Homemade Hydraulic Hose Wrap

"We do site prep work for timber companies, and the brush is hard on hydraulic hoses," says Robert Raymond, Cove, Ark. "We started making hose protectors from plastic pipe, cutting it in spirals with a knife, to slip around the hoses. It was hard work and took a lot of time, so I came up with a simple cutter that does it fast and easy."

Raymond starts with plastic pipe with an inside diameter to match the outside diameter of the hydraulic hose. He then selects a 4 to 6-in. length of steel pipe just large enough for the plastic pipe to slide through and welds short lengths of smaller pipe to each side of the cutter pipe for handles. They provide needed leverage when cutting the plastic pipe.

To make the cutter, he drills a hole near the end of the pipe for a 3/8-in., no. 8 grade or better bolt. He fastens the bolt in place with a 1/2-in. nut on the outside and a lock nut on the inside. He then welds the outside nut to the pipe, removes the lock nut and grinds the end of the bolt to a cutting edge.

"I leave the back edge of the cutting face slightly thicker for added strength," says Raymond. "You need to take your time when grinding the bolt down so you don't overheat it."

Grinding out the face creates a curved cutting edge. The angle of the face determines the width of the spiral that leaves the pipe. The flatter the face, the narrower the spiral will be. If it is too wide, it is hard to open it up to wrap around the hose.

"I made a selection of cutter pipes to match common hose diameters, including 1/2-in., 3/4-in., 1-in., 1 1/4-in. and 1 1/2-in.," says Raymond. "Sometimes the larger diameter plastic pipe can collapse as it is being forced through. I place a small insert opposite the cutter blade to keep the plastic pipe in place."

Raymond notes that the cutter can be made from all scrap parts. It has saved him a lot of money over the years, both in protected hydraulic hoses and not buying commercial protectors.

"I looked at the wraps available, and they cost $12 per foot or more," says Raymond. "My only cost is the plastic pipe and my time. When hoses are covered like this, I can bundle them and tie them. I use them on brake lines too. It just about stops wearing rubber off the lines."

Contact: FARM SHOW Followup, Robert Raymond, 495 Polk Road 233, Cove, Ark. 71937 (ph 580 244-3212).

Cutter bolts screw into a variety of sizes of copper pipes which are used to slice plastic pipe into spirals that slip over hydraulic hoses to protect them.

Cutters are made by fashioning points onto ends of bolts.

Spiked Ratchet Pulls Wood Together

Frame walls out of line? Ready to grab a mall or pry bar to bring them back? Contractor Keith Kennedy was tired of pounding on walls, and the only wall puller tool on the market required at least three hands to work. So, he designed his own tool.

"I developed the WoodRatchet so I could let go of it to reach for the nail gun," he explains. "I made the ends out of flat plate with a spike in it and attached them to a ratcheting binder."

To pull in a stud wall, for example, he hammers the spike of one end to the plate and spikes the other end to the floor. Then he ratchets the wall in place, nails it down and removes the tool with his hammer claw.

"After I started using it I found many other uses for it," he says. Instead of requiring three people to move diagonal braces to level walls, he can do it himself.

"There are holes in each corner of the ends to add a nail or two to if you have a really stubborn pull or a vertical pull," Kennedy says. "But most of the time you don't need nails. You can also flip the ends around and push with it."

He used the WoodRatchet for four years - lending it frequently to other carpenters - before he patented and started selling the tool out of his shop. The ends are made of 1/4-in. steel with 3/16-in. sharpened shark tooth-like spikes. The tool can pull or push up to 3 in.

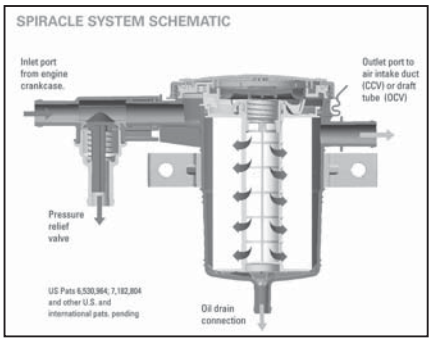
Both ends of the WoodRatchet consist of flat plates fitted with spikes. Ratcheting binder is then used to pull or push stud wall.

"As soon as builders see it, they say it's a good idea, and they wish they had thought of it," Kennedy says. He sells WoodRatchet for $69.95 plus shipping through his website, which includes videos of the tool in use.

Contact: FARM SHOW Followup, Keith Kennedy, Kennedy Mfg. LLC, 174 Monroe Lake Shores, E. Stroudsburg, Penn. 18302 (ph 570 223-0527; www.woodratchet.com).

Filter Recovers Lost Engine Oil

If your truck or tractor is using a lot of oil, it could be due to excess crankcase blow-by. A filtration system from Donaldson can recover that oil. The Spiracle filtration unit vents the blow-by from the crankcase and filters out particles such as soot. It also captures, condenses and returns oil particles to the engine sump. The Spiracle is OEM-installed on many large farm, construction and fleet engines. It is also available for retrofit.



Spiracle filtration unit captures "blow-by" oil from the crankcase and returns it to the engine sump.

"It captures oil that would otherwise be lost and returns it to the engine sump," explains Veli Kalayci, Spiracle team leader. "The gasses are filtered of soot and other particulates and returned to the turbo or released, depending on the engine."

Spiracle crankcase filtration is used in Tier 3 and Tier 4 engines primarily for emissions control. However, Kalayci says the oil captured can be significant, especially as an engine ages.

"The amount of oil saved by the filtration system depends on engine size, duty cycle, operating conditions and life of the engine," says Kalayci. "The more wear, the more crankcase blow-by. Blow-by can have a big impact on oil consumption."

Chris Purdy, Spiracle product manager, would only say that the units are priced competitively. Distributors and dealers can be reached through the company.

Contact: FARM SHOW Followup, Donaldson Filtration Solutions, Emission Systems, 1400 W 94th St., Bloomington, Minn. 55431 (ph 952 887-3058; toll free 866 675-2847; fax 952 698-2510; emissionssales@donaldson.com; www.donaldson.com).

Bruce Dunahoo turned an unused semi trailer into a low-cost storage "shed" by adding a deck and stairs on back.

Semi Trailer "Decked Out" For Storage

An unused semi trailer can be turned into an easily accessible, low-cost storage area by adding a deck and stairs on back, says Bruce Dunahoo, Zearing, Iowa.

A friend helped Dunahoo build the deck and mount shelving on the walls inside the semi.

"I use the trailer to store parts, lumber, and supplies. It's really handy," says Dunahoo. "The trailer is close to my machine shed and driveway."

Contact: FARM SHOW Followup, Bruce Dunahoo, 14231 U.S. 65, Zearing, Iowa 50278 (ph 641 487-7328).