

## Hay Spear Also Moves Bale Rings

If you put off moving round bale feeders because of the hassle, you'll be interested in the Hay Spear/Ring Mover. It moves both bales and feeders with one attachment that fits on a 3-pt. hitch or front-end loader.

And once you put the 145-lb. attachment on the tractor, there's no reason to get off when moving a feeder. Two hooks catch the top of the hay ring.

"Because it's so easy to move a bale feeder with this attachment, you'll move it more often, keeping mud and manure from building up around the ring," says Darrell Adams, inventor.

To put the attachment on the front-end loader, Adams says you need a separate bolting package he sells for about \$30.

Sells for \$390 plus shipping.

Contact: FARM SHOW Followup, Triple H Inc., 1844 Dement Hollow Rd., Readyville, Tenn. 37149 (ph 615 273-2286; webmaster@feedwithease.com; www.feedwithease.com).

**"Because it's so easy to move bale feeders with this attachment, you'll move them more often, keeping mud and manure from building up around the rings," says Darrell Adams.**



## Adjustable Track Bar For Dodge Pickups

Anyone with a Dodge Ram 4-WD pickup will be interested in this new "adjustable track bar" that's designed to keep the axle centered on Dodge pickups.

The Dodge Adjustable Track Bar (DAT) was recently introduced by Russell Tessier of Solid Steel Industries, Weyburn, Sask. Tessier says the new adjustable track bar is designed to replace the existing OEM track bar on Dodge 4-WD pickups made from 1994 to 2002.

"These Dodge series 4-WD trucks have a track bar that holds the front axle centered from side to side," says Tessier. "On the upper end of these factory track bars is a ball joint, much like a tie rod end. The problem is that this ball joint often fails prematurely. As it wears out the front axle is allowed to move side to side, causing excessive wandering."

That, says Tessier, contributes to a problem called the "death wobble".

"The death wobble is a violent shaking in the front end that usually happens when the truck hits a bump or pothole in the road. Usually the truck won't come out of it until you drop the speed down to 10 or 15 mph. It can be very dangerous. A loose or worn track bar isn't the only cause of the death wobble, but it's a major contributor to the problem," he says.

Solid Steel's track bar conversion kit has high quality rubber bushings at both ends, thus eliminating the troublesome ball joint. It's adjustable, and works on trucks with up to 3 in. of lift.

According to Tessier, one other problem with the factory ball joint version track bar is that it's expensive to replace. "When the ball

joint wears out the whole track bar has to be replaced. If the rubber bushings on our adjustable track bar ever wear out, new bushings can be pressed in at minimal cost.

"Many people have had to replace the factory track bar on their Dodge Rams every 30,000 miles or sooner. It's sometimes hard to tell if the track bar is worn out. The best way is to look at the upper ball joint end of the track bar while someone turns the steering wheel back and forth a few times (with the truck parked, of course). If you see any movement in the ball end, there's wear and the truck will wander. Our rubber bushings are designed to outlast the Dodge factory track bar as well as the Moog replacement track bar."

The adjustable track bar sells for \$295. A conversion kit to install the track bar sells



**"Dodge series 4-WD trucks have a track bar that holds the front axle centered from side to side. On the upper end of these factory track bars is a ball joint, much like a tie rod end. The problem is that this ball joint often fails prematurely," says Russell Tessier.**

for \$175.

Contact: FARM SHOW Followup, Russell Tessier, Solid Steel Industries, Box 301, Weyburn, Sask., Canada S4H 2K1 (ph 306 842-4346; Russell@solidsteel.biz; www.solidsteel.biz).

## "Tweel" Eliminates Tires, Wheels

Forget about flat tires. In fact, forget about tires all together with the new Michelin Tweel. Now being tested in low speed, low weight applications such as wheel chairs, scooters, ATVs and even skid steer loaders, the Tweel is showing promise. Initial work on larger vehicles including an Audi Sedan and military vehicles has also been positive, says Lynn Mann, director of public relations, Michelin North America.

"The original idea was sparked by an engineer who made the comment during a presentation that if you reduced the load or speed enough, a zero pressure tire could run forever," says Mann. "That sparked interest in what would be needed to do that."

What was needed, it was determined, was a tire tread that provided suspension and contact with the ground and connection to the wheel hub for traction. What wasn't needed was the rigid wheel and tire, as we know it, with air and valve assemblies.

The Tweel consists of a composite reinforced tread band connected to a flexible wheel via rectangular polyurethane spokes. When the rubber tread band encounters a rock or obstacle, it flexes, as do the spokes. Displacing the spokes in one area has no effect on remaining spokes or wheel suspension. The combination of flexible tread wall and spokes provides weight carrying ability, shock absorption, ride comfort, rolling resis-



**Tweel consists of a composite reinforced tread band connected to a flexible wheel via rectangular polyurethane spokes.**

tance and mass similar to pneumatic tires while adding suspension-like characteristics for improved handling.

The ability to continue functioning in difficult situations is one reason the Tweel is being looked at for military applications.

On a more practical note, Tweels give vehicles like skid steers the combined benefits of pneumatic tires and tracks. The flexibility ensures that the maximum tire surface remains in contact with the ground.

"We have had some success with passenger cars, but Tweels for them are still more than a decade away," she says.

Contact: FARM SHOW Followup, Michelin Consumer Relations Dept., P.O. Box 19001, Greenville, S.C. 29602 (ph 800 847-3435; www.michelinman.com).

## Revolutionary "Active Wheel"

Michelin has another first-of-its-kind product that might have even more potential than the "Tweel." The Active Wheel is designed to eliminate brake systems, transmissions, differentials and even frame suspension.

Company managing partner Edouard Michelin has been quoted as saying, "Why not use the space within the tire to put as many components as possible, including all suspension, and make it active with an electric motor that eliminates the need for a mechanical transmission."

Use the space is just what the Michelin researchers did. Each Active Wheel contains a permanent magnet electric motor, a disc brake and an active suspension system. The electric motors provide both acceleration and braking. When braking, the wheel motor switches from user to generator mode, storing power for the next acceleration.

The electronically controlled suspension allows the car to instantly adjust from luxury sedan smooth to sports car firm.

So far the Active Wheels have been showcased in two prototype cars developed by Michelin. The Hy-Light is hydrogen fuel cell powered, while the Concept is a gas/electric hybrid. While Michelin says they have no intention of building cars, the revolutionary



**Active Wheel contains a permanent magnet electric motor, a disc brake, and an active suspension system. The electric motors provide acceleration and braking.**

all-in-one wheel units could certainly change how car makers do business.

"Active Wheels are at the prototype stage," says Lynn Mann, director of public relations, Michelin North America. "No costs have been identified yet. The next stage is to interest others in the technology."

Contact: FARM SHOW Followup, Michelin Consumer Relations Dept., P.O. Box 19001, Greenville, S.C. 29602 (ph 800 847-3435; www.michelinman.com).

## Motorcycle Converted To ATV

One of our favorite sites to visit on the internet is the Machine Builders Network (www.machinebuilders.net). Created by Matt Kramer, the website features tons of "made it myself" machines built by backyard inventors.

There's a forum where members (registration is free) can discuss new project ideas, plans, hydraulics and even show off completed projects.

That's where we found these photos of a wrecked Kawasaki motorcycle turned into a homemade ATV. The builder was a Finnish fellow whose email address is:



**This is one of many projects featured on www.machinebuilders.net.**

taisto@pp.htv.fi. There are more pics at his website: www.harvelit.com.

### How To Reach Us

To submit a "Made It Myself" Story Idea, New Product, Shop Tip, "Best or Worst Buy", or other information, send a note along with photos, drawings and literature, if available. We'll get back to you later if we need more details. Send to: Editor, FARM SHOW, P.O. Box 1029, Lakeville, Minn. 55044 (ph 1-800-834-9665; fax 952 469-5575). Email: Editor@farmshow.com. You can also submit information at our

Website: www.farmshow.com.

To change your address, renew your subscription, take out a new subscription, or order videos or books, or for other information regarding your subscription, contact: Circulation Department, FARM SHOW, P.O. Box 1029, Lakeville, Minn. 55044 (ph 1-800-834-9665; fax 952 469-5575) Email: Circulation@farmshow.com.