

“Bad Gas” Drives Repower Business

Jim VanDerEems gives poor quality gasoline the credit for the good business he's built up repowering tractors. Over the past 20 years of working on tractors, bad gas is often the cause of engine problems.

“It was bad enough when they took out the lead, but with ethanol, it's worse,” says VanDerEems. “Repowering older gas-powered tractors with diesel engines is the answer. I draw up a diagram of what I need to do the job and take it to a local machine. They make exactly what we need.”

The coupler is his trade secret. “We came up with a design that works with almost any engine,” says VanDerEems. “It lets me bolt the driveshaft to the flywheel. I have a flex plate in there and have never had an issue.”

VanDerEems specializes in the Allis Chalmers brand. He prefers putting Cummins engines in larger tractors, such as a 100 hp. AC 190. He finds them easy to work with.

For small tractors, he generally goes to a company in California that sells imported diesel engines on eBay. A typical 10-hp., air-cooled diesel for a garden tractor is just under \$670. He has also used 2-cylinder

Continental in slightly larger tractors. Finding the right engine isn't a problem.

“I can get a complete new motor just right for the chassis I am working with,” says VanDerEems. “I'm currently working on an AC D10 garden tractor and have a couple more that will be coming in for repowering when I finish this one.”

VanDerEems gives FARM SHOW stories credit for many of his repower ideas. He also credits his father, who was a mechanic, and his mechanically inclined son John for much of his success. He notes it is John who often handles the search for the right small engine.

Many years of working as a mechanic in an Allis Chalmers dealership added to VanDerEems knowledge.

“My son is laid off in the winter, so he helps me then,” says VanDerEems. “As I've gotten older, I like working with smaller tractors. I don't have to climb all over them and manhandle parts.”

Contact: FARM SHOW Followup, Jim VanDerEems, 3345 Cross Rd., Watkins Glen, N.Y. 14891 (ph 607 535-2395).



Repowering older gas-powered tractors with diesel engines is the answer to poor quality gasoline, which is often the cause of engine problems, says Jim VanDerEems. He specializes in Allis Chalmers tractors.



Microwave technology is used to measure hay moisture as bale exits bale chamber. Models are available for both big and small square balers.

Moisture Meter Designed To Work On Small Balers

Small square bale producers can get moisture sensing on-the-go with the new Gazeeka 180. It measures hay bale moisture as the bale exits the chamber. Using microwave technology mounted to the baler, it is accurate to within half of one percent of oven-dried samples in a lab.

“When hay is going to export, operators need to know exactly what the moisture is when baled,” says John Ashworth, International Stock Food (ISF), U.S. distributor for the Gazeeka.

Ashworth notes that the Australian-made Gazeeka 870 for big square balers has been on the market for 14 years. It's commonly marketed with the Staheli West steamer. He expects that will continue with the new 180 sensor.

Steaming is designed to moisten hay as needed for maximum leaf retention and improved value. Pairing it with the Gazeeka moisture sensors allows the operator to adjust steaming on-the-go to achieve the optimum moisture level.

The Gazeeka measures total moisture in all types of hay. It marks the location of wet spots and helps the operator segregate bales accordingly. The in-cab monitor displays instantaneous, maximum peak, and average moisture.

“It lets operators know when to stop baling because the dew has come in or when to stop when the hay becomes too dry without spending time stopping to check moisture levels,” says Ashworth. “If hay producers have had problems with moisture, after

running a Gazeeka moisture meter, they don't anymore. They can set up their systems to use moisture to their advantage, not their disadvantage.”

Installation for both models is simple. Two opposing antenna are mounted to brackets at either side of the bale exit point. Very low energy/high frequency electromagnetic waves are transmitted between the antennas. The waves measure approximately a square foot through large square bales and about 6 sq. in. through small bales. Power used by the sensors is equivalent to that used by a mobile phone.

The Gazeeka 180 for use with small square bales is priced at \$5,060. The Gazeeka 870 has a suggested retail price of \$7,495 for use with big square bales.

“Brackets for mounting the 870 to large square balers vary from \$200 to \$700, depending on the brand and model,” says Ashworth. “Brackets for the 180 vary from \$250 to \$350, depending on type of baler and straight chute or quarter-turn chute.”

System longevity with the 870 has been a major selling point. “We have units that have been running for the full 14 years we have been selling it,” says Ashworth. “Lots of customers have taken them off balers they were selling and installed them on their new baler.”

Contact: FARM SHOW Followup, International Stock Food, 1200 Buckhead Crossing #E., Woodstock, Ga. 30189 (ph 770 977-1664; ph 800 497-4243; info@isfglobal.com; www.isfglobal.com).

Metal Stairs, Platform Bolted Onto Deere Baler

Duane Marvin, Preston, Iowa, wanted an easier and safer way to climb to the top of his Deere 597 round baler, so he attached a platform and steps to the front of the baler. One side of the platform is used to hold a 55-gal. barrel of preservative which he applies to his hay while baling.

“I use this baler to make net wrap bales and occasionally have problems with net wrap clogging up in the top roller,” says Marvin. “When that happens I have to climb the front of the baler and cut the wrap off, which isn't easy or safe to do. I can't be the only person with this problem, and don't know why Deere doesn't build their balers with factory steps. Over the years I've mounted the same step and platform on several other Deere balers. I use a skid steer to load the barrel and use ratchet straps to hold it in place.”

The steps came off an old tractor. He used existing holes to bolt it onto the baler's frame.

“I spent \$50 for a 12-volt electric pump and bolted it under the barrel. I also mounted a toggle switch in the tractor cab,” says Marvin.

Contact: FARM SHOW Followup, Duane Marvin, 5643 421st Ave., Preston, Iowa 52069 (ph 563 543-6131; marvinfarm@gmail.com).



Add-on steps make it easier and safer for Duane Marvin to climb to the top of his Deere round baler. Platform holds a 55-gal. barrel of hay preservative.

How To Reach Us

To submit a “Made It Myself” Story Idea, New Product, Shop Tip, “Best or Worst Buy”, or other information, send a note along with photos, drawings and literature, if available. We'll get back to you later if we need more details. Send to: Editor, FARM SHOW, P.O. Box 1029, Lakeville, Minn. 55044 (ph 800 834-9665; fax 952 469-5575); email: editor@farmshow.com. You can also submit information at our website: www.farmshow.com or text from your cellphone to: 952 465-5019.

To change your address, renew your subscription, take out a new subscription, order videos or books, or for other information regarding your subscription, contact: Circulation Department, FARM SHOW, P.O. Box 1029, Lakeville, Minn. 55044 (ph 800 834-9665; fax 952 469-5575; email: circulation@farmshow.com).