

Energy savers

Cutting lighting costs

Tips on indoor and outdoor savings.

BY LEIGH GLENN

Dale Willey Automotive has made a switch in its lighting plan that's truly brilliant. The dealership has swapped out magnetic T12 fluorescents for electronic-ballast T8s, which require much less maintenance. And even though they added 35 percent more space to the Lawrence, Kans., store and increased light intensity by more than 50 percent, the lighting bill has stayed the same. The sunlit quality of the body shop has drawn raves from technicians. "It makes it easier to work," says general manager Greg Maurer.

Lighting accounts for a large portion of dealership energy expenses. Lighting is also critical to a dealership's mission of showing off its wares. So dealers should rethink and manage both their interior and exterior lights.

Like Dale Willey Automotive, many businesses are replacing older T12 fluorescents with new T8s. They're also using LEDs in exit signs and replacing halogen and incandescent bulbs with compact fluorescents in decorative and recessed lights. And more stores now have solar-sensitive lights (photocells) that dim when the sun goes down.

Before ever signing on for new fixtures, says Terence Conaty, a mechanical engineer at Lockheed Martin who works with EPA's Energy Star program (see "The Green Store," page 45), dealers must consider three things: the proper amount of light; the best type of technology; and the proper management of lighting systems. Dealers have to conform to manufacturer specs, but may often be oversold on lighting and end up with more than they need, adds Conaty.

MANAGING YOUR LOAD

Dealers can achieve significant savings just by better managing existing lights. Management tools include timers, occupancy sensors, and daylighting when possible, says Conaty.

Ecopower, of London, Ontario, and Houston, makes a dimmer that can help control lot lighting. In fact, dimmers may be ideally suited for lot lights, where inventory must show well in the evening hours—and be secure after hours,



Light show: Metal halide lighting at Dale Willey Automotive

says Ecopower president Jeff Floyd.

The dimmer includes an electronic timer programmed to adjust the light based on the intensity of the sun and hours of sun in any given time of year. Interiors, including showrooms and service departments, that derive some of their lighting from the sun also can benefit from dimmers, says Floyd. He estimates that dimmers help save 30 to 45 percent on lighting.

Though many dealers can save just by managing metal halide lamps better, Tom Andersen, national sales manager for Cooper Lighting, Peachtree, Ga., says he's begun to see dealerships switch to linear T5 fluorescents. In the service department, energy use is cut in half and the payback is 18 to 24 months. Plus, the light itself is more uniform, with "more light down onto the work area so that technicians have to rely less on auxiliary lights," says Andersen.

Another benefit to more energy-efficient lighting: reduced cooling loads in the summer. AE