As soon as operators think a hydraulic system is faulty, they put equipment aside and call their nearest service technician or the manufacturer. The truth is, in many cases, equipment malfunction may be due to improper operating procedures, loose control linkage, a valve improperly adjusted, improper engine rpm or other routine maintenance items.

For the golf industry, Sylvester said that training's role should be to make operators and mechanics aware of the range of possible causes and how to handle them, adding that the majority of problems turn out to be minor and can be solved by the course mechanic, if he is adequately trained.

In the program held in Lake City, special attention was given to hydraulic transmissions used on Jacobsen Hydro Turf Kings, F-133s, and Turfcats and Outfront Commercial rotary mowers. Eaton and Sundstrand hydraulic systems were reviewed, including operation theory, circuitry, testing and failure diagnosis. Lab sessions were used to verify test pressures and test points, with students shown how to use test equipment.

Besides hydraulics, the participants received hands-on instruction in Jacobsen H and F series turf tractors, classroom instruction in the operation and repair of a variety of equipment. Other subjects included grinding of reels and bedknives; general reel maintenance; small engine maintenance planning, diagnostic techniques, failure diagnosis and tools; fairway and blitzer cutting units, including instruction in correct operation; the hydraulic system of a Greens King II, with emphasis on tracing the hydraulic circuits, valve operations, test instruments, etc.

**Maintaining Primary Equipment**

Another reason why maintenance is important to the golf course turf care manager is that he usually has only one primary piece of fairway or greens cutting equipment. This machinery has to be ready to meet cutting schedules at all times, if courses are to remain in best playing condition.

Given economic circumstances, the luxury of having back-up pieces of equipment is fast disappearing, placing the highest importance upon the reliability of the primary machine.

One more area which will receive greater attention in training programs is the practice of true preventive maintenance, which means more than just changing oil or equipment lubrication.

Establishing and following a formal preventive maintenance program was recommended at Lake City. Such a program emphasizes:

1. Keeping a written history of maintenance performed on all equipment.
2. Following manufacturer's recommended maintenance schedule.
3. Following manufacturer's instructions for correct operation of equipment.
4. Supplementing equipment maintenance knowledge by taking advantage of manufacturer-sponsored training programs.

Since Sunbelt states, with year-round growing and cutting, use equipment more than the north, maintenance in such states is a constant concern.

**Reaching Students**

The on-campus program was actually part of Lake City Community College golf course management students' curriculum. It may be that similar programs at other colleges will provide future course managers with important input on the mechanical side of their profession through increased emphasis on turf growing and equipment usage and maintenance.

It's also apparent that there will always be a continuing and growing need for training that helps mechanics to properly diagnose and treat turf care equipment performance symptoms. If training fulfills this need, then it will have made an important contribution to the golf industry.

Phillip A. Taylor, general manager, Jacobsen Service, summed up the program as follows: "We've witnessed the growing importance of the turf management instruction over the past decade. The growth has been accompanied by an increasing number of colleges and universities providing special programs in this area. In view of these developments, the need for manufacturers to provide practical intensive training in turf equipment operations and maintenance becomes much greater.

"What we want are better informed managers. This will result in more productive use and longer performance life for turf care equipment."

"In turn, this should lead to more efficient equipment utilization and valuable savings in time and equipment repair and replacement dollars."

In summation, the value of the above type of program for the golf management industry would appear to be considerable.

The success of such programs can easily mean the difference between equipment lying idle or performing at less-than-optimum capability and turf care machinery ready for service as managers require.

It can also substantially help to close the equipment knowledge gap more rapidly, so that both future generations of course managers as well as the practicing professional today can do their job better.
**Viewpoint**

GCSAA has a new executive director. I'd say that is one giant step for memberkind (I have poetic license). I'm excited and feel that before long the organization will begin to roll with a snowball effect. It is important that superintendents have a very powerful organization behind them. It can be useful in many ways. I know that there are some who feel that an organization offers nothing for them as an individual. What it can offer the profession is what is important. If you are not a member and do have a cynical attitude towards GCSAA, watch it closely from now on. I think you're going to find it more and more attractive. I made a mental note to myself not to coddle rouse this month. In fact, I'm not even going to mention the word. Just keep those cards and letters coming!

Two items of note from Old Bill Lyons that I missed getting into Clippings. On August 14, he is holding a turf management seminar at Lyons Den in Canal Fulton, Ohio at the request of Mr. and Mrs. (Jim) Krush at Hinkley Hills in Ohio. Each two people will have a Lyons Turf Test Kit to work with. It is limited to 80 so call the Krushes at 278-4861. The second is that Bill reports he is still getting excellent Japanese beetle control with lime at 50-100 pounds per thousand. It seems to prevent the beetles from laying eggs in the turf. Just be careful of high nitrogen if your pH gets a little high.

---

**Ad index**

Aquashade
AMF Harley Davidson
Barebo
Cushman Turf
Ditch Witch Equipment
Eagle Vehicles
Flightmaster Corp.
International Seeds, Inc.
Jacobsen Mfg.
Milwaukee Sewerage Commission
Mobay Chemical
Monsanto
North American Plant Breeders
Northrup King
Oregon Ryegrass Commission
Pickseed West
Polaris E-Z-Go
Ryan Turf
A.G. Stafford
Standard Golf
Tuco Agricultural Chemicals

---

**Main, Plainwell, MI 49080. 616 685-6828.**


USED GOLF CARS FOR SALE. 3 and 4 wheel, gas or electric, any make or model. Best prices. Will deliver in quantities of 10 or 20 per load. Call us now for your immediate or future requirements. Mid-Atlantic Equipment Corp., 420 Penn Street, Spring, PA 19475. 215 948-5205.

**MISCELLANEOUS**
NETTING: Designed and produced for use on golf courses and driving ranges. Great barrier for off-course golf balls. 25 feet by 100 feet, durable, easy to handle. J. A. Cissel Co., Inc., P.O. Box 339, Dept. B, Farmingdale, NJ 07727, 800 631-2234.

**POSITION WANTED**
GENERAL MANAGER, busy midwest golf-banquet facility, seeks similar position Middle Atlantic region. Salary negotiable. Reply to Box 217, Golf Business, Box 6951, Cleveland, Ohio 44101.

**HELP WANTED**
AGGRESSIVE SPORTS REPS WANTED: Foremost manufacturer of sport travel cases, golf, tennis and ski-needs strong, aggressive and dedicated sales force to get our product into the marketplace. Send resume with background and other lines that you now represent. Contact: William C. Morris, Flightmaster Corp., P.O. Drawer 1408, Lake City, SC 29560, 803 394-5402.

**WANTED TO BUY**
WANTED TO BUY Horse-drawn equipment as used on golf courses, mower machines and rollers, etc; plows, wagons, etc. Description and price. H. W. Gillough, 412 Arlington Road, Brookville, Ohio 45309.

**Golf Business**

**ADVERTISING SALES OFFICES**

ATLANTA: 3091 Maple Dr., Ste. 312, Atlanta, GA 30305 (phone 404/233-1817)

JAMES R. BROOKS
National sales manager

BOB BEAVER
Northeastern manager

SEATTLE: 1333 NW. Norcross
Seattle, WA 98117 (phone 206/363-2864

ROBERT A. MIEROW
Northwestern manager

---

**Classified**

**CLASSIFIED CLOSING DATES: August issue closes July 9 September issue closes August 12 October issue closes September 11 November issue closes October 9 December issue closes November 5 When answering ads where box number only is given, please address as follows: Box number, % Golf Business, Dorothy Lowe, Box 6951, Cleveland, Ohio 44101. Rates: All classifications 65¢ per word. Box numbers add $1 for mailing. All classified ads must be accompanied by cash or money order covering full payment. Mail ad copy to Dorothy Lowe, Golf Business, Box 6951, Cleveland, Ohio 44101.**

**BUSINESS OPPORTUNITIES**

**FOR SALE**
SOUTHEASTERN OREGON, 9-hole golf course, clubhouse, equipment, irrigation system, driving range & 3 bedroom mobile home. Land available for development. Owner wishes to retire. Write P.O. Box 927, Lakeview, Ore., 97630 or call 503 947-3855.

**USED EQUIPMENT**
USED GOLF CARS FOR SALE. 3 and 4 wheel, gas or electric, any make or model. Best prices. Will deliver in quantities of 10 or 20 per load. Call us now for your immediate or future requirements. Mid-Atlantic Equipment Corp., 420 Penn Street, Spring, PA 19475. 215 948-5205.

WESTERN GOLF CAR DEALERS and clubs, need used cars at right price? E-Z-Go, Harley-Davidson, Club Car, Taylor-Dunn, Yamaha, Marketeer, Melex, fair to excellent condition. Delivery available. Contact Ken James at E-Z-Go West, 714 557-4524.


**INCREASE EARNINGS, SERVICE & SPACE**
Remodel your present storage space, update with NEW Stafford VERTICAL BAG RACKS
- Wear and tear of golf bags is completely eliminated
- Damp bags dry faster — no mildew
- Faster, easier storage
- Provides neat appearance
- Easy to install and add more as needed

Your members will like the extra convenience and care. Your pro shop profits from 40% more space these racks make available. Double unit shown holds 16 bags, size 2' x 4' x 6'-6" high, gives 12' x 12" space for bags. Single unit holds 8, size 1' x 4' x 6'-6" high. Sturdy steel. Bags set solid on tapered shelves. Send us your floor measurements, we will plan a layout and quote you — no obligation. U.S. and Canadian patents. Send for folder.

The A.G. STAFFORD Co.
2000 Allen Ave., S. E. Canton, O. 44711 Phone 216/453-8431

Write 112 on reader service card
It automatically changes the oil and gas mixture to fit driving conditions.

Up hills and down craters—in humid coastal plains or on high, dry plateaus—Autolube™ injection delivers just the right mixture of gas and oil to your Yamaha's quiet two-cycle engine. When you step on the accelerator, Yamaha answers with power, not smoke and odor. And since the oil we don't waste on smoke production stays in the oil tank, you could play more than a round for every thousand miles from here to the moon without ever checking it.

Whether or not your final destination is more distant than the nearest clubhouse, independent swing arm front suspension means you arrive in luxury car comfort.

Let your dealer show you all the standard features and imaginative options that make the quiet, economical, virtually smoke-free Yamaha Gas Car such a pleasant way to travel.

YAMAHA
When you know how they're built.