Money-Saving Repairs & Maintenance Shortcuts



Roger Gutschmidt used a big tractor to tow this 25 by 6-ft., 5-in. thick concrete slab to a new location. He cut a hole in the slab, then tunneled under it with a long air nozzle to blast out dirt. Then he slipped a log chain through the hole and pulled the slab away.





As Gutschmidt headed uphill over some uneven ground, the slab broke into 2 big pieces. He pulled them one at a time to the new location and set them in place. He then filled the big crack between them with concrete.

How To Move A Big Cement Slab

By Mark Newhall, Editor

I got a call recently from regular contributor out the center with an air chisel. In order to Roger Gutschmidt in Gackle, N. Dak. It's always fun to hear from him because he's usually up to something interesting.

This time he told me he was planning to move a 5-in. thick concrete slab that measures 25 by 6 ft. in size that served as an apron outside one of his farm buildings that he planned to enlarge. The plan was to tow it to a new location with one of his tractors.

"Rather than having to break it up and haul it away, I figured I didn't have anything to lose by trying to move it to a new location alongside another shed," Roger told me.

A couple weeks later I heard back from Roger with a detailed report.

"I made a hole in the slab by drilling several 3/8-in. dia. holes in a circle and then knocking

slip a heavy log chain through the hole, I tunneled under the slab with a long air nozzle to blast out dirt.

"I hooked up to my 7530 Deere MFWD 150 hp tractor and pulled the slab away from the wall. It was going pretty good until I headed uphill over some uneven ground and the slab broke into two big pieces. I pulled them one at a time to the new location and set them in place. I filled the big crack between them with concrete. It works great to hold chemical totes and other stuff.'

Contact: FARM SHOW Followup, Roger Gutschmidt, Gutschmidt Mfg., LLC, 6651 Hwy. 56, Gackle, N. Dak. 58442 (ph 701 698-2310; shopdoc@drtel.net).

Centrifuge Gets Sludge Out Of Used Oil

Don't burn or throw out dirty oil when you can clean it and use it to safely run diesel motors. You can clean a gallon of old oil at a time or clean old oil continuously 24/7 with centrifuges from US Filtermaxx.

"We've powered our shops for 18 months straight burning used oil in our diesel generator," says Steve Chastain, US Filtermaxx. "We have 4,000 hrs. run time without a problem."

Chastain first got involved with waste oil about 10 years ago when his house was without power for a week. "To save money we started blending used motor oil with diesel, but realized it needed to be clean."

The answer was a centrifuge. He tried different commercial products before deciding to build his own. "I feel we have them perfected now with a very high gravity force and cleaning to submicron particles," says Chastain. "We build them like a tank, heavy and nearly indestructible. The motors are designed to run at only 1,800 rpm's for longer life."

His centrifuge can clean from 10 to 40 gal. per hour, depending on the weight of the fluid and how dirty it is. It can be filled a batch at a time with a stop to clean the sludge out every hour and a half. Set one up with pumps, preheaters and automation, and it will clean oil continuously and dump the sludge by

While the basic centrifuge bowl is the same in all the standard models, with a capacity of slightly less than a gallon, the drive units vary. The speeds and resulting G-force changes from one model to another. The company offers 2,400G, 3,000G and variable speed 6,000G models.

Chastian is offering the 3,000G centrifuge with a 1 1/2 hp motor for \$1,500. Prices go up with the complexity and G rating of the system. A 6,000G with variable speed programmable controller and inline oil heater is priced at \$3,339. Options include pumps, heaters and more. Automatic controllers allow the units to cycle and drain sludge, cleaning up to 1,000 gal. per day.

"We will be introducing a 10,000G unit by the end of the year," says Chastain. "It will have a variable frequency drive with a new heater system that can take up to 4,000



Centrifuge cleans dirty oil so you can use it to safely run diesel engines. It can clean from 10 to 40 gal. per hour.



The centrifuges are designed to fit over a 55-gal. drum or can be placed inline between dirty oil tanks and clean storage tanks in an automated system. Systems vary depending

"We have shipped centrifuges around the world," says Chastain. "They are being used on-board oceangoing ships to clean bunker oil before it fuels the engines. They are also in use at airports around the country with oil being blended into the fuel for taxicabs. In many lesser developed countries, oil is going through our centrifuges instead of being dumped on the ground."

Chastain suggests blending cleaned oil and gas 80:20. Diesel fuel can be blended at 80:20 to 50:50 rates.

"FARM SHOW readers can receive a \$200 discount on the basic and programmable 3,000G centrifuges," says Chastain. "Just use the code 'FARM SHOW' when you order."

Contact: FARM SHOW Followup, US Filtermaxx, 2925 Mandarin Meadows Dr., Jacksonville, Fla. 32223 (ph 904 334-2838; steve.chastain@usfiltermaxx.com: www. usfiltermaxx.com).

4020 Tractor Repowered With Combine Engine

"My 1971 Deere 4020 with its original engine was losing power and using oil, so instead of overhauling it, I replaced the engine with one from a 6620 Deere combine," says semi-retired Iowa farmer Arlis White. "The engine from the 6620 turns 115 hp on the dyno. It sounds great and has a lot more torque than the original engine.

White says he looked into overhauling the original tractor engine, but the cost was fairly steep. He was able to acquire the used 6620 engine at a price that was considerably less. He replaced the engine himself with help from his sons over a 2-week period. "It wasn't very difficult to make the switch at all," Arlis says. "We disconnected the radiator, the fuel line, removed the starter and just started taking bolts loose, supporting the frame before removing the engine. The new engine slid right in place

and we connected everything back up and it started right up."

White says he's put close to 1,000 hrs. on the 6620 engine in summer and winter work over the past 3 years. In the summer he uses it for haying and some occasional field work, but during the winter the tractor has a loader, a bucket and snowblower. "It starts just fine in all kinds of weather, runs well and just sounds better than the original tractor engine. It's fuel efficient and doesn't use a drop of oil," Arlis says. "I'd recommend this engine for anyone wanting to repower a 4020.

White says he enjoys keeping older equipment running well and working around his farm. He has completely restored a Deere 60 tractor that he still uses regularly.

Contact: FARM SHOW Followup, Arlis White, 18214 Dalmation Ave., St. Olaf, Iowa 52072 (ph 563 783-2463).





On windy days, the 20-ft. sq. doors on Gutschmidt's machine shed would catch wind like a big sail. The sliding door supports he designed keep that from happening.

Supports Protect Big Sliding Doors

"I designed sliding door supports for my new machinery storage building. Each door is 20 ft. wide and 20 ft. high. I had a lot of trouble opening them on windy days. Once the door got past the edge of the building it would catch wind like a big sail. These supports keep that from happening," says Roger Gutschmidt, Gackle, N. Dak.

"As the door opens, it goes behind two uprights, which are set in concrete. The tallest one is braced by a horizontal bar that runs over to the sliding door upright."

Contact: FARM SHOW Followup, Roger Gutschmidt, Gutschmidt Mfg., LLC, 6651 Hwy. 56, Gackle, N. Dak. 58442 (ph 701 698-2310; shopdoc@drtel.net).