Money-Saving Repairs & Maintenance Shortcuts

of foamy suds that look almost like shaving cream "

BD Diesel Performance, Abbotsford, B.C., Canada, (ph 800 887-5030 or 604 853-6096; www.dieselperformance.com): If you're having trouble keeping your Ford pickup driving straight, this company's new Cam Caster Adjuster kit might help. It's designed for 2005 to 2010 Ford Super Duty models. The kit installs on the radius control arms to help correct the caster to a more positive angle and also helps prevent a number of potential steering problems. Sells for \$213.75 plus S&H.

Enterprise Plastics, Inc., Kent, Ohio, (ph 330 346-0496; www.epstores.com): This company sells a variety of replacement parts for Minneapolis Moline tractors. Examples include rubber moldings, headlight brackets, grilles, pivot pin spring clips, rubber gas tank mounts, battery supports and clamps, battery clamp ends, and tractor switch labels. The company continues to develop new parts.

Floyd Miller, Miller Power Enterprises, Topeka, Ind. (ph 260 768-7002): "I specialize in Honda engine sales and service and have thousands of engine parts in stock, both new and used, including parts no longer available from Honda. If you're looking for a new or used part, there's a good chance I'll have it or can get it for you.

"I also have a large inventory of new, used and obsolete Briggs & Stratton engine parts as well as Tecumseh, Peerless transmission, Kohler, McCullogh, MTD and more. The photos show one of Honda's oldest single cylinder models, and also their newest twin cylinder model. All Honda GX commercial series engines come with a 3-year warranty."

David Koenig, Quincy, Ill.: "When I can't remove a broken bolt because it's flush with the material, I lay a nut on top of the stud and then use my Mig welder to weld the nut through the center. Then I back it out with a wrench. Works every time."

David Millsap, Abingdon, Va.: "I bolt soup cans to both sides of my roll-around



toolbox. They make handy holders for cans of WD-40 or other spray bottles. I simply drilled small holes into the sides of the toolbox and then bolted the cans on. I also zip tie plastic coffee cans to my tractor's rollbar. The cans provide a handy place to keep 2-liter bottles of water or pop as well as small hand tools."

Anonymous: "I recently tried to start a chainsaw and weed eater that had been stored for a long time. No go. I tried putting in new spark plugs but it didn't help.

"Then I drained out the gas and put straight Gumout fuel system cleaner into the chainsaw's tiny tanks and primed them. Varoom! Both tools started right up. Then I shut both machines off, drained the Gumout, and put fresh gas into the tanks. Again, both machines started right up. Unbelievable. Now both machines run great with no problems."

David Lindsey, Mansfield, Tenn.: "In 1994 I bought a 1993 Dodge 1-ton dually pickup equipped with a 5.9-liter Cummins diesel engine and automatic transmission.

At about 48,000 miles the transmission overdrive started messing up. It would slip out of overdrive while I was driving along at a steady speed. It felt almost like I had shifted into neutral. I checked with three different transmission shops and all said the transmission needed a complete rebuild. So I had the transmission rebuilt at a cost of about \$1,400.

"At about 98,000 miles the same thing happened again and I was told another transmission rebuild was needed. So, I started trying to figure out what was wrong.

"I removed the cover on the throttle position sensor and discovered there was a lot of dust in it. I used an air hose to blow the dust out and then took a screwdriver and jiggled the slot that operates the thing and blew it out again. Then I put the top back on. Now the transmission's overdrive works just like new, and I didn't have to spend \$1,400 for another overhaul.

"Here's what I do when tubeless tires start leaking air around the rim. I remove the valve core and use an oil squirt can equipped with a thumb lever pump to deliver 25 to 40 squirts of oil into the tire. Then I replace the valve core, pump up the tire and drive the vehicle for at least a mile to sling oil all around the rim. I've used this idea successfully for years on all my tires."

Bryce Dunn, Dunn, N.C.: "We had to repair a mast cylinder on our TCM forklift. The local shop said it would cost about \$2,200 to remove the mast and stretch it out across the floor to remove the cylinder. Instead, we raised the forks and chained them to the top of our shop ceiling so we could take the cylinder out. We spent about \$200 on repairs, saving us \$2,000."

John Willenbrock, Hayden, Ala.: "I read with interest in your last issue how Jim Rankin of Paris, Ky., is able to grease wheels without removing the hub. He uses a simple tapered tip that screws onto the end of his grease gun. He drills a 1/4-in. hole in the center of the hub that's the right size for the tip.

"In 1971 I was field supervisor for J&J Farms near Poplarville, Miss. We were running 5 IH disks 12 hrs. a day and losing one wheel hub per week due to fine dust getting inside the hubs.

"To solve the problem I drilled 1/8-in. dia. holes into the dust caps. Then I cut a 1/8-in. pipe coupling in half, brazed it onto the dust cap, and screwed in a grease fitting. I made sure that our drivers greased each wheel every day until new grease started to show up at the back of the hub. Problem solved."

Spring Creek Products, San Angelo, Texas (ph 866 651-6702 or 325 651-9558; springcreekproducts.com): Spring Creek's pipe-cutting guide makes precision





cutting a simple job for welders. Four different precision cuts are possible: Saddle cut, 45 degrees, 22 1/2

degrees, and 90 degrees. You open the guide and place it on the pipe, then clamp the guide firmly in place with a heavy-duty spring, allowing you to draw in precise cutting guides. Available in 8 different sizes.

Bill Smith, Churubusco, Ind.: "I cut a 14-ft. field packer down to a 4-ft. model that I



Tire Hammer is driven by an emergency spare tire mounted on a trailer axle and hub.

Do-It-Yourself Power Hammer For Blacksmiths

For about \$1,000 and 100 hrs. of gathering materials and construction time, you can make your own power hammer with a unique drive mechanism.

"This Tire Hammer uses an emergency spare tire and rim mounted on a trailer axle and hub," says Clay Spencer, who sells plans and leads workshops to build the tire hammers. The retired NASA mechanical engineer has a passion for power hammers because they're so handy for any blacksmith – amateur or professional.

He developed the design based on a sketch on a napkin by inventor Ray Clontz, who gave him permission to build and create plans.

It's driven by a 1 hp, 1,750 rpm, single phase, 60 cycle, 120/240 volt, frame 56, (TEFC preferred) electric motor. A flat pulley (3 7/8-in. dia.) is mounted on the motor. The motor is pivoted by the treadle action, so the pulley rubs against the tire to drive the hammer downstroke. This "clutch" provides outstanding control, says Spencer, because the harder you push on the pedal, the faster the tire spins. It delivers up to 270 blows a minute and will cut through 2-in. thick metal in about 20 strokes

Spencer's design calls for a 50-lb. hammer and a 6 by 36-in. solid anvil. The 6 1/2-ft. column that supports the hammer and drive is made of 1/4-in. wall, 5-in. square tubing.

"We have made 371 hammers in workshops across the country," Spencer says. Blacksmiths get together to plan a date and spend three weekends doing preassembly before Spencer arrives for the final weekend. His fee is a tire hammer and mileage from his home in Alabama.

"This is a difficult and demanding project to build correctly," Spencer says. "The welds must be done strong enough to hold everything together. The pins must all be parallel to prevent wearing out the bearings. The hammer head must be aligned to the anvil



use behind my garden tractor to roll my lawn. I have a lot of moles in my yard and use the packer to smooth out the ground they dig up. First I roll one way and then a week later I roll at a perpendicular angle, which leaves a checkerboard pattern.

"The packer was originally designed to pull behind a disk or tractor and consisted of two



Unit is driven by a 1 hp, electric motor. Flat pulley mounted on motor rubs against tire to drive hammer downstroke.

correctly so the dies will hit evenly, and the tire and crank must be properly positioned to line up with the toggle mechanism and guides"

Still, he notes, it's a project many farmers and ranchers have the skills to complete, as well as parts on hand to reduce the cost. He has sold several hundred copies of his plans with 20 pages that include a materials list, drawings and complete directions.

Spencer also offers workshops on making 450 tools to go with the tire hammers, and he has designed two styles of treadle hammers. Spencer teaches at the John C. Campbell Folk School in Brasstown, N.C., in a blacksmith shop named after him.

To see his hammer in action, go to www. farmshow.com to view a video.

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gangs. I cut the gangs down and then added a single 4-ft. gang on top. I also shortened up the packer's tongue.

"I used an old 2-wheeled trailer to build this portable deer hunting lodge, which was only partially built when I took this photo. I cut down four phone poles to a length of 9 ft. and bolted them to the trailer's floor, then built the lodge on top of them. I used excess tin roofing off an old pole shed to build the sides and a solar panel to build the roof. I used 3-in. screws to attach the sides to the roof and made a window. The floor is made from plywood. I use a ladder to access the lodge. The lodge stays warm, although the solar panel doesn't add much heat until the afternoon hours."