parts. Today, he and his sons Brad and Justin, nephew Tyler, and 3 other employees are a big supplier of paddles and pintle chains to customers across the country.

"We started out small and soon the word spread that we made excellent replacement parts. We were also able to offer huge cost savings so the business just grew from there," says Brad. "Now we manufacture and stock many of the common paddles that fit several types of spreaders on the market." The family-owned business, known as Excel Manufacturing, will also custom-manufacture paddles to whatever specifications a customer wants.

"We make our paddles from high carbon steel," says Brad. "They're thicker and wider than the original and OEM upgrades, so they last longer. Our paddles are more resistant to abrasive material like sand and gravel and corrosive manure than ones you'd buy from a spreader dealer."

Excel's chains fit manure spreaders and silage wagons. "Short line dealers don't want to inventory those parts, so we're able to provide a lot of chains that simply aren't readily available anywhere else," Brad says. Because they buy large quantities of chain they're able to save farmers about 40 percent on the cost of a new pintle apron chain compared to ones bought from a dealer.

The company's website is designed in a way that customers can easily order the chain or paddles they need online. The make and model of the spreader along with the chain type, bed length, center-to-center width and links between flights provides Excel with the



Hank Van Bochove and his sons are a big supplier of heavy-duty paddles and pintle chains for manure spreaders.

information they need to fill the chain order. Paddle orders are filled in the same manner when the make and model of spreader are provided. Excel also takes orders by phone if a customer doesn't have internet access.

"We try to fill every order within one

day and can ship it for next day arrival if a customer needs it fast," Brad adds.

Contact: FARM SHOW Followup, Excel Machine & Manufacturing, 2751 Beech Ave., Inwood, Iowa 51240 (ph 712 986-4288; www.manurespreaderparts.com).

#### Plastic Covers Solve Deere Shift Problem

Randy Smith says Deere forgot to make a cover for an exposed circuit block on its 5425 tractor. He discovered the problem when he borrowed a friend's tractor and was warned the shuttle drive only worked occasionally unless the pto was engaged.

"A Deere mechanic came out to check it, and it worked...while he was there." says Smith. "I did some digging and found some corroded fuses on an exposed fuse block right above the axle. I called Deere to order a cover, and they said no cover existed."

Since he had a milling machine in his shop, he decided to make his own cover. At first he thought to make a 2-part mold and cast plastic in it. After noticing a welding stick that had been dipped in Plasti Dip, he decided to try a dip mold. He got busy with a block of aluminum, milling it down to the right size

and shape.

"I emailed Plasti Dip and asked what release to use, but they said it wasn't made for dip molding," recalls Smith.

He checked the internet and found one fellow who had used plastic wrap over a mold. Smith decided to try silicon spray first, and if that didn't work, he would try the plastic wrap. The silicone spray worked.

"I sprayed the mold and let it dry and then dipped it," he says. "It took about 4 dips with half an hour in between each. Aside from making the mold, it didn't take that long."

Smith also made a cover for a 12V junction box above the fuse block. He filled the sockets full of dielectric grease and reinstalled the fuse box. Covers worked great and so did the shuttle.

"The Deere mechanic charged my friend





Deere never made a cover for an exposed circuit block on its 5425 tractor, so Randy Smith made his own. Photos show mold with new plastic cover (left) and cover installed over fuse block.

\$300 after theorizing the intermittent problem was a wire grounding at random someplace," says Smith. "If anyone else has this problem or just wants a cover Deere can't provide, I'll be glad to make them."

Smith says he would charge around \$20 to make the covers. Since making his own, he has sold 4 sets to friends with a similar problem on Deere tractors.

Contact: FARM SHOW Followup, Numeric Control, LLC, P.O. Box 916, Morton, Wash. 98356 (ph 360 269-1497; www.simplecentrifuge.com).

"Banana Pan" is designed to drain all the oil from a **Duramax diesel** engine so vou won't be putting new clean oil in with dirty oil.



# "Total Drain-Out" Oil Pan **For Duramax Diesel Engines**

the oil from any Duramax diesel engine, resulting in a cleaner engine every time you change the oil.

The Duramax diesel engine's dirty secret is that it has a hump at the bottom of the oil pan that's lower than the drain plug. The hump adds volume, so you can have more oil in your engine. But when you drain the oil there will still be 2 cups of undrainable, used oil trapped in the hump.

By eliminating the hump, the new "Banana Pan" is able to drain all the oil so you won't

This new oil pan is designed to drain all be putting new clean oil in with old dirty oil. It's made from 356T6 aluminum and has a stainless steel magnetic drain plug with safety wire. The pan is an exact fit so no special tools, cutting or grinding are required for

The Banana Pan comes powder-coated in yellow. It sells for \$379 including S&H.

Contact: FARM SHOW Followup, Banana Pan, P.O. Box 3078, Oceanside, Calif. 92051 (ph 800 474-7538; www.go-truck-yourself.

## 8-Ft. Fluorescent Lights Fitted With CFL Bulbs

"Eventually 8-ft. fluorescent lamps will be phased out and we won't be able to buy them, so I got an early start by retrofitting a couple of 8-ft. long ceiling-mounted fixtures in my garage with compact fluorescent lamps," says Terry Morgel, Avon, Minn.

He removed the ballast and all the factory wire and lamp holders from the fixture. "The factory wire is too light for CFL's, which require AC voltage," he explains.

He installed two different kinds of lamp holders: one with a short pipe nipple, and the other with an adjustable weatherproof holder that can be pointed to whatever you're working on like the ones used on outdoor floodlights.

"To install the lamp holder with a short pipe nipple, I drilled a 3/8-in. dia. hole in the fixture and then fed the nipple and wire through the hole and tightened the nut," says Morgel. "To install the adjustable weatherproof holder, I drilled a 7/8-in. dia. hole in the fixture and then inserted the lamp holder and tightened the nut. It's best to use at least a 14-ga. wire when installing CFL lamps. You can install as many lamp holders in each fixture as you like."

He bought the lamp holders at Menards. The outdoor adjustable holders sell for about \$3 and the porcelain nipple ones for up to \$5."



Terry Morgel retrofitted two 8-ft. long ceiling-mounted fixtures in his garage with compact fluorescent lamps.

He says he plans to retrofit his entire shop with CFL's. "CFL's are a lot more energy efficient than the old-style fluorescent lights,' notes Morgel.

Contact: FARM SHOW Followup, Terry Morgel, 37313 Co. Rd. 3, Avon, Minn. 56310 (ph 320 363-8802).