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Hi-tech hits outdoor power

■ A recent trend toward using technology to create smaller, more efficient outdoor power equipment will continue into the 1990s, according to a small engine expert.

"Outdoor power equipment is using science and technology today, not mass, not force, not brute strength," says John Johnston, national service manager for HMC/the Green Machine, Long Beach, Calif. "Five years from now, you'll be working on plastic and ceramic engines weighing two to three pounds and producing temperatures up to 1200 degrees Fahrenheit."

Johnston, who gave a series of "total service seminars" to HMC dealers across the nation last winter, points also to advances being made on engines of all sizes. "There will come the day when you'll see no spark plugs in engines," he notes. "As early as next year, General Motors products won't have distributors."



John Johnston

Toro enters fitness market

■ The Toro Company is not sitting still, enjoying its comeback from a well-publicized slump of a few years ago. A leading independent manufacturer of lawn care equipment, Toro has entered a market outside its usual domain—the fitness market.

The Minneapolis-based company has introduced the Isopower exercise machine, a technologically-advanced product that made its debut in February. The machine uses electronics, rather than actual weights, to control resistance.

Bob Carlson, Toro fitness equipment vice-president and an exerciser himself, explains: "The major difference between this equipment and others is that it uses electromagnetic force to create resistance as opposed to mechanical means."

Two birds with one system

■ Texas researchers have designed and developed an irrigation system capable of applying both water and chemicals through separate nozzle systems from the same moving pipe. W.M. Lyle of the Texas Agricultural Experiment Station and J.P. Bordovsky developed the dual-nozzle system for efficient irrigation and accurate chemical application.

The researchers say the new Multi-Function Irrigation System (MFIS) is an upgraded Low Energy Precision Application (LEPA) system. LEPA consistently posted application efficiencies of 98 to 99 percent.

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