

Giant Wash Rig Cleans Big Sprayers

Neil Welsh keeps his spray rig and himself clean with his drive-thru equipment washer. The 17-ft. tall legs and 20-ft. crossbeam with integrated booms and nozzles make it easy to keep the 1,500-gal. Miller Nitro sprayer clean. The 20-year old does most of the spraying for his family's farming operation. He is also responsible for keeping the tall sprayer clean.

"With a front boom, you are driving into the spray mist all day long," says Welsh. "The sprayer gets coated with chemicals and road dust. After a couple of days spraying, even a new sprayer starts to show signs of corrosion. It's hard to spray it off with a hand wand without getting the chemicals and dirt on your body and clothes."

Welsh designed the washing unit to clean away the bulk of the day's deposits. The triangular structure consists of three 2-in., schedule 80 stainless steel pipes locked at 2-ft. distances in a cross web of 1 3/4-in. dia., 1/4-in. thick steel pipes.

The pipe structure is strong enough to serve as its own ladder for maintenance. The 2 pipes forming the base of the triangular structure are plumbed to deliver 180 gal. of water at 150 lbs. pressure. The water blasts equipment passing through from flat fan nozzles positioned at opposing 35-degree angles and staggered every foot. Separate spray nozzles mounted at ground level direct water up and into the inside wheel wells.

"The angle of the nozzles ensures that the sprayer gets hit by streams of water from 2 directions, not just straight on," says Welsh, who built the washer as a 4-H project. "The

Hypro 4200 pump is unusual with its impeller shape. It's hard to get both volume and pressure, but this one offers both."

Welsh built the entire system from stainless steel so it would stand up to the corrosive chemicals. An accomplished metal worker, cutting and drilling the stainless steel was less of a challenge than getting the web of pipes bolted to each other.

"I used an auto-feed drill press to drill the sixty plus holes that were needed," says Welsh. "The flanges had to be perfectly square so the bolt holes all lined up."

Although the spray season is limited, the structure is left up year round. Drain valves at the bottom of water carrying pipes empty them at season's end. The entire pump system is enclosed to the side of the structure for easy disconnecting and moving to storage with a forklift.

Currently the washer framework is bolted to large concrete slabs at either side. Plans are to install a concrete pad that will be used both for washing sprayers and filling. A drain will direct wastewater to an evaporation ponding area. At that point other changes



Neil Welsh keeps his self-propelled sprayer clean with this drive-through equipment washer. Pipe framework bolts to large concrete slabs on either side.

may be made, such as placing undercarriage tips in the pad and using a larger pump or multiple pumps, one on either side, for higher pressure. Welsh notes that the third pipe could also be used to carry water.

"We may add a cleaning solution tank for use every few days," says Welsh. "We will be installing reverse osmosis water treatment to make the washer work better, but also to improve the spray solution quality."

Check out a video of Welsh's washer at www.farmshow.com.

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3-Wheeler Converted To Fat-Tire Dirt Bike

Brent Seline of Fallon, Nevada recently sent FARM SHOW photos of an old Honda Big Red 3-wheeler he turned into a fat-tire dirt bike.

"After seeing a couple of other 3-wheeler to 2-wheeler conversions, I took what I considered to be the best approach and turned a couple of 1980's Honda Big Reds into a nice running, fat-tire bike," says Seline. "I purchased the two 'basket case' 3-wheelers for a couple hundred dollars and figured a dirt bike conversion would be the best use for them. The bike handles great and is easy and fun to ride in the soft sand around our desert area."

He stripped one of the 3-wheelers, an ATC 200E, down to the frame and removed the engine, then fabricated a swing arm mount. After removing the 3-wheeler's rear axle and mount from the frame, he installed the swing arm and twin shocks from a 1987 Yamaha

BW200 dirt bike. The swing arm incorporates a jackshaft to keep the chain clear of the bike's wide rear tire. He also mounted a no. 520 sprocket inside the jackshaft that matches a sprocket already on the Honda engine.

The bike's front forks and triple tree came off the other Big Red, a narrower ATC 200S. Seline lengthened the forks several inches to get a proper stance and better handling. He kept the 3-wheeler's stock muffler and exhaust after lengthening the pipe and re-fitting it. He also installed a new carburetor and several smaller components to complete the build.

"The bike still has the 3-wheeler's original Hi-Low transmission and electric start. I repainted the gas tank and recovered the seat," notes Seline.

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