

Computerized Gauge Helps You Save Fuel

You can keep track of how your car or pickup is performing with this new computerized gauge. It plugs into the diagnostic connector found under the dash on 1996 and newer cars and light trucks.

The Scan Gauge II is a small box that plugs in to your car's OBD II port to read the car's computer. It comes with large high contrast LCD digits and a user changeable backlight color. A detachable cable allows the unit to be easily moved from vehicle to vehicle.

The gauge is equipped with a trip computer that automatically tracks real-time information while you're driving. The unit reads your car's speed, load, throttle position and other factors, and computes your current miles per gallon. You can see how the mileage changes as you accelerate, climb and descend hills, or cruise down the highway. As a result, you can fine-tune your driving habits and use less gas. The trip computer can also be used to compute your cost per mile and cost per trip.

A series of digital gauges help you diagnose and troubleshoot problems by providing real-time data about your vehicle's codes



Computerized gauge plugs into the diagnostic connector on late model vehicles.

and conditions when the problem occurred. The gauges show your vehicle's fuel economy, fuel rate, battery voltage, coolant temperature, intake air temperature, engine rpm's, vehicle speed, manifold pressure, engine load, throttle position, and ignition timing.

"If a problem occurs and readings start to change, you can catch things early before they become more expensive problems," says the company.

Sells for \$159.95 plus S&H.
Contact: FARM SHOW Followup, PES Network, Inc., 4157 N. West Pinion Cir., Eagle Mountain, Utah 84005 (ph 801 400-3242; fax 801 880-8322; www.pureenergy systems.com/store).



Jeff Weeks built a frame to attach a 5-ft. bucket to his Suzuki. One-post mounting provides a great view from the driver's seat.

Suzuki Fitted With One-Armed Bucket

Jeff Weeks' one-armed hydraulic bucket on his Suzuki Samurai moves snow just as quickly - or maybe even slightly faster - than his neighbor's skidsteer.

The Belchertown, Mass., welder wanted something small that wouldn't tear up the yard when he moved snow. He purchased the Suzuki, which is slightly bigger than a Jeep, and he custom built a framework to hold a used 5-ft. bucket. He built a one-post lift that doesn't block his view from the driver's seat.

"I removed the passenger side floor, so I could run a 6 by 4-in rectangular steel tube from the frame to the rollbar," Weeks explains. He welded pieces of angle iron to beef up the frame and from the rollbar to the back of the Suzuki.

"I mounted a very small belt-driven hydraulic pump where the emission pump used to be on front of the engine," Weeks says. In order not to overload it, he designed the loader to work with a small, vertical cylinder. It was enough to give the loader a 6-ft. lift.

"I installed a Timbren load booster on the front axle, to help carry a load - it's like an inexpensive heavy duty spring," Weeks says.

To double his low range ratio, he sent the transfer case to a company in Oregon that modifies cases for vehicles used for rock climbing.

"I splurged on this, spending about \$700.



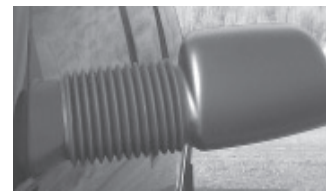
Weeks mounted a small belt-driven hydraulic pump in place of the emission pump on front of the engine.

It was worth it," Weeks says. It gave him the power he needed. His only regret was that he had a manual transmission. An automatic transmission would have been smoother, he says.

The bucket works with a two-spool control valve, and the dump is also hydraulic. With experience building firewood processors and working with hydraulics, Weeks engineered the loader to be simple in design.

Besides the transfer case cost, Weeks spent about \$1,200 for his Suzuki and bucket.

Contact: FARM SHOW Followup, Jeff Weeks, Amherst Welding, 330 Harkness Rd., Amherst, Mass. 01002 (ph 413 253-4867).



Extending mirror is electrically-operated, extending with the flip of a switch.

Power Mirrors Extend For Safer Towing

After being ticketed for hauling hay with inadequate mirrors, four buddies brainstormed over beers on how to make an extending mirror.

"We just kept messing with it and built a prototype. The first one took two minutes to extend," explains Dave Thompson. With more experimentation, the patented Power Vision electrically extending mirrors were ready for market. With the flip of a switch, the six-way mirrors extend in about three seconds.

Using parts made in the U.S., the mirrors are assembled in Pendleton, Oregon. The product got a real boost when GM started offering the mirrors as an option on pickups.

"When GM started putting them on, it gave us the credibility we needed," Thompson says. Power Vision sells the mirrors aftermarket for late model vehicles.

Typical customers are RV owners, farmers and ranchers and others who haul wide loads. The mirrors work on GM pickups 1988

and later; Dodge Ram pickups after 1994; and Ford's Super Duty trucks starting after 1999, and 1992 and later E-series vans.

The mirrors include a breakaway feature, folding parallel to the vehicle for car washes and when they bump into a garage door, for example.

"Sixty percent are installed by the vehicle owners," Thompson says. "It's not real technical, but it takes time and you need to follow directions."

Depending on the model and options, a set of mirrors ranges from \$450 to \$600, with a one-year parts warranty. Options include turn signals and heaters for frost-free viewing.

Power Vision mirrors are sold through the company's website and through dealers. Dealership inquiries are welcome.

Contact: FARM SHOW Followup, Power Vision LLC, 5678 NW Golden Ave., Pendleton, Oregon 97801 (ph 866 901-2957; www.powervisionmirrors.com).

Ken and Sharen O'Brock have been installing the Model 702 water pumping windmill - originally designed in 1933 - for the past 40 years.



Water-Pumping Windmill Passes Test Of Time

It's hard to beat the Model 702, a water pumping windmill originally designed in 1933, according to Ken and Sharen O'Brock, who have been distributing and installing the windmills for 40 years. They sell 4 to 16-ft. dia. windmills to clients throughout the U.S. and overseas. The windmills are used for everything from watering cattle and irrigating land to removing oil and chemicals from groundwater.

Interest in windmills for pumping has stayed steady throughout the years, Ken notes, with a burst of interest when people thought they might lose electricity during Y2K. Windmills can be installed with hand pumps or as backup on wells that have electric pumps.

The windmills can also be used for pond aeration and other uses. Ken modified five windmills, for example, to move in a rotary motion rather than reciprocal in order to operate oil skimmers at an oil refinery. For another client, the windmill pushed bubbling air into the ground water to oxidize and break down hazardous chemicals.

Ken notes he doesn't manufacture windmills. He sells units from four U.S. windmill manufacturers. As a distributor, his expertise is in applying the units to specific needs. Plus,

he and his wife are one of the few distributors who do installations.

"There always seems to be some issue that arises, and we can handle anything," Ken says. The O'Brocks work with customers to decide how large a windmill they need depending on the amount of water they want to pump and the well depth. The tower must be above wind obstructions. While they've installed windmills on towers up to 80 ft., 33 to 40-ft. towers are most common.

Customers can do the installation themselves, Ken adds. Windmills up to 10 ft. can be put up by hand, but larger ones require a boom or crane.

Some businesses purchase large windmills for business landmarks with their name on the tail. Individuals often put them up as nostalgic lawn ornaments.

The O'Brocks' website includes prices for all sizes of windmills, towers, hand pumps and other parts, as well as many colorful photos of windmills and towers being installed.

Contact: FARM SHOW Followup, O'Brock Windmill Distributors, 9435 12th St., North Benton, Ohio 44449 (ph 330 584-4681; kenobrock@hotmail.com; www.obrockwindmill.com).