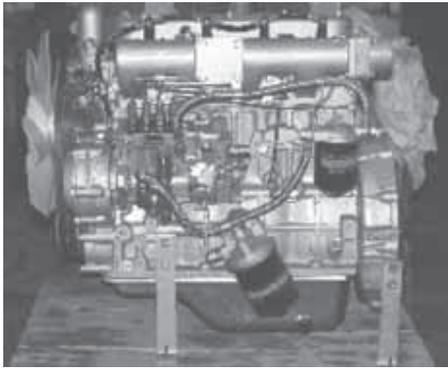


Chinese diesel engines use up to one third less fuel than competitive American and Japanese models, says importer Robert Shrock.



## He Specializes In Chinese Diesels

Customers of Imperial Diesel Machinery say their Chinese diesels use less fuel than competitive American and Japanese models.

"One customer told us he was using between 0.4 and 0.5 gal./hr. on his Imperial diesel versus 0.7 to 0.75 gal./hr. on his Yanmar. Both were on 12 K gensets," says Robert Shrock, Imperial Diesel. "If you can cut fuel use by a third, that's a considerable savings at today's fuel prices."

Shrock is sold on the Chinese diesels and even powers his business and his home with an Imperial Diesel genset. He filtered cooking oil in the home generators to keep the cost down.

He says the key to satisfaction with Chinese diesels, regardless of the fuel source, is in the prep they receive. He has been importing Chinese diesels to repower tractors and for use in gensets for more than 20 years. Although he carries a full line of parts, he has found minimal need for repairs once he learned to "Americanize" them.

"I only sell a couple of parts kits a year to past customers, and we have sold more than 2,000 diesels over the years," says Shrock.

Originally a Belarus tractor and engine dealer, Shrock learned that assembly was often not up to par, though manufacturing quality was fine. When Belarus engines became difficult to import, Shrock started investigating Chinese diesels.

"My main goal was to supply a value priced product that had equivalent quality to American products," recalls Shrock. "I found factories that had good product and metallurgy, but they didn't pay as much detail to finished assembly."

He settled on Imperial Diesel Machinery, though they too needed quality control re-

view. Americanizing the diesels meant prechecking heat torques and resetting the distance between the cam lobe and the valve stem. He would check all bolts, snugging down and tightening them to proper torque. He would even pull the oil pan and do a bottom up torque check.

"We got rid of most oil and coolant leaks this way," says Shrock. "Other importers were just marketing them the way they came. People would blow a head gasket or ruin bearings and cylinders, all because of a lack of initial prep."

Shrock says the quality control has improved measurably over the years. He no longer pulls the oil pan for a torque check. He also sees less and less need for other prep work. While he did see some water pumps go out after 1,500 to 2,000 hours, that is no longer the case.

"We remachined the housing and put in premium bearings and seals," says Shrock. "We don't have that problem anymore, but we do repair water pumps on other makes."

A big advantage with the Chinese diesels over U.S. brands such as Deere, which Shrock also services, is common parts. "A lot of parts such as filters, bearings and seals are common between manufacturers."

The one problem that still exists with Chinese diesels is meeting federal emissions mandates. Because they aren't certified, they can no longer be used to repower tractors and other self-propelled equipment. Shrock says they can be sold for gensets, irrigation pumps and other stationary uses for a few more years.

Contact: FARM SHOW Followup, Imperial Diesel Machinery, 8569 Ward North Rd., Kinsman, Ohio 44428 (ph 330 876-8709).

## Diesel Boosts Power, Fuel Efficiency In Deere 4020

Jim Lumbrezer's Deere 4020 has more power and uses less fuel since he replaced the old gas engine with a diesel.

"The fuel economy is just unbelievable. I used to use 8 to 10 gallons an hour," says the Swanton, Ohio, farmer. "Now I use 4 to 4 1/2 gallons an hour."

Lumbrezer says there were several challenges to install the 404 diesel engine from a Deere 4230 into his gas-powered 1967 Deere 4020. Because of the size difference of the engines, he had to add a few inches to the frame, which also meant lengthening hydraulic pump lines and steering lines.

One of the biggest challenges was the flywheel. "The ring gear on the flywheel was different. Instead of buying another flywheel, I took it to a machine shop and had it cut down," Lumbrezer says.

Using the same flywheel also saved him

from making changes to other parts. For the clutch, for example, he just replaced the pilot clutch bearing and clutch disk to match it up to the diesel engine. By changing a bearing, he maintained the dry clutch system in the gas tractor. He also used the alternator and ignition from his old tractor.

Both systems were 12 volt, but Lumbrezer added another battery for more starting power for the 120 hp engine.

"I had to add weight to the back, otherwise it would just spin because of all the power," he says.

He bought the engine used and spent about \$2,000 for everything. That was six years ago, and Lumbrezer says he's put 2,000 hours on the tractor since then doing fieldwork.

Contact: FARM SHOW Followup, Jim Lumbrezer, 11293 Co. Rd. 2, Swanton, Ohio 43558 (ph 419 825-1089).

## Seal Stops Drill Bearing Failure

Tired of replacing bearings on Deere 750 and 1850 No-Till drills? Concord Equipment has the answer with the Seal Sealer.

"The Seal Sealer was developed by a South Dakota farmer who got tired of replacing bearings," says Shawn Justesen, Concord Equipment. "I've heard from farmers who replace the bearings on their closing wheels every year, sometimes twice a year."

The closing wheel takes a pounding, working at an angle. Add no-till conditions, and the stress gets worse. The bearing design just doesn't hold a seal, suggests Justesen.

"Dirt gets in, and the bearing goes out," he says. "The Seal Sealer will protect the seal and the bearing, lengthening the life of the bearing."

Best of all the Seal Sealer takes only minutes to install. Remove the closing wheel, fit the seal sealer over the bearing seal, and put the wheel back on.

Concord Equipment is in the process of finding distributors to handle the product. In the meantime, they're selling them direct. From one to 15 bearings, the unit price is



Concord bearing sealer is designed to protect the seal and bearings on the closing wheels on Deere 750 and 1850 No-Till grain drills.

\$24.99. For a limited time, 16 or more Seal Sealers are available at \$16 each.

Contact: FARM SHOW Followup, Concord Equipment, 110 15th St. S, Hawley, Minn. 56549 (ph 218 483-3307; fax 218 486-3308; www.concordequipment.com).

## How To Get Engine Oil Analyzed

Larry G. Turner Sr., of the Oil Analysis Company in Chester, Va., offers a mail order service for vehicle oil analysis. However, his service has an added twist from others.

"The unique part of my service is that I also maintain a statistical database of all vehicles so you'll be able to see what you and other owners of similar vehicles are experiencing at a similar mileage, plus the brand and type of oil used, engine type, etc.," he says. "A lot of customers really like that."

Turner makes the analogy that an oil analysis kit is like a blood test for your car, since it lets you see if the engine's healthy (wearing normally). It identifies specific contaminants which helps to pinpoint the cause of a problem before more expensive repairs become necessary.

You no longer have to wonder if the oil you're using is providing the kind of protection your valuable engine needs, or if that expensive engine rebuild you just paid for is wearing normally, he explains.

"This is a predictive maintenance program that needs to be done as often as you'd perform a tune up, or any regularly scheduled preventative maintenance," he says. "Although it's offered primarily for analysis of engine oil, this program will also provide the same warning system for transmissions, steering gear, trans-axles, and other lubricated components."

A few examples of analysis results include: elevated chromium, which means increased piston wear; elevated copper means bearing wear; presence of silicone means worn seals or air filter; elevated iron means cylinder wear or ring damage; and glycol presence means a leaking head gasket.

The oil analysis kits include instructions and all supplies needed to collect and submit the sample, such as a sample bottle and label, prepaid mailer, mailing label and information form. The form, to be completed by the customer, asks for certain information

about the oil being tested and about the vehicle.

To make the collection process as easy as possible, Turner also offers a bellows bottle, which allows the oil to be extracted through the dipstick tube, using tubing that's provided. Alternatively, a standard bottle is used to catch a sample while the oil drains.

Preliminary test results are sent by email, usually in a week to 10 days from the sample being mailed in. Soon after, Turner supplies a hard copy with additional details from the lab, by U.S. mail. The analysis provides a breakdown of contaminants, additives, and physical properties of the oil, along with an interpretation and advice/suggestions regarding abnormal results.

"If you'd like to review the database of previous oil sample reports, please visit <http://members.rennlist.com/oil> and select Test Results. There, you'll see over 200 Analysis Reports prepared for our customers. Additionally, there are four samples of new, unused oil, which provide a baseline for those who wish to know the sample values of their oil before it's been subjected to the stresses of an engine. These sample reports are highlighted with green bands of color to make them easy to find."

The kit costs \$19.99 plus S&H, but because he encourages a regular checking program, Turner offers a 3-pack oil sample kit for \$55 plus S&H. There are no additional lab fees, as the kits are all-inclusive.

Besides these test kits, Turner also sells several useful chemical products such as an odor eliminator, adhesive remover, zinc phosphate rust preparation for metal parts, and body seam sealer.

Contact: FARM SHOW Followup, The Oil Analysis Company, 4608 Dunkirk Drive, Chester, Va. 23831 (ph 800 583-8601 or 804 526-1151; info@youroil.net; www.youroil.net).

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