### INTERMEDIATE TRIM MOWER



A power-assisted four-link steering system and other design improvements resulting from 20 years of development work by Toro make its new 220-D intermediate size trim mower highly maneuverable and productive. The company has increased handling ease while lowering maintenance difficulty with its compact, liquid-cooled trim mower.

The 220-D has 23-inch front drive tires for increased riding comfort, better curbclimbing and better traction. The 20.5 hp, three-cylinder Mitsubishi diesel engine is cooled by a mid-mounted industrial radiator. The PTO drive shaft is controlled by an easy-to-change electric clutch.

The turf manager has three cutting deck options with the 220-D. He can choose 52inch, 62-inch or 72-inch widths. All rotary decks feature full flotation cutting units with casterwheels, anti-scalp rollers, skids and anti-scalp blade cups. Height of cut is easily adjusted in one-half inch incremenets from one to four inches. A new counterbalance (deck weight transfer) system allows pre**ROOKIES** PRODUCT UPDATE

cise, single-knob adjustments to match flotation balance with tractor traction.

THE TORO COMPANY Circle 159 on Postage Free Card

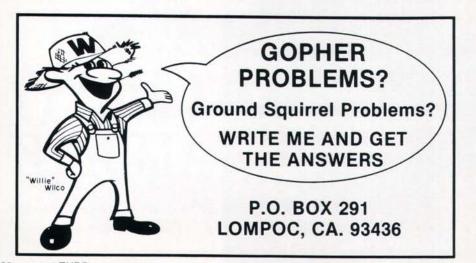
# DUAL PURPOSE GAUGE KIT



Providing simple, accurate measurements of static and dynamic pressure and flows, the SAK-2 System Analyzer Kit by Rain Bird is an easy- to-use, dual purpose pressure/flow gauge kit for use in designing new irrigation systems or troubleshooting existing systems.

The SAK-2 can be used to estimate available operating pressure and flow capacity of a new system or to measure flow and pressure at the sprinkler head. It features a flow range of 0 to 40 gpm, a pressure range of 0 to 160 psi and a temperature tolerance of 40 degrees to 110 degrees F. Flow readings are displayed in both gpm and L/m (metric).

The kit includes a liquid-filled pressure gauge with a 3/4-inch female threaded universal body and adapters to fit the 1800 Pop-up, R-50 Rotor, 15103 Mini-Paw Rotor, Maxi Paw Rotor or any 1/2-inch riser. Additional components include static and dynamic pressure caps, an easy-to-use sys-



62 sportsTURF

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tem analysis chart and an analyzer straightedge.

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## TURF RECONDITIONER

Howard, the manufacturer of Turf-Quaker, has developed a way to vigorously cultivate compacted soil without severely damaging the turf above. Four-inch-long blades spaced four inches apart slice into the root zone cutting tangled roots and shattering hard soil layers. A vigorous side-to-side quaking action loosens the soil opening it up to air, moisture and nutrients.

The 60-inch-wide Turf Quaker can be operated by tractors with 30 to 65 hp and 540 rpm power-take-off. It is attached to tractors with a category I, three-point hitch. Gears provide four different speeds for the rotor. The Turf-Quaker rides on two wheels with flotation tires and can be converted to a rotary tiller to expand its usefulness.

#### HOWARD

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### **MINI PICKUP**



The GX-20 is a ruggedly constructed small pickup for campus, golf course or park light hauling jobs from Chikusui. Less than 48 inches wide and ten feet long, the vehicle can carry a payload of nearly 1,800 pounds. Loads are easily dumped with the hydraulic tipping bed.

The two-passenger GX-20 can reach a top speed of 22 mph and climb 30 degree slopes with the power provided by a 16 hp twin-cylinder gasoline engine. A synchromesh transmission with dry-plate clutch provides four forward speeds and one reverse. Four-wheel drum brakes stop the vehicle quickly even when fully loaded.

Wide turf tires and a suspension with leaf springs and shock absorbers enables the GX-20 to carry its load across turf areas without causing damage.

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Beautify and prevent unwanted weeds and algae in contained ornamental ponds, lakes and lagoons without harm to humans, fish, wildlife or turf.

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# GOLF COURSE PROGRAM



Superintendents can take full advantage of their IBM PC/XT central irrigation computers or PC compatible computers with a new computer program from LABB Sys-

# PRODUCT UPDATE

tems/Software. The Golf Course Superintendent's Toolbox is specially designed software that helps superintendents do chemical cost analysis, personnel records, labor hour reporting, inventory control, equipment records, budget reporting, sprayer calibrations, scheduling and accurate maintenance logs. If the superintendent does not already have irrigation software, the Toolbox has a program to estimate water usage, determine sprinkler timing sequences and other irrigation related calculations.

Three floppy discs and an easy-to-read, illustrated operator's manual guide the superintendent through the programs. The programs are selected from an on-screen menu. They direct the computer operator step-bystep through each sequence. The superintendent simply inputs the appropriate data into formats designed by experts specifically for his needs.

The Toolbox is designed to run on any PC/XT compatible computer having at least 256K memory, 10 Mb hard disk and IBM compatible graphics printer.

#### LABB SYSTEMS

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## **RIDING AERATOR**





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- EASY OPERATION
- COMPLETELY SELF CONTAINED....
   NO ELECTRICITY NEEDED
- EFFORTLESS INSTALLATION
- THREE SIZES AVAILABLE FOR CONVENTIONAL & DRIP IRRIGATION SYSTEMS

Through a unique hydraulic design, the existing line pressure forces water into the additive tank. And then, that same pressure forces the mixture back into the main line. It's amazing, yet simple!

**TRICKLE SOAK SYSTEMS** 8733 Magnolia, Suite 100 P.O. Box 38 • Santee, CA 92071-0038 (619) 449-6408



Clean, vertical-coring action and variable core spacing are two major features of the new Ryan GA-30 riding aerator. The operator can change the core spacing anywhere between  $2\frac{1}{2} \times 1$  inches to  $2\frac{1}{2} \times 5$ inches with a hand lever while aerating. Depending upon the tines and soil condition, the aerator can penetrate up to  $3\frac{3}{4}$  inches deep. At the five inch spacing the GA-30 can create 11 holes per square foot over a 28,000 square foot area in an hour.

An 18 hp Kohler twin-cylinder engine provides power to the hydrostatic drive which allows the operator to maneuver the aerator without shifting gears. Maneuvering is also simplified with a pedal-operated lift for the aerating head. Transport speed for the GA-30 is six mph.

Operator comfort is provided by a padded seat and steering controls isolated with rubber from the chassis. The throttle, choke and ignition switch are within easy reach.

Case-hardened steel tines are available in four sizes, from 3/8 inch to 3/4 inch. A shear bolt protects the tines and aerating mechanism from damage by solid objects buried below the surface. Five lubrication fittings require only seasonal maintenance.

An optional attachment windrows aeration cores to the center to prevent tires from running over them on the next pass. OMC LINCOLN

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# The Ultimate, All-In-One Landscape Implement!

The unique, new Dakota Hand is designed to be a do-anything, go-anywhere landscape tool. The main parts being a towable, bucket or 3-point mount tree transplanter, a boom sprayer, a log splitter, a dump box, and a spreader. The transplanter's patented floating cradle enables you to hydraulically vary the rootball diameter up to 28 inches.

Options include water pump, hydraulic pump, jack hammer, hydraulic power pack, and many more.

The Dakota Hand is made specifically for resorts, golf courses, apartment complexes, hobby farms, parks, nursuries, municipal and state facilities, and for rentals, landscapers or soil conservation.





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Dealer Inquiries Welcome Product Demonstration Available on Video

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# PRODUCT UPDATE

ROOKIES

## TRIPLEX GREENSMOWER



The Bunton line of professional mowers now includes a riding triplex greensmower. The mower is available with either an 18 hp twin-cylinder Onan gasoline engine or a 16.5 hp three-cylinder water-cooled Kubota diesel, both on anti-vibration mounts. The Onan has an aluminum block with cast iron sleeves. The drive is a true hydrostatic, closed-circuit which requires fewer valve banks and hydraulic pumps than other systems for lower maintenance.

The reels are independently operated to allow back lapping or raising individual cutting units completely off the ground. This allows multiple mowing patterns without turf damage from dragging reels during turns. All reels, carriage frames, catchers and reel motors are interchangeable. Bedknife to reel adjustment is designed for ease and simplicity. Frequency of cut is .23 inch at 3.5 mph.

#### BUNTON COMPANY

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# CLOSED MIXING SYSTEM

Applicator exposure to pesticide dusts or liquids can be greatly reduced with the Closed Mixing System from Lesco, Inc. The portable unit, constructed of corrosionresistant materials, mounts on the fill well of most power sprayers.

The applicator does not have to open bags of pesticide for mixing with the unit. A closed bag of the appropriate amount of pesticide is placed into the unit and the lid is closed. The bag is opened inside the closed system and its contents are mixed automatically with liquid in the spray tank. As a result, the chance of inhaling pesticide dust is eliminated.

#### LESCO, INC.

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# SCOREBOARD

# **CLASSIFIEDS**

CLASSIFIED ADVERTISING RATES: \$40.00 per inch payable in advance. One inch minimum. There are about 50 words per inch. Send copy with check for \$40.00 at least four weeks prior to issue date to: Classifieds, sportsTURF magazine, P.O. Box 156, Encino, CA 91426. Blind box numbers are available. Special borders and rules will be billed at display advertising rates. Classified ads are not commissionable.

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Larry Keesen, Ltd., offers over 25 years of irrigation design and analysis experience and a national reputation for developing and presenting seminars, training programs and design schools for Toro, Rain Bird and Weather-matic. Keesen is a certified cost estimater and irrigation designer in commercial and golf course water systems. Currently president of the American Society of Irrigation Consultants, Keesen offers state-of-theart technology and water conservation as specialties. Specific recent projects include: Highland Ranch Golf Course, Glen Eagles Golf Course in Denver, CO, Greenbelts for the Colorado Highway Department, Stellar Plaza in downtown Denver, Denver University and Clayton Colleges, Colorado State Capitol Complex and the Washington Monument in Washington, DC. Call today for a free brochure. (303) 790-2708.

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Rock Rake: Harley TR3-8, Three-Point Hitch, PTO Drive. Good Condition.

Rock Picker: Anderson E Series, PTO Drive with Hi-Lift. Excellent Condition.

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#### **TECHNICAL AERIAL PHOTOGRAPHY**

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