Mobile Hydraulic Pump Has Many Uses

John Humeniuk gets a ton of use out of his mobile hydraulic pump. It powers his log splitter, grain conveyor, sawmill, dump trailer and more. There's no need to pull up a tractor with hydraulics when he can use his truck with the pump or the pump alone.

"I have an old grain trailer with a lift cylinder on it that I use for wood, sand and more," says Humeniuk. "With the pump in the back of my truck, I can drive into town and dump a load of firewood. The auxiliary pump works great if I'm splitting wood too."

Separating the splitter from a tractor was the reason he decided to build a mobile pump in the first place. He'd built a hydraulic-powered splitter to mount to his tractor's 3-pt. He put it on skids so it would be easier to move around.

"I got to thinking that a separate motor and pump would be handier than running the hydraulics off of a tractor," says Humeniuk. "I discovered I could build one for about $1,200 to $1,300, while I would pay $3,000 for anything like it online."

He'd put one together about 10 years earlier, but decided it was time for an upgrade. The new one has a 5-hp Honda 160 engine with an electric start that he bought for about $800. A 16-gpm pump was $150. He estimates the valves, battery, hoses, coupling and incidentals added several hundred more.

His first pump had the reservoir on the end. He moved it to a spot under the motor, battery and pump on the upgrade. The more compact design makes it easier to move.

Humeniuk used 1-in. square tubing for the frame and 1 1/2-in. tubing for the skids. A "picking ring" added to the crossbar on the top of the frame makes it easy to pick up and set down with his loader or an excavator.

"I put a detent valve on it, so I can use it with my wood splitter for take-off and return," says Humeniuk. "It's also been great for use with my Timber King 1400 sawmill. With the aid of the auxiliary pump, I've upgraded the sawmill to include many of the hydraulic features of the next model up. Building and adding them myself saved many thousands of dollars."

Humeniuk says building his own mobile hydraulic pump has saved thousands of dollars.

A piece of steel tubing pinned to one side of the auxiliary's frame lets him run hydraulic motors, too. He raises the tubing, pulls the detent down, and lowers the tubing to hold the valve in the open position.

The pump also makes it easy to move equipment with hydraulic cylinders around. "I can set the pump in the back of the truck, back up to a disc or bushhog, and raise it up for towing to another location," says Humeniuk. "No tractor needed."

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Bertalotto centered a 4,500-lb. winch between the stringers. He estimates the gantry will support a lift of about 1,000 lbs.

Handy Outdoor Gantry Crane

Roy Bertalotto's gantry crane makes pulling a camper off a truck or lifting a tractor to work on easy. The crane is 12 ft. high, 11 ft. wide and 44 in. deep. Building it with pallet racking was easy, too.

"My biggest concern was that it might tip over, but it's rock solid," says Bertalotto. "I bolted two uprights 44 in. apart to a storage shed and set the other two on concrete piers. I used double stringers between each set of uprights and bolted them together with angle iron to increase load capacity."

Bertalotto centered a 4,500-lb. winch between the stringers. He estimates the gantry will support a lift of about 1,000 lbs.

"When I want to lift a camper off my pickup, I attach two one-ton chain falls (or chain hoists) to each stringer at the width of the camper," says Bertalotto.

When he set out to build the crane, he priced pallet racking. He found a wide price range and had several quotes in the $600 to $700 range.

"I ran across a guy online who had bought out a warehouse," says Bertalotto. "He had 20 or 30 pieces left. I paid about $75 for each upright and $20 for each stringer."

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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.

Scott Geyer, Editor & Publisher

Ralph Volkman, Black Creek, Wis.: "When I sprung the arms on my tractor loader, I straightened them by picking up a heavy object with the high side. Then, I placed a post below the other arm. I carefully raised the front of my tractor while watching the frame twist. Next, on a level concrete slab, I checked to see how much I'd corrected it. Don't do too much at once, as it's very easy to overcorrect."

Eli Apple, Hillsborough, N.C.: "I bought a tool cart from Harbor Freight to use around my shop. It was a nice cart, but it wobbled a lot. I took 3/8-in. Grade-8 washers and put them between the casters and the metal. It steadied it very well."

David Krapfl, New Vienna, Iowa: "Equipment jacks often get rusty outside. I put the jack in a drill press and bore several 1/4-in. holes through the outer and inner tubes, and then spray penetrating or lube oil through the holes onto the threaded shaft. I've saved a few jacks this way."

Samuel "Doc" Holloway, Riverton, Wyo.: "My International 606 with TA needed a clutch replacement. I used small strips of candle wax to align the two input shafts to go into the clutch."

Wallace Bengtson, Braham, Minn.: "When I have a frozen grease fitting, I use a short piece of 17-gauge electric fence wire to push in the stuck grease and move the ball inside."

Dan Spinden, Fort Collins, Colo.: "I made my own paint booth by attaching clear plastic sheeting to the rafters. I unroll it whenever I have to paint a tractor or other equipment. It isolates my tools and equipment from overspray."

Roger Kahler, Dunnell, Minn.: "When installing a rim on a hub without studs, cut the bead off a log bolt, taper the end and screw it into the top side of the hub. Then, hang the rim, install the other lug bolts and remove the headless bolt."

Herb Dunham, Millerton, Penn.: "Now on my 89th trip around the sun, I needed to add another step to get aboard my IH 300 utility tractor. So, I bolted an old buggy step below the original."

Gary F. Thomsen, Arion, Iowa: "I used two bicycle hoists to lift my topper off my Ranger to install a bed protector. I replaced the hoist's ropes with nylon ropes and mounted the hoist pulleys to 2 by 4s, slightly closer than the topper length.

"A leak suddenly appeared on one horn loader cylinder, oil spraying in my face. I wrapped an old tube sock around the piston end of the cylinder. It still leaked, but not as much. I got my day's work done and installed a new seal later.

"I mounted an electric 440-lb. hoist to an old hay track in the barn's hay mow. It's much easier to lift tires, wheels and other stuff upstairs. I replaced the ladder with salvaged stairs."

John Rochester, Charlotte, N.C.: "When using stacked shims, it helps to bind them together with electrical tape so they stay stacked and don't move around. This works on large and small shims with different shapes."

Anonymous, Pa.: "Everyone but me probably knows this, but R4 industrial tires don't get near the traction of ag tires in the field, similar to the difference between summer and winter tires in snow.

"Try the rubber tarp straps with holes every 4 in. along the length. They're so convenient that you'll want to throw away the ones without holes.

"I wanted to move several small items a long distance in my Ford F-150, which only has tie downs in the bottom corners