

## He Rebuilds Antique Magnetos, Carburetors

If you collect or restore old tractors, you'll be interested in the service offered by Earl Lundin of Revillo, S. Dak., who rebuilds magnetos and carburetors for antique tractors to "like new" condition. He even builds some of his own tools to do the work.

He charges \$40 per hour and ships the rebuilt magnetos and carburetors by UPS.

"Rebuilding magnetos is a rare business and a lost art," says Lundin. "I don't advertise and rely entirely on word of mouth. I do work for people from all over the U.S."

A magneto is a self-contained, high voltage distributor that ignites the spark plug on older tractors that don't have a battery. It produces a spark by running magnetic energy through a magnet, coil, condenser and points.

"A lot of antique tractors have been parked outside for 50 years or more so when I rebuild the magnetos or carburetors, they're usually all rusted up. I use a sandblaster to clean up the casting. When sandblasting I use only glass beads to keep from distorting the metal.

"I also install new threads on the bottom of Deere cast iron carburetors when condensation causes the threads to rust or break. Some of these carburetors have been on the tractor for more than 70 years. I make the threads on a turning lathe using my own jigs.

I also had to make my own jig for making the threads. As far as I know there are only two other people in the U.S. who make and install new threads like this."

Lundin, who retired from farming in 1992, says he has been doing this kind of work all his life. He started doing it as a business 10 years ago.

Few people are willing to work on magnetos and carburetors found on antique tractors. "Most mechanics avoid them, and no one has the tools," says Lundin. "In fact, a lot of antique tractors had battery ignition systems installed on them back in the 1950's because no one knew how to restore the magnetos.

"I have all the tools required to repair magnetos and carburetors, including coil testers, condenser testers, spark testers, and a magnetizer to charge magnetos. I even had someone from Chandler, Arizona, make a digital gouse tester for me that measures how much magnetism is in a magneto's magnet. It lets me know if I'm increasing the magneto's magnetism level or if the magneto is already fully charged."

He says he can rebuild any magneto, but often he has to make parts for them. "I've even had to make my own pullers to take magnetos apart. For example, when I needed a puller for an International Harvester mag-

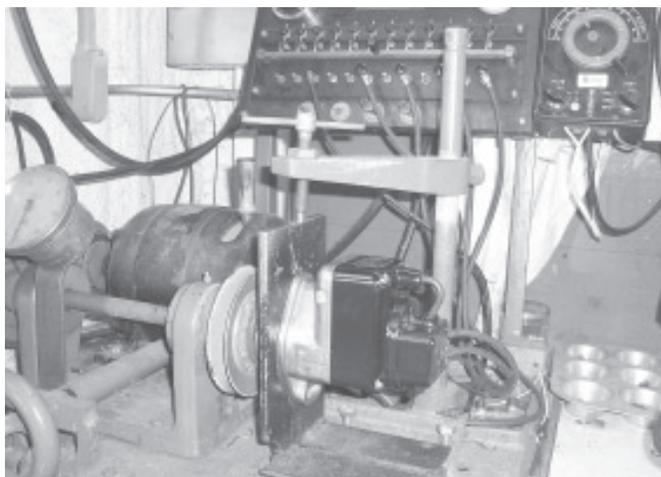


Photo shows a typical antique tractor magneto being tested on a commercial magneto bench tester.

neto and called the company, they said the last one they sold was way back in 1972. So I made my own, using a pattern from another mechanic who already had a puller."

Lundin says the first magneto was built in about 1890 when gas engines first came out. "I deal with the Wico Magneto Company in Chicago quite often to get parts."

Most of the work he does is on Deere tractors, "because Deere customers have a terrific loyalty".

During the winter months he conducts seminars in Arizona. "I started up a break-fast club of tractor collectors. Every year I do one seminar on carburetors and another one on magnetos. Some people say I should start up a school, but I haven't got that far yet," he notes.

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## Boost Diesel Performance With Better Information

Monitoring the temperature of major components on diesel trucks is a great way to keep tabs on the condition of your vehicle. Of course that's kind of hard to do with traditional OEM gauges installed. It's especially questionable if you have added performance-enhancing equipment to your rig.

"For some reason, major car and truck makers have never been that into real precise instrumentation," says Jenn Dandekar, co-owner, Danin, Inc. "Most drivers can get by, but if you really want to know at what temperature your engine is running, you need a pyrometer for exhaust temperature. Transmission fluid temperatures also give a more complete picture of operation. It's especially helpful if you are pulling a load."

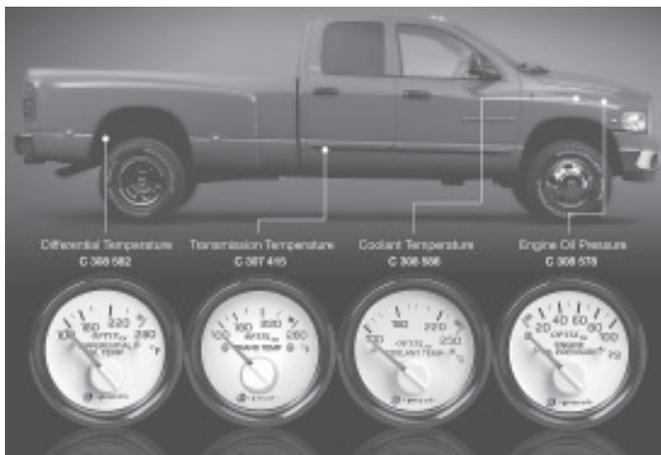
Getting a better read on key temperatures and pressures is the goal of Danin's new Optix series of diesel performance gauges. In the past, the company has offered a Pyro gauge as well as fuel pressure gauges and

transmission temperature gauges. Now they have added gauges to monitor differential and coolant temperatures as well as engine oil pressure and rail pressure.

Dandekar says any of the gauges can be installed by their dealers or by a knowledgeable customer. "We designed them to be easy to install with Molex connectors," says Dandekar. "You just run connections to the spots to be monitored."

The gauges, complete with sensors and wire harness, are LED lit, tested, calibrated and ready to mount. Suggested retail prices range from \$53 for the transmission temperature gauge to \$198 for the Pyro gauge for monitoring exhaust temperatures.

Contact: FARM SHOW Followup, Danin, Inc., 3944 W. Segerstrom Ave., Santa Ana, Calif. 92704 (ph 714 662-0600; toll free 800 398-6580; fax 714 662 0607; www.danininc.com).



Getting a better read on key temperatures and pressures is the goal of Danin's new diesel performance gauges.

## New Gauges For Old JD's

Looking to replace a gauge for an old Deere tractor? That's what Jerry Trcka needed when he contacted Travis Jorde, a specialist in Deere decals. When Trcka asked about gauge face decals, Jorde recognized an opportunity. Now Jorde makes the decals, and Trcka installs them in new and restored gauges.

"Jorde suggested we expand and do everything from 1935 to 1972 Deere 2-cylinders as well as the New Generation 20 and 30 series tractors," says Trcka. "All together, we do approximately 40 to 50 different gauge faces."

Trcka restores some old gauges, but most of his business is making new gauges to fit the older tractors. Restorations can take 4 to 6 weeks and cost up to \$60.

Trcka takes apart the old gauge, cleans it, paints it and installs the correct face decal for the model. Gaskets, nuts, washers and

glass lens (not plastic) are also replaced.

The bulk of his customers simply order a new gauge with the proper face. That process starts with a brand new gauge that Trcka disassembles. A Jorde decal is laid down to match the tractor model and year, and Trcka reassembles and calibrates the gauge. New oil and amp gauges are priced at \$60 with a new temperature gauge priced at \$70 to \$80, depending on the length of the lead.

The key to either accurate restoration or replacement is matching the right colors and style to the model and year. "Different years of the same model had different color combinations," explains Trcka.

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Jerry Trcka makes new gauges and also restores old ones.

