John Handeen, Montevideo, Minn.: "We use a clothes iron to start engines in sub-zero weather. I just use tarp straps to secure it to the underside of the oil pan. It's more effective than other heaters because the amount of heat is fully adjustable and it uses less electricity than block heaters. They're cheap, too, if you look for old ones at farm auctions."

**Eric Sagan, Melville, Sask.:** "In your last issue a reader said he uses WD-40 as starting fluid. That might work okay but the best starting fluid I've found is Johnsen's Starting Fluid, which is a 50 percent blend of ether and propane. Very effective (www. johnsens.com; ph 817-556-0983)."

Earl Caron, Oxford, Mich.: "The clutch linkage on my Kubota 3600 GST tractor was froze up right where it goes through the bell housing. When I pressed the clutch in, the pedal would stick all the way down to the floorboard. I tried all the penetrating oils but nothing would help. The dealer wanted \$1,800 to fix it because they would have to remove the loader and break the tractor in half to get to the problem.

"Then I remembered the article in FARM SHOW about making penetrating oil from a 50-50 mix of transmission fluid and acetone. After mixing the two, I applied some and let it soak in. A couple hours later I added more and started working the clutch pedal in and out. I added more as I worked the pedal and, in no time, the pedal was back to normal.

"I was so happy with not having to spend the money on a repair, I renewed my subscription to FARM SHOW for 3 more years!"

**T.W. Ojala, New Ipswich, N.H.:** "When banding a pallet full of lumber or other material, shove a piece of pvc or steel pipe in under the material and feed the band through the pipe, then pull the pipe out and tighten down the band. Works nifty."

**Daniel Williamson, Fort Necessity, La.:** "Sometimes when using a chainsaw, the blade and chain get caught in a cut. You can spend a lot of time trying to free it up. My solution is to keep an old bar and chain nearby so if I get stuck, I can remove the powerhead, install the spare bar and chain, and resume cutting."

Tony Ryba, Johnstown, Penn.: "When my 2016 Ford F150 XL went back to the dealer for its first free oil change, I had

tightening and hand sharpening.

stabilizes it

He started with a 10-in. long, 6-in. sq. wood

"I just insert the end of the bar into the

device and lift the bar slightly so the chain can

turn, then tighten the clamp," says Nelson. "It

block fitted with a screw clamp. A short 2 by

2 piece of scrap wood attached to the block

them troubleshoot a starter problem. With the key in the start position, there were numerous times when there would be a split second delay before starting, and sometimes it wouldn't start at all. A few months after they worked on it, at about 5,800 miles, the problem came back. Lacking a wiring diagram, I just did basic maintenance. The ground straps and ground wire connections were cleaned to bare metal on the firewall, starter stud, and on the inner fenders. A coating of electrical grease was applied over the tightened connections. Since I did that, starter action is immediate with the turn of the key."

Tom Lass, Cromwell, Minn.: "A reader in a recent issue related how he had trouble starting a Sears rototiller. He finally replaced the Champion spark plug with a Delco, and after that the machine started on the first pull. I'm a retired auto mechanic and I've had the same problem with Champion spark plugs in small engines. Now I strictly use NGK plugs and my starting problems have been solved, too."

Ready Davis, Willow Creek, Calif.: "I run a small engine repair shop and sell Husqyarna chainsaws. I love them so I was concerned to read about Paul Peyton's experience with purchasing a replacement fuel hose for his trusty Model 66 chainsaw. The replacement hose was too short and he said the dealer and company were unhelpful.

"I suggest Mr. Peyton consider using a Husqvarna fuel filter, a couple inches of extra fuel tubing, and a small brass nipple to install where the current fuel filter is. Small zip ties or wire could be used to improve the seal. Should only cost about \$12 and will allow him to continue using his trusty ol' Husky."

Steve Nichols, Galesburg, III.: "In your last issue one of your contributors shared his money-saving idea of using a shop-vac filter in place of a factory-approved Toro filter for his mower. Paying \$37 for an air filter is outrageous but I don't know if it's a good idea to use a vac filter. I would find out if the filtration capability is equal to the original filter in terms of microns of particles. The \$27 saved could pale in comparison to the cost of replacing your engine."

Wallace Browning, Buckingham, Va.: "I use metal bed frames to make repairs and build projects around the farm instead of buying angle iron. You can get them for



Wood block fitted with screw clamp holds chainsaw's bar steady for chain tightening and hand sharpening.

## **Portable Chainsaw Bench Clamp** Stephen Nelson, Winston-Salem, N.C., made can be easily placed on a bench or tailgate,

a portable chainsaw bench clamp to hold his chainsaw's guide bar steady for chain to work on the other side.

"It holds the bar level and is much more handy than sitting on the ground wrestling with the saw's power head."

Contact: FARM SHOW Followup, Stephen Nelson, 207 Elaines Way, Winston-Salem, N.C. 27127 (ph 336 764-8929; yoganelson1@ gmail.com). Money-Saving Repairs & Maintenance Shortcuts

Have you come up with any unusual money-saving repair methods for fixing farm equipment? What maintenance shortcuts have you found? Have you had any equipment recalled by the factory? Name a particularly tough mechanical problem you've had with a piece of equipment and how you solved it. These are a few of the questions we asked randomly selected FARM SHOW readers. If you have a repair tip, maintenance shortcut, or other mechanical experience you'd like to share, send details to: FARM SHOW, P.O. Box 1029, Lakeville, Minn. 55044 or email us at: editor@farmshow.com. Mark Newhall, Editor

free in any college town when students move out in May. I usually pick up 10 sets or so for myself and to give away. It's great for many projects."

Kenneth Vincent, Kimball, Neb.: "I use medicine dropper bottles to apply oil by the drop. So many things on the farm only need a drop or two of oil and that's easy to do with a medicine dropper. I like to use 90 weight oil for this kind of stuff because it's heavy enough to stay put. For example, I use 3 or 4 drops to drill a hole through 3/8-in. metal. Easy to do with the dropper and saves wear and tear on drill bits.

"Another idea that's handy is to keep a 1-gal. jug full of water around with a separate

hand-held spray pump. It's handy for cleaning off headlight lenses, or cooling off a small piece of iron I just welded, or anything else where you just

need a dab of water. You'll find many uses once you have one sitting around."

Floyd Netterville, Smithdale, Miss.: "I use a permanent Sharpie marker to write the date and hours on oil filters to remind me when the oil and filter were last changed. I also write this information, including make and model, on a dry erase board placed in an easy-to-see spot in my shop."

Bruce Klosky, Derry, Penn.: "Having had head gaskets blow twice in the 25 hp. Kohler engine in my zero-turn mower, I was at a loss as to what to do. It always ran so hot that the muffler would glow red while moving, and backfire and diesel after I turned it off. The dealer told me they all do that but it seemed to me something was wrong. While looking through some old auto repair manuals I read that the heat problem could be caused by spark plugs. The Champion RC14YC that Kohler recommended were the same "hot" plugs used in a Chrysler 360 V-8. I was able to find 'cool' E3 plugs at a local auto parts store. I installed the E3.64 spark plugs and noticed an immediate change. The muffler no longer glows red and I've noticed I have more low-end torque. The engine doesn't backfire or diesel anymore when I shut it off" James D. McLaughlin, Wauchula, Fla.:

"I raced motorcycles for nearly 20 years and learned quite a bit about diaphragm carburetors and fuel mixes for 2-cycle engines.

"I've noticed many readers having problems starting and running chainsaws that overheat and actually boil fuel in the tank. One of the causes is that people put too much oil into a premix because they think it will help lube the saw. But the extra oil changes the viscosity of the mix and actually leans out the engine, making it run hot."

Gary Parsch, Hope, Mich.: "Most of my shop machines and tables are on swivel casters so I can move things out of the way easily to make room for large projects and move tools closer to jobs. It also makes it easier to keep my 24 by 40-ft. shop clean.

"I have 4 retractable hanging extension cords around my shop so there's always a cord handy and they're not tangled up on the floor.

"I don't farm but I have a 30-acre woodlot and the surrounding grounds to take care of. I realized that I have 52 tires that require air. To maintain them all, I have a 100gal. propane tank that I converted to hold air. I keep it handy all the time so I can fill tires quickly. Another time saver is to use trickle chargers on every machine that sees minimal use. It makes the batteries last longer and they're always fully-charged."

Richard Nybo, Northfield, Minn.: "A friend of mine gave me two Water Boss water softeners. He got less than 4 years out of each of them before they quit working. The company was no help. I temporarily hooked each one up to my well and found out that the flow out of the drain was real slow. There was a flow restrictor just inside the barbed elbow that is built into the softener head. I cleaned out the restrictors with a drill bit and both softeners started working great again. Apparently, Water Boss has fixed this problem on newer units."

Michael J. Thomas, Salmon, Idaho: "When was the last time you were in the middle of greasing a piece of machinery and ran into a fitting that would not take grease? That happens because of dirt, heat, sunlight, water, and other elements on the farm. Most of us have tried unthreading a grease fitting and forcing grease through it,