

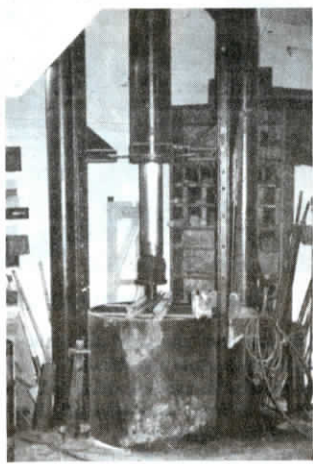
Giant-Size 140-Ton Shop Press

Saskatchewan farmer Ben Kambeitz built a giant 140-ton shop press using a 10-in. dia. cylinder that came off a junked earth mover.

"It'll bend a railroad rail," says Kambeitz, who comes up with many innovative ideas in his farm shop and uses the press on both routine and unusual projects.

Hydraulic pressure for the press is provided by a 3-piston Williams hydraulic pump. He built the press frame out of heavy-walled natural gas pipe. The press table beneath the piston was made from a piece of pipe taken from a large gas pipeline. Kambeitz notes that the 36-in. long cylinder on the press will exert about the same pressure as a fully loaded railroad tank car.

Contact: FARM SHOW Followup, Ben Kambeitz, Box 93, Richmond, Sask. S0N 2E0 Canada.



service the battery. Also, power drained slowly out of this battery so I put a switch on the ground side that lets me shut it off when not in use."

Dennis Van Arb, Alton, Iowa: "When painting equipment, instead of masking or otherwise covering tires and other parts, brush on liquid soap and then power wash when paint is dry. Works great and is a lot faster."

Alan Pegram, Lincoln, Ill.: "I had problems with chemicals settling in my nozzles and spray boom so I installed a 30-gal. fresh water rinse tank to flush the pump and booms out after each use. I do it in the field instead of back at the farmstead. It cost only \$50 or so for valves, hoses, and some welding."

"The best shop idea I ever had is my EZ Mount dual wheel handler which was previously featured in FARM SHOW (Vol. 15, No. 6). It works with a front-end loader and makes it easy to mount and dismount any size duals. It's being built for me by Ficklin Machine (ph 815 268-7826) and retails for \$289."

Francis Simmers, Jamestown, N.Dak.: "We have a pit in our shop for working under heavy equipment and a floor hoist for lighter vehicles. We also have a traveling beam with a 2-ton hoist that covers the

entire shop.

"I have made several improvements to the 6.2 liter diesel in my half-ton GMC pickup. The first was to enlarge the engine air intake to a 4-in. hose and to flair the air cleaner body so air enters in a funnel shape - an improvement over the original too-abrupt opening. This change eliminated the muffling effect of the intake hose so it's a little more noisy but it stepped up the pulling ability of the truck. I also replaced the original mufflers with others that have less resistance.

"I also have the same 6.2 GM diesel in my 23-ft. motorhome. I installed an electric pump near the fuel tank to serve as an emergency pump, should the primary pump ever fail, but also to be used to purge air from the system when changing filters, etc. A vent cock was put in the pipe between the final filter and the injection pump to allow trapped air to escape. The engine doesn't need to be running since the electric pump is wired to the accessory lug of the ignition switch.

"In addition, we installed a dual range 2-speed auxiliary transmission in the motorhome which gives us three extra in-between speeds - just what this diesel engine needs to keep it operating at the proper rpm. With the ability to split gears, we're now able to

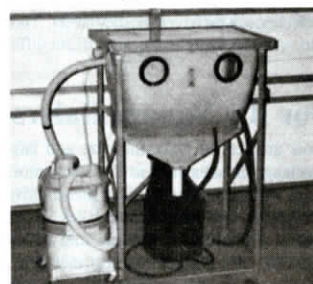
Sandblaster Great For Cleaning Small Parts

"I bought a small portable sandblaster from Sears and liked it for small cleaning jobs but it was messy to use in the shop since it sprayed sand all over. Another problem was that it wasn't easy to reuse the sand," says Leonard Appleman, Johnstown, Neb., who turned the Sears unit into an enclosed sandblaster that lets him reuse sand and also does a better job of containing sand.

"I mounted an old fiberglass fertilizer hopper on angle iron legs, positioning it at a comfortable work height. I added a funnel on the bottom and a plexiglass lid - set into an angle iron frame - that gives a full view of work inside the hopper.

"I cut two holes in the front of the hopper for my hands and put a piece of split rubber hose around each hole to protect my arms from fiberglass splinters. I put a light inside and attached a shop vac which sucks out the fine dust so I can see the workpiece while blasting it.

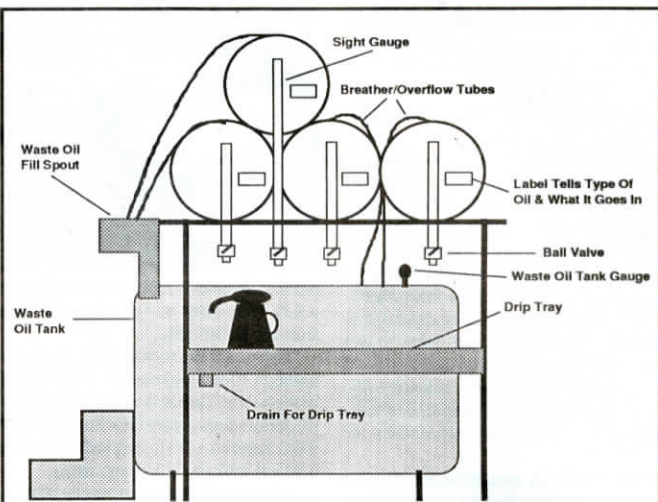
"The lid hinges up and I set my workpiece on an old stove grate to keep it from falling down the funnel. The sand tube



and air hose come up through holes in the bottom of the hopper. I use a pair of heavy rubber gloves to protect my hands. As I use the sand, it falls to the bottom, out the funnel, and back into the Sears blaster to be used again.

"The original Sears unit can be easily removed for outside use on bigger projects."

Contact: FARM SHOW Followup, Leonard Appleman, Rt. 1, Box 358A, Johnstown, Neb. 69214 (ph 402 722-4465).



Bulk Oil Dispensing Rack

"I made a bulk oil dispensing rack out of angle iron and three 55-gal. drums," says Tim Boucher, Crookston, Minn.

"The drums are about 5 ft. off the floor and store the three different oils we use in our equipment. Above the oil drums is a 30-gal. drum that holds antifreeze. All four drums are fitted with sight gauges and ball valves that are positioned over a drip tray that catches any spillage.

"There's an old 300-gal. fuel oil tank on the floor under the platform that we use to store waste oil. Overflow from the barrels above run into the tank so we never spill on the floor when filling. We use air pressure to pump oil and antifreeze up into the barrels."

Contact: FARM SHOW Followup, Tim Boucher, Rt. 1, Box 62, Crookston, Minn. 56716 (ph 218 281-2058).

keep up good momentum on long mountain grades without overloading the engine. I also installed a tachometer since I felt I was shifting down too low before shifting when driving in the mountains. Now we cruise at 2,750 rpm's and downshift whenever it gets down to 2600. The engine is rated at 3,600 rpm's so we're operating at about 75 percent of rated speed, which should contribute to long engine life."

Albert Scafe, Ashton, Idaho: "Taking baler knives out to sharpen them can be quite a job unless you have help. I do it myself using magnets from old radio speakers to hold the bolts in place while I go to the other side to put the nuts on. That'll work on other repair jobs, too.

"Timing is very important on a baler. If you replace a chain, be sure you have it timed right or you can do a lot of damage.

"I weld extra steps onto my tractors and combines to make them easier to get on and off.

"To take a hydraulic pump off a Deere combine, I made a wrench out of an old harrow tooth. I bent it into a U-shape and welded small brackets to the ends so I could put a bolt through to keep it from spreading. Then I welded a short iron on it to hit with a hammer to knock the pump loose.

"When replacing pickup feeder teeth on a New Holland baler, be sure to hit the bolts several times to make sure they settle into place. Otherwise, they'll come loose."

Stan Miller, Lafayette, Ind.: "I paint the points on my combine cornhead a reflective orange which makes them easier for the operator to see header height at night. It takes several coats of paint the first time to avoid wear-off. Thereafter, I only have to touch it up occasionally."

Gary Fugh, Fisher, Ill.: "The first two years I ran my Gleaner R-50 combine, the cornhead would sometimes drop by itself. The problem was erratic and inconsistent. The dealer tried several times to solve the problem. Finally, after harvest the second year, a company troubleshooter replaced

the hydraulic control valve and solved the problem.

"We've had what seems to be an extraordinarily high incidence of burnout of the dim beam on the headlights of our 1987-92 Ford vehicles which are equipped with 9004 Halogen bulbs. Seems like they're prone to early failure. We've also had trouble with water getting into the headlight enclosure. We drill 1/4-in. holes in the bottom of the lights to drain them.

"One maintenance shortcut we use is to install grease zerks on almost all wheel hubs so they can be easily greased on a regular basis."

Frank Sir, Lindsay, Mont.: "I have a 1981 Case 2390 tractor with an electrical problem. The lights come on whenever there's a rainstorm even with all the switches turned off. The headlights stay on for about three days and the instrument panel lights stay on a couple days longer. The local Case mechanic has been unable to solve the problem other than suggesting I disconnect the battery or install a complete new wiring harness."

Dave Nicholas, Martinsville, Ohio: "One of the best products we use in our shop is Sta-Bil fuel conditioner, which keeps motor fuel molecules from delinking into other sticky compounds like tars or varnishes. I've used it for 20 years to winterize or store gasoline and diesel-powered equipment. Be sure to buy the concentrate. It costs 75 to 80 percent less. (Sta-Bil, Gold Eagle Co., Chicago, Ill. ph 800 367-3245 or 312 376-4400)."

Do you have a repair tip or maintenance shortcut you'd like to share? Have you made a shop tool that solves a tough mechanical problem? Do you have a shop problem you can't seem to solve?

If so, we'd like to hear from you. Write to: FARM SHOW, Repairs & Shortcuts, P.O. Box 1029, Lakeville, Minn. 55044.