### WATER QUALITY SOLUTIONS

SolarBee manufactures floating solar pow-Reservoir and Pond Circulators ered circulators for all sizes of ponds that oper-

ate 24 hrs/day on solar power with no power cost and almost no maintenance. One SolarBee unit can impact the whole pond and can eliminate blue-green algae, improve clarity, eliminate odors, improve dissolved oxygen levels, and eliminate fish kills. SolarBee/800-437-8076

For information, circle 064 or see http://www.oners.ims.ca/4569-064



### 2-WAY RADIO

The Motorola Talkabout T7400 twoway radio has a range of up to 7 miles and offers a rich feature set including eight NOAA weather channels, 99 Interference Eliminator codes, and (Quiet Talk) noise filter. The radio is equipped with earbuds and voice activation (VOX) for hands-free communication. Additionally, it features priority scanning to easily find the group's channel and code by searching all possible combinations while the home channel is scanned most frequently. Motorola/800-638-5119

For information, circle 067 or see http://www.oners.ims.ca/4569-067



AquaMaster is a worldwide leader in the manufacture of fountain and aeration equipment, for any aquatic environment. Their aquatic management systems are the



industry's only total components UL, cUL Listed and CE, plus finest warranties. Sizes from 1/3 to 25 hp, single and three phase, 50 and 60 Hz. AquaMaster/800-693-3144 For information, circle 063 or see http://www.oners.ims.ca/4569-063





## V-BLADE PLOW CONTROLS

A new hand-held CabCommand Control and a Joystick option are now available for the Western MVP adjustable V-Plow. Key features include: each function has its own button; wings move in or out either simultaneously or separately; and buttons are backlit for night use.

Western Products/414-354-2310 For information, circle 070 or see http://www.oners.ims.ca/4569-070



### PRESSURE WASHERS

Mi-T-M Corporation manufactures the HSE Series hot water electric pressure washer, professional grade units that are quieter and vibrate less. Features include: fan cooled electric motor with manual thermal overload protection; top fired, dual spiral coil with powder coated heat exchanger; and 50-ft. steel wire-braided pressure hose.

Mi-T-M/800-553-9053 For information, circle 068 or see http://www.oners.ims.ca/4569-068



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Director of Grounds Boston Red Sox

### **Dan Cunningham**

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### **Bill Findley**

Head Groundskeeper St. Louis Cardinals

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Head Groundskeeper Houston Astros

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### MARKER CAN ALSO SPRAY

Tru Mark's integrated spray boom with foam marker ensures accurate herbicide and fertilizer applications. The RS-500 self-propelled riding field

marker provides more spraying capabilities on the same chassis. The Richway Turf Tracker foam marking unit gives the operator visible queues for precision spraying.

Tru Mark Athletic Field Marker/800-553-MARK

For information, circle 134 or see http://www.oners.ims.ca/4569-134

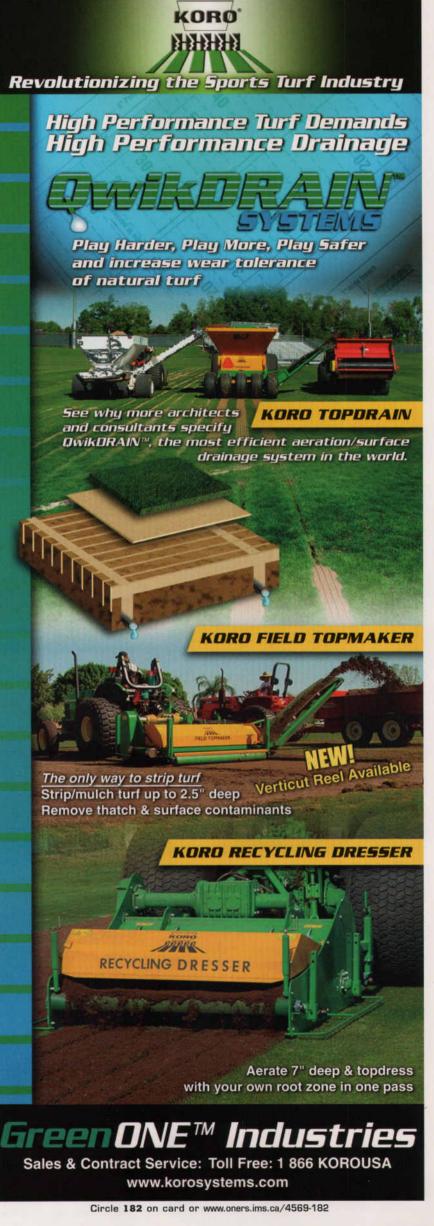


### RETAINING WALL SYSTEM

Versa-Lok retaining wall systems control erosion and drainage while adding beauty to your site. Available



in a variety of colors and both standard split-face and weathered textures. Industry's only solid, pinned segmental wall system. Curves, corners, columns all possible. Versa-Lok/800-770-4525
For information, circle 065 or see http://www.oners.ims.ca/4569-065



#### (continued from page 35)

Soil Issues

Shoumo Mitra, Ph.D., California State Polytechnic, Pomona Dirk Muntean, Soil and Plant Laboratory, Inc.

Many times the landscape professional is faced with the declining health of landscape plants. This session will focus on the long-term improvement strategies for plant health and vigor by learning the basics of soil science. The role of soil amendments and fertility as they relate to physical and chemical properties will be discussed, along with commonly observed landscape problems and possible solutions.

Soil Erosion Control Rod Dahl, USDA



### Introducing two advanced premium Kentucky blues from Turf-Seed, Inc.

**Midnight II.** Rich, dark green-blue and compact-growing. The next generation of Midnight with improved year-round color, increased resistance to rust and mildew, improved summer performance and hard-wearing traffic tolerance.

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Al Schrand, Fiber Marketing Competition for the very limited water supplies of the arid west has led to intensive changes in land use strategies. Part of this session will focus on a project located in the Newlands Project, Nevada, where multiple factors have contributed to the demise of irrigated farmland. Because of these factors, this area suffers severe wind erosion. Related to this focus will be a discussion of new technologies in erosion control along with how biostimulants and soil amendments can virtually eliminate failures.

#### **Irrigation Track**

Irrigation Design

Bob Morris, University of Nevada, Cooperative Extension

Tom Ash, HydroPoint Data Systems

In our arid climate, irrigation design is the most important factor in establishing a water-use efficient landscape. Proper design must incorporate the appropriate heads and layout with the correct choice and location of valves. This overview of irrigation design will explore the various factors that influence evapotranspiration (ET) of plants, and microclimates. Add to that a discussion of the new generation of "Smart" ET controllers, and you have a session that will showcase how the landscape industry at all levels can benefit. A demonstration of the WeatherTRAK "smart" ET controller will be highlighted.

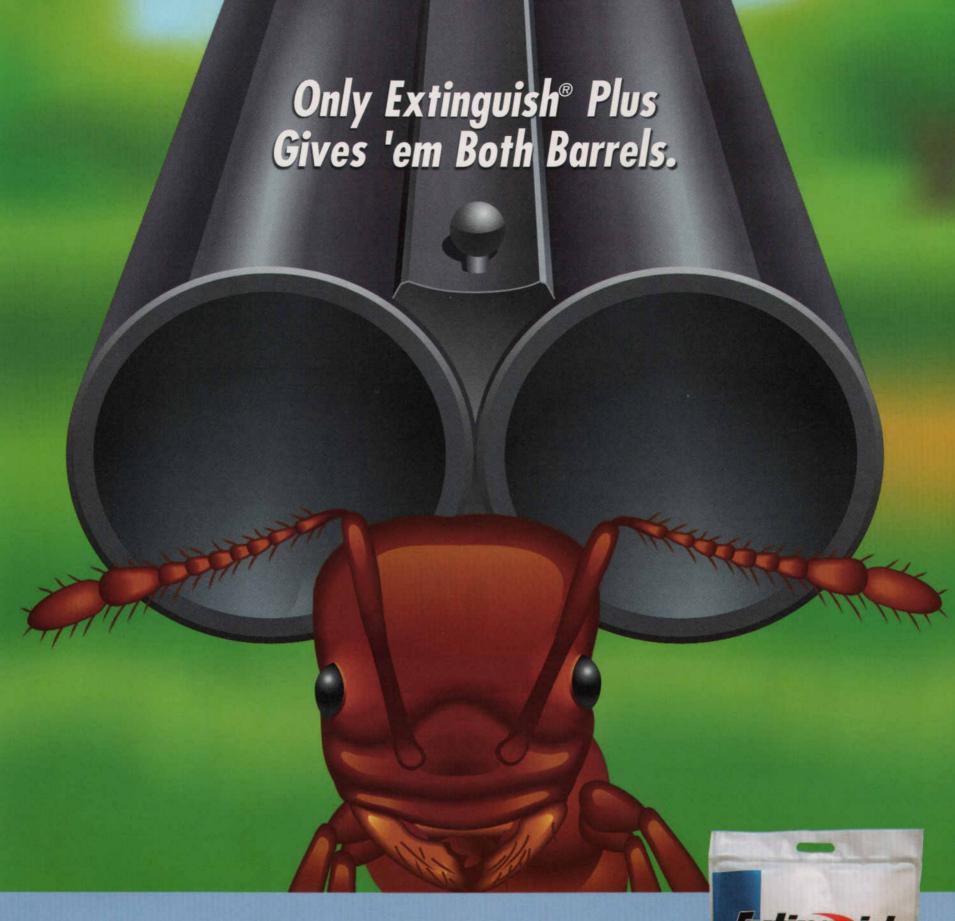
### Irrigation Efficiency

Shoumo Mitra, Ph.D., California State Polytechnic, Pomona

Mike Baron, Walla Walla Sprinkler Company

As water becomes an increasingly precious commodity, maximizing irrigation efficiency is a must. Learn the factors that affect irrigation efficiency in the field, such as sprinkler performance, installation considerations, and site conditions.

Steven Jay Porus has 27 years of conference and tradeshow experience. He can be reached at siporus@unlaccess.com.



Fast acting. Long lasting. Extinguish Plus is the only dual-active bait that kills adult fire ant workers and sterilizes the queen.

Blow away fire ants before they take another bite out of your assets. These little buggers account for nearly \$6 billion\* of damage annually in the United States. Extinguish Plus gives you the double barrel approach to fire ant control with an adulticide to knock 'em down and an insect growth regulator (IGR) for long lasting results.

Unsuspecting workers take the bait back to the mound as food, eat it and die. They also spread it to the queen—effectively eliminating colony growth and relocation. Extinguish Plus is fire ant ammo approved for indoor and outdoor use where fire ants are a problem.



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6

(continued from page 37)

#### Q. You stress "well-maintained" grass."

**A.** The problem is that, too often, someone who isn't trained properly will be assigned to maintain a field. It will begin to deteriorate in a few years and the athletic director will begin thinking about an artificial surface. So you get in a cycle where proper planning up front could have saved a lot of money.

#### Q. Could the same problem occur with synthetics?

**A.** Yes. Adequate preparation and maintenance are essential for both surfaces. Since we are now in the first generation of the new types of synthetic turf enough time hasn't elapsed for a true test and some problems are just beginning to show up.

### Q. For example?

A. Things like improperly glued seams may not show up until later. These can be

fixed. But neglecting proper surface preparation can be even more of a problem. What happens if you discover surface undulations through the lines in a football or soccer field? On natural grass you can just mow them out. But on synthetics the problem may be clear down in the subbase and can't be fixed without replacing the turf. So, in some ways, surface preparation for synthetics can be more exacting than grass.

# Q. What about maintenance items such as cleaning and marking on synthetics?

A. These are things that will have to pass the test of time. Many synthetic fields will have permanent markings for soccer and football; if there's a third it will just be painted on. The markings will fleck off the synthetic fibers in time, but not from the rubber. So there will always be kind of a shadow there that's hard to remove. As for maintenance, synthetics don't take to burning and gum very well. They can be watered down for cleanup from things like vomit and bleeding, but the rubber and sand down below tend to get a little fouled over time.

# Q. How would you compare costs between the two surfaces?

A. They can even out. The cost of maintaining a well prepared, sand-based natural turf field will be higher. Compared with the fact that, over time, the synthetic surface will have to be replaced, it can be a wash. But it's important to remember that cost comparisons can't be really valid unless there has been a comparable commitment to subsurface preparation and adequate maintenance.

### Q. So what's your view of the future?

A. Synthetic surfaces have been on the upsurge, but as organizations see that an investment in good turf managers is the best strategy for getting more out of natural fields I think we'll see a move back toward the middle.

Swanson Russell, a marketing communications firm in Lincoln, NE, supplied this article.



# The fastest, most affordable high-capacity topdresser in sports turf today

MILLCREEK TURF TIGER CUBS are two new 1.8 and 2.3 cubic yard capacity topdressers that are faster and more versatile than any other equipment of its type. We replaced the topdresser brush with our exclusive SaberTooth beater that applies material up to twice as fast without compromising precision. Now you can apply a dusting up to 1" of material in one pass. Rugged, durable, and easy to operate, there's nothing else like it or as affordable. Both models well under \$9K.



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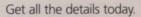
■ Synthetic turf infill

■ Lime

■ More...



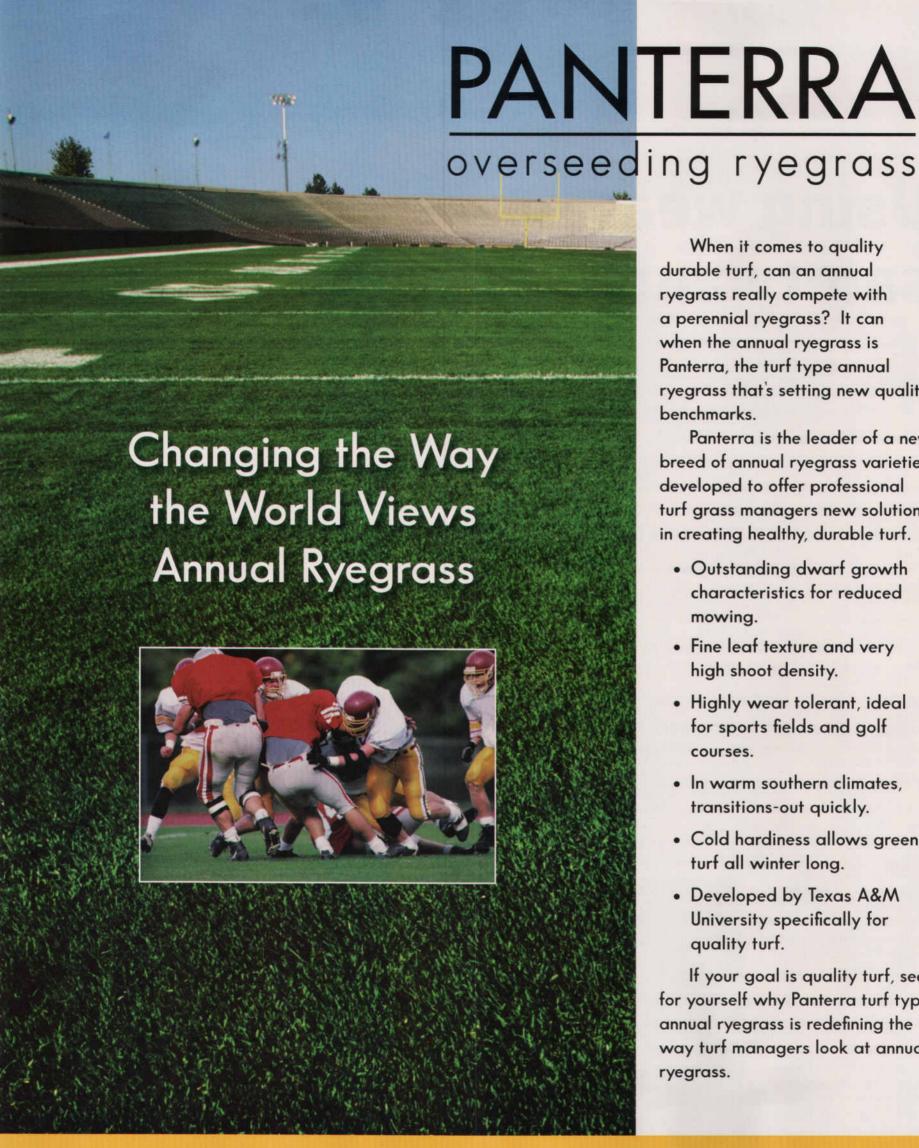
Spreads compost with ease, even if wet and clumpy.







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Panterra is the leader of a new breed of annual ryearass varieties developed to offer professional turf grass managers new solutions in creating healthy, durable turf.

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- · Fine leaf texture and very high shoot density.
- Highly wear tolerant, ideal for sports fields and golf courses.
- In warm southern climates. transitions-out quickly.
- Cold hardiness allows green turf all winter long.
- Developed by Texas A&M University specifically for quality turf.

If your goal is quality turf, see for yourself why Panterra turf type annual ryegrass is redefining the way turf managers look at annual ryegrass.



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# Using weather info for safety and turf maintenance

hese case studies describe how the athletic departments at University of Georgia and University of Oklahoma use daily weather information for public safety and field upkeep and maintenance purposes.

### University of Georgia

Located in Athens, the University of Georgia boasts more than 33,000 students, 368 campus buildings, 614 acres of land, and a total workforce of more than 9,500 employees. Founded in 1785, the university is the first state-chartered university in the United States, and home to the Georgia Bulldogs. A member of the Southeastern Conference, the university offers nine men's varsity sports, 12 women's varsity sports, and has won 18 national championships in its athletic history.

In his role as assistant head of athletic grounds, Paul "Waldo" Terrell maintains 17 acres of turf for the university's outdoor athletic fields and facilities. As the individual responsible for planning the irrigation, fertilization, mowing, pesticide application, and game preparation schedules, Terrell's success relies on the weather and planning accordingly.

"Everything we do and the schedules we create rely on the weather," Terrell said. "The more weather information we can get, the better. We don't want to waste money on chemical applications and paint to see them washed away by rain two hours later."

MxVision WeatherSentry Turf Edition Online gives Terrell accurate weather information for operational decisions including: StormPath technology that provides an animated pictures of predicted rainfall over the next 72 hours; up-to-the-minute local and regional weather forecasts; current and future radar capabilities; real-time lightning data; and PrecipTimer, which lets you know when the rain will start and how long it's going to last.

"With all the hurricanes this region has seen this year, our Turf Edition Online has been very helpful," Terrell said. "In fact, thanks to forecasts we received on the system, one week we moved up plans to paint the field in Sanford Stadium by two days. By painting it on Tuesday instead of Thursday, we didn't waste 100 gallons of paint, and the field was painted and ready for the game on Saturday."

The Lightning Manager, which monitors lightning as it approaches your area and sounds alarms when a strike occurs within your designated zone, proved particularly helpful one day.

"Game Operations and the Event Management Office use the real-time lightning information we get for fan safety purposes," said Terrell. "One day during a soccer game, Lightning Manager was warning of storms and lightning in the area. Thanks to this information, they were able to clear the stands at the game before any fans were affected."

"The first thing I do each day is check out the Turf Edition Online for the latest forecasts and weather information. I especially like the fact that I can check it from home. I would certainly recommend it to anyone," said Terrell.

### University of Oklahoma

Founded by the Oklahoma Territory Legislature in 1890, the University of Oklahoma in Norman is a doctoral degree-granting research university with 19 colleges that enrolls more than 30,000 students. With 16 NCAA Division 1 sports teams, the university maintains many athletic facilities, including Gaylord Family - Oklahoma Memorial Stadium, home of the Sooners football team. With a capacity of 82,112, the stadium ranks as one of the largest, most-recognized venues in college football.

Since taking over as the University of Oklahoma's athletic turf and maintenance director in 1999, Kenny Gajewski is responsible for maintaining all of the athletic fields and outdoor facilities on the university's campus. With a crew of seven full-time grounds workers and five full-time maintenance workers, Gajewski's schedule is often dependent on the weather.

"The weather can impact a lot of what we do and when we do it," he said. "To be effective, we constantly need to know what the weather forecast is and when the rain and storms will arrive in our area."

With their subscription to MxVision WeatherSentry Turf Edition, the University of Oklahoma receives up-to-the-minute local and regional weather forecasts, current and future radar capabilities, real-time lightning data and StormPath technology that provides an animated picture of predicted rainfall over the next 72 hours.

"We refer to our system throughout the day for the latest radar and forecasts," said Gajewski. "If we have a time frame of when the weather will hit, we know how much time we have to finish a project or get the crews inside. The weather can also impact scheduling of watering and employees, so we need accurate, continuous information."

Two MxVision WeatherSentry Turf Edition features that have proven to be beneficial for Gajewski are PrecipTimer and Lightning Manager. "One day we were scheduled to play UTEP in football, and because of the forecasts on our

WeatherSentry, we knew there was a good chance of rain," he said. "So, we kept an eye on it and when we knew what time the rain would start, we alerted the game officials. We were also notified that there was lightning nearby, so we were able to get the teams off the field and the fans to safety before everything hit."

"The product offers so many options, we use it as a guide for everything we do. Without a doubt, I would recommend it to anyone who needs to have consistent, accurate up-to-the-minute weather information," said Gajewski.

Meteorlogix, Minneapolis, MN, supplied this article. See www.meteorlogix.com.



### SULLY LOVES PROSPORT

see http://www.oners.ims.ca/4569-090

The ProSport is K-Rain's next generation of professional rotors, designed specifically for turf applications. Triple nozzle configuration promises uniform watering. Each nozzle throws a graduated pattern of water, providing prifrom 45-75 ft. Michael W. Sullenberger, Sports Turf Manager, George Mason University, and STMA Field of the Year winner, says: "The K-Rain ProSport works, peri-od. Nothing in the industry provides better coverage. The K-Rain Manufacturing Corp./561-844-1002 For information, circle 090 or



Airfield Systems' drainage for natural turf

fields includes faster installation than gravel, and a 1-in. void space beneath the soil for the exchange of oxygen, resulting in healthier turf. No water collects on the field surface as an Airfield system moves water rapidly.

For artificial turf, the system enhances player safety with a lower G-Max rating, and eliminates the migration of rubber infill material due to flooding.

Airfield Systems/405-359-3775 For information, circle 118 or see http://www.oners.ims.ca/4569-118



### **MULTI-FLOW DRAINAGE**

Roll out your drainage problems; roll in the Multi-Flow. Fast-acting, longlasting, and affordable, Multi-Flow is the solution to soggy fields and postrain game cancellations.

Contact Varicore for a catalog, product sample, athletic field drainage design guide, or site-specific design advice.

Multi-Flow Drainage/800-978-8007 For information, circle 087 or see http://www.oners.ims.ca/4569-087





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### QUICK COUPLING VALVES

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For information, circle 088 or see http://www.oners.ims.ca/4569-088





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Hancor Inc/800-848-3546

For information, circle 096 or see http://www.oners.ims.ca/4569-096



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## SPORTSTURF FERTIGATION

Sports fields are becoming sports complexes, meaning heavy use and longer seasons. Fertigation can reduce labor and fertilization costs. Quick recovery from turfgrass damage and reduced irrigation water usage are additional important benefits gained from including fertigation in your new installation or adding it to your existing irrigation system.

Turf Feeding Systems/800-728-4504
For information, circle 121 or see http://www.oners.ims.ca/4569-121

### **RAIN BIRD ROTORS**

The Rain Bird" 5500 Series Rotor features Memory Arc, which returns the rotor to its original arc setting. Non-strippable drive mechanism prevents damage from vandals, while the continuous full and part circle operation in one unit reduces inventory requirements. Easy wet/dry arc adjustment with slotted screwdriver through top of rotor from 50° to 330-degree part-circle, 360degree non-reversing full-circle. Rain Bird/800-724-6247 For information, circle 094 or see http://www.oners.ims.ca/4569-094

