New Reelmaster® Fairway Mowers
A Better Cut, From Start To Finish
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Toro Company, we’re grateful to have a reputation for being innovative and for continually striving to improve our products and create new ones.

In this spirit, Toro recently introduced four new mowers in our popular Reelmaster line, each built for exceptional performance and improved after-cut appearance on fairways.

Drawing a great deal of attention at the 2006 Golf Industry Show, the four new Reelmaster mowers—models 5210, 5410, 5510 and 5610—feature Toro’s innovative Dual “Precision” Adjustment (DPA) cutting units, an all-wheel drive system and numerous other advanced capabilities.

**Customer-Inspired Design**

“The new units are based on research and feedback we received from golf course superintendents, operators and technicians,” says Tony Ferguson, marketing manager for Toro’s Reelmaster mowers. “They wanted a better fairway mower that provided improved quality of cut and after-cut appearance along with reduced maintenance, easier adjustments and improvements in operator comfort.

Based on the feedback we’ve received from many customer visits, the new Reelmasters have succeeded in all of those areas.”

Ferguson and his crew tested the new machines at about 100 courses around the country. Superintendents at these test sites were impressed.

“Simply put, it did a great job,” says Jeff Eldridge, golf course superintendent at the Nicklaus Golf Club, a newer, high-end, private facility in Overland Park, Kansas.

Located in a warm-season/cool-season grass transition zone, the Nicklaus Club has zoysiagrass fairways, which have always been a challenge for mowing and grooming.

“Zoysiagrass is ornery,” Eldridge explains. “But Toro’s new units are a vast improvement on zoysiagrass. Right off the truck it did a great job of mowing.”

**DPA Earns Praise**

Many superintendents were most impressed with the mowers’ new DPA cutting units—an exclusive Toro innovation that makes reel blade adjusting much faster and easier.

“The DPA—that’s huge because it’s so much simpler than other machines in terms of adjusting it,” says Craig Currier, golf course superintendent at Bethpage State Park in Long Island, New York, site of the 2002 and 2009 U.S. Opens. “The adjustments on the reels themselves were really easy. With this, it’s just 1-2-3.”
Eldridge agrees, viewing the new DPA cutting units as the product’s most important feature.

“The biggest thing is the new cutting unit, the DPA” he says. “That’s something we’ve been requesting for years, and I think that’s going to really help us to do our jobs better.”

“With the DPA, I think you get a better reel-to-bedknife adjustment,” Eldridge explains. “Out in the field, we’re able to do a better job of adjusting one side instead of having to adjust the entire bedknife.”

Better Quality Of Cut

The DPA cutting units are brand-new and leverage many innovative and proprietary features that together elevate the overall quality of the Reelmaster mowers. With special suspension and weight balance, the cutting units’ innovative design optimizes ground-following and mowing performance to deliver unbelievable quality of cut on a variety of terrains.

The cutting units are also made with a proprietary reel blade material—another innovation exclusive to Toro.

“By using a harder base metal and an advanced tempering process, the blades hold an edge much longer,” says Ferguson. “The result is reduced adjustments and less frequent backlapping and grinding. That helps to ensure a consistently higher quality of cut because the sharper edge shears the grass blade off cleanly, so grasses stay green and healthy. We even scalloped the reel blades for a built-in relief, which also helps keep the blade sharp.”

A related improvement on the cutting units is a heavy-duty bedknife called EdgeMax™—used exclusively by Toro, which incorporates a harder, leading-edge tool steel to retain its sharp edge up to three times longer than standard bedknives. You can choose from among three cutting units: a 5-inch diameter 8 blade; a 7-inch diameter 8 blade; and a 7-inch diameter 11 blade.

More reliable mowing is further enhanced by the Reelmasters’ specially designed all-wheel drive system—another innovation that’s new to the industry. The CrossTrax™ drive system is based on Toro’s patented Series/Parallel traction system. This drive system provides superior traction on wet slopes by transferring power from the front tires to the opposite rear tires. That way, if the upslope tire starts to lose traction, the opposing rear tire absorbs more weight to help propel the unit forward and up the hill.

“I think the quality of the cut is great, and it was really quick,” Currier says. With five courses and nearly 300,000 rounds played every year at Bethpage, a high level of productivity is essential for him and his crew. “With all the play we have here at our facility, we need to get in and out as quick as we can without sacrificing quality.”

Lighter Frame, Less Compaction

With the new Reelmaster machines, Toro also offers another important benefit: a product that’s not only better, but lighter. The mowers weigh up to 280 pounds less than Toro’s older units, and that’s even with the more powerful engines.

“We trimmed unnecessary weight so the mower would have a lighter footprint, but without sacrificing any durability or functionality,” Ferguson says. “That means the new Reelmasters provide the finest fairway cutting with less compaction or turf abrasion.”

Eldridge and Currier viewed this feature as an important benefit.

“Lighter frames are a benefit because any time you get a lighter footprint on the turfgrass surface, you’re doing yourself a big favor,” Eldridge says.

“The lighter the mower is, the less compaction,” Currier says. “For what we’re looking for, the weight is good.”

Many Other Advantages

To provide better after-cut appearance, the Reelmasters accommodate a series of built-in features and optional attachments, including platform grommers, powered rear roller brushes, collection baskets, cutting-unit combs and more. The mowers can even be configured with Toro’s TurfDefender Leak Detector, a device that identifies hydraulic leaks and then shuts down the cutting system to prevent turf damage.

The new mowers also offer increased operator comfort, providing a deluxe seat suspension, a control panel within closer reach, easier step-entry and exit, tilt steering wheel and reduced noise.

“Comfort-wise, it was great, too,” Currier says. “It’s such a comfortable and smooth machine. When you’re riding around on a golf course all day it’s pretty rough, so the operators are definitely going to enjoy not bouncing up and down all over the place.”

Currier adds: “There’s plenty of room on the machine and it’s easy to use,” said Currier. “It’s also big enough to make sure you have plenty of power.”

“They did a nice job,” concludes Eldridge. “I think Toro has made great strides with these machines.”
At one point in the not-so-distant past, the Toro Sand Pro®, while at the top of its game, may have spent a little more time resting in the shop than working on the course. But all this has changed. The Sand Pro 3020 and 5020 models recently underwent some major modifications and upgrades. Now with improved hydraulic capabilities, more ground clearance, steerable front-end attachments and under-a-minute attachment changes, the new and improved Sand Pro 3040 and 5040 are ready to hit the market.

From Good To Better
To make changes to these reliable bunker-management machines, Toro went straight to its customers. With hands-on test sites set up across the nation, golf course superintendents, assistants, technicians and operators had the opportunity to spend a few hours examining—and trying out—the new features and changes.

“Since we are replacing a product that is number one in its field for quality, we wanted to make sure that we understood what our clients did and did not like,” explains Greg Janey, marketing manager for the Toro Sand Pro. “First, we decided that this product could improve overall with a Quick Attach System that allows anyone to change attachments in under a minute without any tools. This is compared to over an hour with the older models.”

“Also, we decided that the chain design on the 3020 for the steering wasn’t as reliable as we would like, especially in these harsh sand and dirt environments. So we completely got rid of it. The new 3040 has a gear design that is completely sealed from the environment and its harmful elements. Even better, the 5040 has new hydraulic power steering.”

Taking into consideration customers’ varied needs, comments and concerns, Toro took the under-utilized Sand Pro and made it more functional and easier to use. This way, customers can be more productive—accomplishing more with less. Scott Cochran, golf course superintendent at Ballantyne Country Club, a 130-acre Rees Jones-designed course in Charlotte, North Carolina, is already making plans for a more productive day with the new Sand Pro models.

“We constantly strive to exceed the expectations of our members and have spent probably 40 percent of our time on bunkers this year,” Cochran describes. “We currently use the older Sand Pro models, and we operate them 5 to 6 times a week from 2 to 5 hours a day on our daily maintenance.”

The golf course is characterized by rolling hills, beautiful lakes, magnificent views—and 95 well-manicured bunkers; however, the hilly terrain occasionally causes bunkers to wash out during heavy rainstorms.

“Our bunkers tend to catch some run-off during big rain events, but with our Sand Pros we’re able to put them together again fairly quickly,” Cochran says. “It will be even easier with the new Sand Pro.”

Cochran adds: “I feel like the best machine on the market was the 5020, and I didn’t think Toro could improve on it. But they have.”

“Toro really listened to what we asked for and delivered the improvements. I feel lucky that they asked for my input.”
— Scott Cochran, Golf Course Superintendent, Ballantyne Country Club, Charlotte, North Carolina
Cochran admits that he and his staff are usually a bit skeptical when companies decide to make changes to existing products and machinery, but they were more than pleased with the new Sand Pro 5040, especially with its 17 attachments that can be switched out easily in less a minute.

“I think the new Sand Pro is going to be a very useful tool from our standpoint because it’s going to give us the ability to do more than just one particular job,” Cochran explains. “We have limited floor space in our shop, and if we can purchase attachments to make a machine more versatile, then it’s definitely something we’ll consider. Toro really listened to what we asked for and delivered the improvements. They have been extremely helpful. I feel lucky that they asked for my input.”

From Better To Best

To better meet the needs of customers, the improved Sand Pro 3040, which will eventually replace the 3020 model, is equipped with a fuel-efficient, 16-horsepower Vanguard® engine. It features improved gear-drive assisted steering and a Quick Attach System on the back as well as the standard hydraulic lift, 3-wheel drive traction.

The 18-horsepower Sand Pro 5040 will take the place of the 5020. In addition to the standard series features, this premium model offers new hydraulic power steering, a front and back Quick Attach System and the comfort, efficiency and dependability that Toro customers have come to expect for keeping bunkers conditioned and ready for play.

The new improvements and innovative features of the 3040 and 5040 make these bunker rakes unsurpassed for grooming, construction activities and specialty maintenance across your entire course. But one of the favorite additions to the upgraded designs is the Hydraulic Flex Blade, which is an ideal attachment for golf courses that get more than their fair share of inclement weather. The Sand Pro has always had a blade, but it was operated manually. Until now, this manual blade was a cause for lost time and spent energy. With the new models, however, the hydraulic capabilities make reconstructing bunker faces much less problematic.

With about 170 bunkers on 400 acres at Carmel Country Club in Charlotte, North Carolina, Bill Anderson, greens and grounds director, appreciates this new improvement. Anderson, who has more than 32 years of experience, says, “we average 50-plus inches of rain a year, so pushing the sand back after a heavy rain is a big part of our bunker maintenance. The Sand Pro’s new Hydraulic Flex Blade will make that an easier and faster job. The thing that I like the most is not so much the flex but the fact that you don’t have to manually lift the blade up or down. Overall, the Sand Pro is a good machine that they made even better. I’d give it an A+.”

With increased versatility, capability, and ease of use, the new and improved 3040 and 5040 models are more competitive, performance-driven, operator- and technician-friendly. Undoubtedly, the Toro Sand Pro will be spending less time in the shop. From now on, it looks like the Sand Pro will be spending a lot more time in the bunkers and out on the course.

“Overall, the Sand Pro is a good machine that they made even better. I’d give it an A+.”

– Bill Anderson, Greens and Grounds Director, Carmel Country Club, Charlotte, North Carolina
This Changes Everything is the tagline associated with Toro’s new Sand Pro 3040 and 5040 bunker rakes—and it couldn’t be a more appropriate statement.

Thanks to superintendent and operator feedback, Toro designers created completely revamped machines featuring power steering and/or gear-drive manual steering, Reduced Simplified Maintenance (RSM), improved ground clearance and 3WD series/parallel traction.

But the Sand Pro’s most significant innovation—the revolutionary Quick Attach System (QAS)—is the feature that will drastically change how you do your job.

The Quick Attach System allows you to switch out the machine’s 17 attachments in less than a minute, no tools required! This capability, which makes the Sand Pro the most versatile power groomer on the market today, is designed to maximize your time and skyrocket your productivity.

With no tools required, this hands-on system allows a single operator to quickly change out the machine’s attachments. Even more good news is the Quick Attach System is as easy to learn as it is to use.

In three easy steps, here’s how it works:

Step 1A: Position the attachment onto the QAS latching A-frame, making sure it is properly aligned. All attachments connect in the same way.

Step 2A: Once the attachment is in place, pull the QAS lever firmly into the ‘up’ position. This locks the system, ensuring that the attachment stays in place during use.

Step 1B: To remove the attachment, release the QAS lever into the ‘down’ position and lower the lift. This unlocks the QAS, allowing you to take attachments off and/or put attachments on in a minute or less.

Toro’s QAS is the easiest, quickest attachment-changing system in the industry. With the old system, it could take up to an hour to switch among attachments. But now, this new Sand Pro innovation ensures that you spend less time changing attachments and more time doing the tasks your job requires.

The new Sand Pro models can be outfitted with 17 attachments, including:

- Hydraulic Flex Blade
- Steerable Front Attachments
- Spring-Loaded Manual Blade
- Rear Segmented Grooming Broom
- Coco Drag Mat Carrier System
- Mid-Mount Cultivator
- Mid-Mount Leveling Blade
- Utility Box
- Blower
- Spiker
- Box Blade
- And many more
Esto lo cambia todo es el eslogan asociado con los nuevos rastrillos de búnker Sand Pro 3040 y 5040 de Toro, y sería difícil encontrar una definición mejor. Gracias a los comentarios que recibimos de supervisores y operadores, los diseñadores de Toro han creado máquinas totalmente renovadas, con dirección asistida y/o dirección manual con transmisión por engranajes, Mantenimiento Rutinario Simplificado (MRS), mayor altura sobre el suelo y tracción a 3 ruedas Series/Parallel.

Pero la innovación más significativa del Sand Pro—el revolucionario Sistema de Acoplamiento Rápido (SAR)— cambiará para siempre la forma en que usted trabaja. El Sistema de Acoplamiento Rápido le permite cambiar cualquiera de los 17 accesorios de la máquina en menos de un minuto - ¡sin herramientas! Este sistema, que hace del Sand Pro el acondicionador motorizado más versátil que se encuentra hoy en el mercado, está diseñado para ayudarle a aprovechar mejor su tiempo y maximizar su productividad.

Sin necesidad de herramientas, este práctico sistema permite que un único operador cambie rápidamente los accesorios de la máquina. Y mejor aún, el Sistema de Acoplamiento Rápido es tan fácil de aprender como de usar.

**Funciona así, en tres sencillos pasos:**

**Paso 1A:** Coloque el accesorio en la pletina triangular del SAR, asegurándose de que quede correctamente alineado. Todos los accesorios se conectan de la misma manera.

**Paso 2A:** Una vez posicionado el accesorio, jale firmemente de la palanca SAR hasta la posición “elevado”. Esto bloquea el sistema, garantizando que el accesorio quede acoplado durante el uso.

**Paso 1B:** Para retirar el accesorio, ponga la palanca SAR en posición “bajado” y baje el accesorio. Esto desbloquea el SAR y permite acoplar o desmontar accesorios en un minuto o menos.

El SAR de Toro es el sistema de cambio de accesorios más sencillo y rápido del sector. Con el sistema antiguo, el cambio de accesorios podría necesitar hasta una hora. Pero ahora, esta innovación del Sand Pro asegura que usted dedique menos tiempo a cambiar de accesorio y más tiempo haciendo las tareas que su trabajo exige.

Los nuevos modelos de Sand Pro pueden llevar 17 accesorios, tales como:

- Pala flexible hidráulica
- Accesorios delanteros dirigibles
- Pala manual tensada con muelles
- Cepillo acondicionador segmentado trasero
- Sistema portador de estera de coco
- Cultivadora de montaje intermedio
- Grada de montaje intermedio
- Caja de transporte
- Soplador
- Perforador
- Trailla
- Y muchos más
Every now and then somebody comes up with a different and better way to use popular technology to solve an old problem. That’s just what happened at Toro Irrigation.

For years, Toro has offered subsurface “drip” irrigation systems for specialized applications in landscape and agriculture. Drip irrigation — named for its slow, consistent delivery of small amounts of moisture — provides water-savings and other benefits through its efficient distribution process, and when installed below ground, it’s invisible.

Recently, Toro engineers were inspired to try subsurface drip systems on golf courses. Although the industry already had a tremendous range of versatile, adjustable sprinklers and controllers, superintendents still had hard-to-water areas, such as tee boxes and bunker surrounds.

“There really isn’t a golf course out there that hasn’t struggled with that at some time,” says Michele Baird, Product Marketing Manager for Toro, one of the people behind the idea. “They’re usually hand-watering those areas, and that may cause problems in bunkers. It’s also not a good use of time. So we’re hoping when they see this, the light bulb will go on.”

Early Successes

Two years ago, Toro began installing its existing DL2000® Series Subsurface Irrigation System on selected golf courses. Those applications have proven so successful, the company is now introducing DL2000 to the golf industry.

“For us, it’s been a home run,” says Dan Hawkins, golf course superintendent at The Club at Flying Horse in Colorado Springs, Colorado. Hawkins installed DL2000 drip systems on three fairway bunkers at the upscale course in 2004.

“One of our biggest labor costs was hand-watering bunker fingers,” he explains. “They tend to dry out during the day, so you either spend labor dollars or put in supplemental irrigation. DL2000 has really cut down our costs. I’d rather do the drip because I know it works.”

How Subsurface Irrigation Works

The DL2000 uses underground polyethylene tubing with regularly spaced inline emitters. The subsurface network hooks into your existing control system and operates with its own separate control valve.

DL2000 provides many valuable advantages. Agronomically, subsurface drip irrigation enables you to apply precise amounts of water directly to the root zones of your turfgrass and...
maintain optimum soil moisture all the time. It also reduces water lost to wind and evaporation, and avoids problems of erosion or collapse around bunkers. Bunker sand stays dry as well.

But better yet, underground DL2000 drip systems on a golf course eliminate the problem of interfering with golfers play, and as Hawkins says, they greatly reduce the time and expense of hand-watering.

“With the drip, you can schedule your irrigation to apply water at the rate you need to meet your turf demands and soil conditions,” says Bill Carroll, Drip Irrigation District Manager for Toro. “You can even irrigate while people are teeing off, and they don’t know what’s going on because the water is applied subsurface.”

“It’s worked out fantastically. If I had the opportunity, I’d put it around all of my bunkers,” says David Emmons, golf course superintendent at the private, 27-hole Longboat Key Club in Longboat Key, Florida. “With the ability to supply water to stressed turf at any time of the day, the convenience is outstanding.”

Located on a barrier island in the Gulf of Mexico, Longboat Key faces environmental stresses such as salt air and water-quality issues. Certain areas of the course that are harder to irrigate can visibly react to the stress.

“There was a particular bunker that always looked weak around the edges,” says Emmons. “We just couldn’t get enough water on it without hand-watering, and we don’t have the manpower for that.”

After agreeing to try the DL2000, that bunker was one of the first places Emmons installed it. “Within weeks it was greener than it had ever been,” he says. “That really gave it the help it needed.”

Pre-packaged Solution Makes Installation Simple
Subsurface drip irrigation may seem like a radical step for some. To minimize concerns about such a different approach, Toro made the choice easier by creating a complete, ready-to-go installation kit. All the parts needed to implement DL2000 literally come in one box, and are labeled for easy identification.

“We knew that people might be unfamiliar with these parts and fittings, so we had the idea to put all the components in a kit with easy-to-follow instructions,” says Carroll. “The components needed to install most systems are included, and it’s dramatically simplified with one hose diameter, emitter spacing and flowrate. You don’t need to worry about acquiring fittings or anything. It all goes together quite easily.”

There are four separate DL2000 System kits for different uses.

- A Low-Flow/Single Bunker System with flow range from .1 to 8 gpm, and system capacity up to 1000 liner feet.
- A High-Flow/Multi-Bunker System Kit with flow range from 2 to 20 gpm, and system capacity up to 2500 linear feet.
- A Tee Box System Kit that includes Airjection® with flow range of 2 to 20 gpm and system capacity up to 2500 linear feet.
- An Additional Zone Kit containing a 500’ roll of DL2000 with fittings is available for applications where extra dripline is required.

The Tee Box Kit also includes Toro’s unique, built-in Airjection® system, which provides underground aeration during the irrigation process. This exclusive feature aerates the soil by injecting micro-bubbles into the water using existing system pressure. The Airjection System reduces soil compaction and improves turf quality. Adding a DL2000 System—at depths ranging from 1 to 6 inches—is quick and easy.

“You just peel back the existing turf, do the installation, put the turf back over, then water it down and you’re good to go,” explains Baird. “Usually you can do it in about a day.”

“They basically just opened the turf and tucked it in,” says Emmons about his DL2000 installation. “Soon you couldn’t even tell they’d been there.”

Protection Against Roots
Years of experience with subsurface irrigation in landscapes has taught Toro a lot about improving it. For example, a common problem for years was root intrusion, as aggressive roots would grow toward the water and clog the emitters.

Toro solved this problem with its exclusive, patented ROOTGUARD® technology that impregnates the DL2000 emitters with Treflan® herbicide. It forms a non-toxic chemical barrier which keeps the system root-free, but won’t harm turfgrass.

In addition to bunkers and tees, the flexible and adaptable DL2000 System kits can be used around lakes, hardscapes and any areas that are hard to target with conventional above-ground irrigation.

“DL2000 is a great solution that’s remarkably simple,” Carroll concludes. “It’s a win-win,” says Hawkins. “I told a guy yesterday that if we were to do another golf course, I’d do all the bunkers with drip.”

Treflan® is a registered trademark of Dow AgroSciences.
Airjection® is a registered trademark of Mazzei Injector Corporation.
Sprayers ensure that pesticides and fertilizers are applied evenly, helping keep golf course landscapes green, healthy and beautiful. To make this process even simpler, Toro offers several new spray options and attachments, including a redesigned spray boom and a sprayer attachment that transforms a Workman® utility vehicle into a 200-gallon sprayer.

Newly Designed Spray Boom
Combining strength and durability, Toro’s revamped spray boom is a more robust model designed for use with Multi Pro® spray vehicles and Heavy Duty Workman 200 Gallon Sprayers. The boom offers new, improved features that make it more driver-friendly and resistant to damage. Featuring a triangle-shaped truss structure, the system’s wings offer a strong yet lightweight design. The system allows the operator to easily switch the boom from spray mode to transport mode and back again without leaving the driver’s seat.

The system also features an innovative “Whip-Spring” cradle that holds the boom in place during machine transport. In case of accidental contact with low overhead objects, the cradle mechanism allows the booms to break free and avoid damage. Likewise, the double-lobed hinge cams allow the boom, while it is spraying, to break away 90 degrees to the front and rear in case of contact with trees or other objects. The boom tips are even rounded to be more tree-friendly!

In addition, the unit’s spray nozzles are strategically mounted inside the boom enclosure, helping protect them from being damaged and/or rotated, which can adversely affect the vehicle’s spray pattern. The system also comes with a heavy-duty boom actuator.

“This is a big advancement that absorbs a bit of the shock load, thereby increasing boom life,” says Toro Engineer Tim Sosnowski.

Workman 200 Spray System Attachment
Making Toro’s premium utility vehicle even more versatile, the Workman 200 Spray System Attachment transforms the Heavy Duty Workman 3000/4000 series into a spray vehicle as effective as Toro’s popular Multi Pro units.

The attachment comes with the newly redesigned spray boom (discussed above), a 200-gallon tank and electric boom and rate control valves. The required PTO kit allows the Workman to power the sprayer. Best of all, the system is easy to attach, converting the Workman into a sprayer in less than 30 minutes after initial installation.

This attachment enables the Workman to function like a Multi Pro sprayer in a number of ways. One key feature is the attachment’s Spray Pro® proportional drive control system, which ensures that the Workman will provide consistent spray application regardless of the vehicle’s speed.

“In a similar manner to the Multi Pro 1200/1250 sprayers, the pump output is mechanically linked to the ground speed,” says Toro Marketing Manager Greg Janey. “This means the faster the Workman’s wheels turn, the faster the sprayer pump turns, keeping your application rate consistent even while your vehicle speed changes.”

Equipped with the Workman 200 Spray System Attachment, the traditional Workman utility vehicle is transformed into a new product—the Heavy Duty Workman 200 Gallon Sprayer.

“The attachment elevates the multipurpose nature of the Workman utility vehicle even further,” Janey explains. “If customers do not have a need for a dedicated sprayer, they can convert their Workman into a part-time sprayer using the Workman 200 Spray System Attachment, and it will cover their spray application needs. This attachment is simply designed to make the Workman more versatile, offering customers more options.”
Toro's 800 Series sprinklers provide many features designed to benefit both superintendents and technicians.

**True Truejectory**
This feature allows the sprinklers to be adjusted easily to direct water exactly where you want it to go. The result is a lot less water wasted.
- Experiment with all 24 settings simply by adjusting the main nozzle trajectory from the top of the sprinkler
- Fine-tune the radius and spray height from 7 to 30 degrees
- Use this feature to get under trees or up bunker faces
- Try adjusting the trajectory to compensate for windy conditions

**Part-Circle/Full-Circle Coverage**
With the same head, these sprinklers also have the unique ability to spray either part-circle patterns or true full circles.
- Make adjustments to the head without changing out the rotor drives
- Try using the part-circle feature in drought-sensitive areas when you need to temporarily cut back on watering roughs
- Experiment with full-circle coverage during grow-in when adjacent native vegetation needs consistent moisture to get established

**Back Nozzle Capabilities**
A little-known but powerful capability, Toro's 800 Series sprinklers can be fitted with 50 different back nozzles—providing irrigation flexibility when a consistent full-circle pattern won't do.
- Experiment with this capability when you need to water native plants and/or ornamentals near the edge of a golf course

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### Popular Toro Nozzles

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<td>34'</td>
<td>4.5</td>
</tr>
<tr>
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<td>4.1</td>
<td>32'</td>
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</tr>
<tr>
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</tr>
<tr>
<td>89-4654</td>
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<td>4.7</td>
<td>32'</td>
<td>5.1</td>
</tr>
<tr>
<td>89-1878</td>
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<td>36'</td>
<td>4.7</td>
<td>36'</td>
<td>5.2</td>
</tr>
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<td>835S/855S</td>
<td>40'</td>
<td>2.9</td>
<td>40'</td>
<td>3.1</td>
</tr>
<tr>
<td>102-2926</td>
<td>835S/855S</td>
<td>43'</td>
<td>4.2</td>
<td>43'</td>
<td>4.4</td>
</tr>
<tr>
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<td>835S/855S</td>
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<td>4.6</td>
<td>47'</td>
<td>4.9</td>
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<tr>
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<td>5.7</td>
<td>52'</td>
<td>6.3</td>
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<td>835S/855S</td>
<td>48'</td>
<td>7.2</td>
<td>53'</td>
<td>8.1</td>
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</table>

- Try this when your irrigation needs require a different throw range or water output
- Use a back nozzle in windy conditions to help gain better trajectory behind the head and to get better overall coverage

Toro's back nozzle selection is expansive, providing a solution for every application need. The chart above outlines a few of the most popular nozzles, along with information about radius and water output.
Toro Protection Plus Has You Covered

Plans Combine Strong Protection with Great Value

Stuff happens. Mowers break down. Sprinklers stop working. Aerators go on the fritz. Even the best equipment needs to be repaired on occasion. And that’s where Toro Protection Plus (TPP) steps in—providing golf course managers with a fool-proof way to safeguard precious Toro equipment long after their warranty expires.

Offering the equipment industry’s most comprehensive protection against unexpected and unwanted repair bills, Toro Protection Plus is available in two plans: drivetrain and comprehensive protection.

Easily and affordably, Toro Protection Plus helps you:

- Protect your investments
- Save money by avoiding costly mechanical repairs
- Get the service you need when and where you need it

For detailed information about Toro Protection Plus, contact your Toro distributor at 800.803.8676 or visit www.toro.com.