

Great Way To Free Seized Engines

By Keith Berglind

As a mechanic, I've learned to deal with rusted nuts and bolts and other simple rust problems by using penetrating oil, drills, grinders and torches.

But one situation often taxes the skills of most of us: a rust-seized piston in an engine. Engine rebuilders/restorers often encounter engines that have sat for years with water collecting in one or more cylinders. The piston rings and piston walls are locked to the cast iron cylinder wall.

Easy jobs may require only some penetrating oil, then a block of wood driven by a large hammer. But all too often this means the piston is destroyed and the cylinder wall cracks from the wedging action of the rust jammed between the piston and the wall.

This past spring a supplier suggested I try a product called Engine Release. He sent enough technical information to attract my attention so I ordered enough to do a 6-cylinder engine. It turns out one kit is required for each cylinder, so I ended up with 6 small kits. Each kit consists of an 8-oz. can of Engine Release, a small applicator bottle, and a dispenser hose.

The proper application is to put 2 oz. into the small bottle and squirt it into the cylinder through the spark plug or nozzle hole. Then repeat this step every two days until the entire chemical is gone. From my experience, after all the chemical has soaked in, the piston rings will break free of the cylinder wall and the piston will move.



Applicator dispenses chemical around cylinder wall. It can also be squirted in through spark plug or nozzle openings.

The first engine I tried it on was a well-rusted block from a Ford 6000 tractor. This block was stripped except for the one piston and rod that a mechanic friend had been unable to drive out with a hammer six years ago. It had lain on its side outside since the last attempt.

After the second 2-oz. application of the chemical, the piston moved after a sharp blow with a hammer and block of wood. We were impressed by the underside view of how the chemical soaked down into the lower skirt area.

Kits are available online only for \$19.95 each plus \$6.95 S&H per kit. Delivery takes 10 to 14 working days.

Visit the company's website at:

www.enginerelease.com

Reader Inquiry No. 40

“Permanent” Replacement Seals For Deere 30, 40 Series Tractors

A Missouri machine shop that got tired of replacing leaky load control shaft seals on Deere 30 and 40 series tractors came up with heavy-duty “PERMANENT” replacement seals.

Boling Machine Shop, Lenter, Mo., says Deere's seals often start leaking after six months or less. Boling has been making heavy-duty replacements for 20 years. The replacements are machined out of steel with Teflon liners, O-rings, or neoprene washers, depending on model. The O-rings, liners and washers can be replaced without replacing the seals. The 4020 seals also fit 4010, 5010, 5020 and some applications of 4000 models.

The 3020 seal also fits 2510, 2520, 3010

and 4030 tractors. A 4520 seal also fits 4620, 7020, and 7520 tractors. This series sells for \$55 a set.

The company also has seals and bushings for newer tractors which include 4440, 4230, 4240, 4320, 4430, 4440 and 6030. Each set contains two hardened steel bushings which have a wider surface to reduce shaft wear and two seals with replaceable inserts. They sell for \$85 per set.

We also sell load control shafts for most models. New seals this year are, 2950, 2940, 2840, 2850, 2855, 2550 and many others. All seals are fully guaranteed.

Contact: Boling Machine Shop, 2357 Shelby 418, Lenter, Mo. 63450 (ph 660 699-3717; website: www.bolingmachine.com).



One-Man Dual Wheel Changer

This new “EZ Dual Changer” makes it easy for one man to change even the biggest dual wheel on tractors and combines. The EZ Dual Changer was voted the winner of the 2008 Iowa Farmers Inventors Challenge contest.

Made from high tensile reinforced steel, the EZ Dual Changer is a scissors clamp that hangs from a chain hoist on a front end loader, forklift, or service truck boom. The tire is held securely in place and rotates easily on four 5-in. diameter hard rubber wheels, two on each side, that make it easy to line up the lug nuts.

Model 51, the most popular model, can handle all 20.8-in., 18.4-in., and 14.9-in. tires (metric sizes up to 520). It has a weight capacity of 2,000 pounds, so it can lift a 1,000 pound weight plus the dual, a tire filled with fluid, or cast iron centers. There are other models available for larger tires such as an 800 metric. Model 51 sells for \$330 plus S&H.

Contact: FARM SHOW Followup, Bierman Sales LLC, 4320 C Avenue, Marcus, Iowa 51035 (ph 712-324-1930; sbierman@biermansales.com; www.dual-changer.com).

Reader Inquiry No. 41



Permanent replacement seals don't leak like factory seals, says Boling Machine.

Reader Inquiry No. 42