Money-Saving Repairs & Maintenance Shortcuts



Unhappy with his wood lathe, Sieting built his own using angle iron and H-beam steel.

Shop-Built Lathe Better Than New

When the wood lathe he bought chattered with vibration, Norman Sieting got busy and built his own. With 2 by 2-in., 1/4-in. thick angle iron legs and a 4 by 6-in. angle iron bed, he didn't worry about chatter. He used 1/4-in. H-beam steel for the headstock and tailstock. The lathe is 4 ft. long and can turn a 16-in. piece of wood. All he purchased for the job were the V-belt pulleys, bearings and the live center on the tailstock.

"Tused 4-in. wide H-beam for the headstock and 3-in. wide H-beam for the tailstock and welded base plates to them to bolt to the bed," says Sieting. "I milled a channel out of the tailstock H-beam and mounted the live center on the end of a 1-in. threaded rod."

Making the headstock required making room in the center of the H-beam for the pulleys and boring holes in the sides for its spindle. Three-in. square blocks of 1/2-in. steel were welded to either side of the headstock after being bored out for the bearings.

Sieting milled a brass sprue for the headstock. The sprue can be unscrewed and replaced with a 6-in. chuck.

He also made the tool rest. It's a 6-in. length of left-over grader blade tapered at each end. He mounted it to a shaft on a slotted length of steel that bolts to the bed. It's easily adjusted up or down and in or out.

The electric motor is mounted on a plate with a short pipe welded to one edge of the underside. The pipe rides free on a steel arm welded to the end of the lathe. The arm is 1/2-in. round stock bent at a right angle around the corner of the lathe. When a V-belt is in place, the motor's weight tensions the belt. Sieting simply tilts the motor forward to release tension when changing belts.

With only occasional need for the full 4-ft. bed for turning wood, Sieting fabricated a 2-ft. metal brake to fit on one end of the lathe bed. The brake bed is a 24-in. long piece of 4 by 6-in. angle iron that bolts to the lathe bed.

The top steel plate is 24 in. long, 1 by 6 in. and tapered at the long edges. A 24-in. long, 1 by 2-in. piece of steel is bolted to the top plate from its underside. It's a reinforcing bridge for the top plate, tapered at each end.

"The bridge keeps the top plate flat when pressure is applied to the brake," says Sieting.

Turn knobs in the keepers on the ends of the top plate, screw into the angle iron bed to hold down the top plate and the material being shaped. When the turn knob is loosened, springs on bolts that extend through the keepers to the angle iron bed raise the top plate so material can be slid into place.

The brake apron is a 24-in. length of 2 by 3-in. bar stock anchored to the keepers at pivot points. A lever on the apron provides the leverage needed to bend most metal Sieting works with.

Contact: FARM SHOW Followup, Norman Sieting, 6112 Walker Rd. NW, Rapid City, Mich. 49676 (ph 231-564-1031; normansieting@gmail.com).

Solve Ratchet Strap Hassles

The idea for Strap Lizard came out of frustration with tangled ratchet straps, wasted time tying strap ends, and knots coming untied. The Minnesota inventors couldn't find a product on the market that solved these issues.

Strap Lizard is designed to work with your existing straps between 1 and 1 3/8 in. wide, up to 16 ft. long, and with a 1,000 lb. capacity rating. The directions are simple: tighten the ratchet using the fold-out handle, wind up the excess strap, and clip the Strap Lizard to the load.

Reviewers on the website rate Strap Lizard 4.8 out of 5 stars. One reviewer says, "Really solved the problem of loose straps swinging around. I was tying down my ATV, and it worked slick. I plan on buying a few more for friends."

Strap Lizard (ratchet strap not included) sells for \$14.50 with free S&H. Bulk orders



Strap Lizard makes it easy to store ratchet strap ends on loads.

of 12 or more are \$12.50 each. Custombranded Strap Lizards are also offered; contact the company for more information.

Contact: FARM SHOW Followup, Strap Lizard (support@straplizard.com; www.straplizard.com).

Handy Cordless Heat Gun

The new Wagner® Furno 550 battery-powered heat gun makes fixing frozen pipes, rusted bolts, and other challenges easy. As a leader in advanced paint applicators and heat guns, Travis Johnson, product manager, says the cordless heat gun lives up to the company's high standards.

"It was just released in July 2024 to help consumers and contractors have a more mobile solution," he says.

The Furno 550 includes quality features such as an LED work light and a display panel that allows users to select one of five temperature settings up to 1,000 F. A lock-off safety ensures it won't turn on accidentally. The lock-on function and integrated feet allow it to be used hands-free.

The most outstanding difference may be how long the Furno runs on a battery compared to other heat guns. It operates up to 19 min. on the lowest setting and 7 min. at the highest setting on the 2-amp battery that comes with it.

"You can get larger batteries to lengthen the time," Johnson says. The Furno runs on Bosch batteries that customers may already have with other cordless tools.

The heat gun comes with two nozzles. A flare nozzle works well for wide heat distribution, and the curved deflector wraps



Heat gun comes with two nozzles. A flare nozzle works well for wide heat distribution, and the curved deflector wraps around a pipe.

around a pipe.

The Furno 550 sells for \$210 and is available through Wagner's website, Amazon, Walmart TSC and other companies

Contact: FARM SHOW Followup, Wagner SprayTech Corp., 1770 Fernbrook Ln., Plymouth, Minn. 55447 (ph 763-519-3555; www.wagnerspraytech.com).



When the hydraulics fail, the rocker arm drops and the system goes to work. The springs release, unlocking the lever on the brake assembly and activating the brake drum to stop the tractor.

Shop-Built Emergency Brake For IH 706

At nearly 80, Steve Vargo had no interest in having to jump off his IH 706, so he engineered an emergency stop. He did so after backing it out of his shed and finding himself without steering or brakes. Headed downhill, jumping might have been his only alternative.

"Luckily, I had a manure pallet on the rear, and it stopped the tractor," says Vargo. "A friend of mine had to jump while his tractor and bush hog went down into the holler. I've heard of lots of others with the same problem."

In Vargo's part of West Virginia, the holler or valleys are steep and can be deep. "All it takes is a piece of dirt in the hydraulic oil filter," says Vargo. "The same problem can be caused if the pump fails or the relief valve sticks open. You lose the hydraulic pressure in the steering, brakes and transmission. All the tractor can do is free-wheel."

When Vargo approached a semi-trailer mechanic about it, he was told nothing could be done. That was all the challenge he needed to find a solution

He installed a brake assembly and drum from the back axle of a semi-trailer on the left axle of his tractor. The brake assembly is mounted to a 1/2-in. steel plate bolted to the tractor frame. The drum with a section of the rim is mounted to the tractor's wheel, so when the wheel turns, so does the drum.

"I had considered using a hand-operated lever to activate the brake, but I didn't want to rely on it," says Vargo. "I decided to use the tractor hydraulics to activate it. I was worried I wouldn't have the brake assembly centered and it would drag. I made jigs out of wood and centered them so I knew how to cut the steel plate."

His activation system was fabricated largely from salvaged parts. The system consists of two coil springs from the struts on a car housed in square steel tubes. The tubes are welded to steel plates that bolt to the axle housing.

The activation trigger is the tractor's left 3-pt. rocker arm. A threaded push rod connected to the rocker arm maintains pressure on the coiled springs, keeping the lever on the brake assembly locked. When the hydraulics fail, the rocker arm drops and the system goes to work. The springs release, unlocking the lever on the brake assembly and activating the brake drum to stop the tractor.

"I tested it out on a hill, and it worked fine," says Vargo. "I had to measure space carefully to install it, as I had only a quarter inch to spare."

Contact: FARM SHOW Followup, Steve Vargo, 2135 McGraws Run Rd., Valley Grove, W.Va. 26060 (ph 304-336-7144).