

The first riding greensmower to cut with the precision of a walker.

# Introducing the Greensmaster® TriFlex® Series.

Setting a new standard in riding greensmowing.

Our engineers were given the ultimate challenge, to design a riding greensmower that redefines precision cutting. With the all-new Greensmaster TriFlex Series, they exceeded all expectations—not just once, but four times. They raised the bar for cutting performance, productivity, versatility and maintenance. Each model delivers a quality of cut and performance that you simply have to see to believe.



## **Greensmaster TriFlex**3300 Gas

- Briggs & Stratton® Vanguard,® 13.4 kW (21 hp), 2-cylinder, aircooled gasoline engine
- Proven and reliable hydraulic reel circuit



## **Greensmaster TriFlex** 3400 Diesel

- Kubota<sup>®</sup> D902, 17.5 kW (23.5 hp), 3-cylinder, liquid cooled, diesel engine
- Proven and reliable hydraulic reel circuit



### Greensmaster TriFlex Hybrid 3320 Gas

- Briggs & Stratton® Vanguard,® 13.4 kW (21 hp), 2 cylinder, air-cooled gasoline engine
- 48-volt, all-electric reel circuit with no leak points



## **Greensmaster TriFlex Hybrid 3420 Diesel**

- Kubota® D902, 17.5 kW (23.5 hp), 3-cylinder, liquid cooled, diesel engine
- 48-volt, all-electric reel circuit with no leak points

### **Cutting Performance**





### **Double A-Arm Suspension Technology.**

appearance, and improved turf health.

The combination of Toro's patented Flex<sup>™</sup> technology with a Double A-Arm suspension design allows cutting units to achieve a full range of controlled movement to easily master contours and undulations on any type of terrain. Also, with an all-new patent pending Lift-in-Turn<sup>™</sup> feature, the geometry of the suspension ensures that all three cutting units remain level during the cleanup pass to minimize triplex ring for a consistently level cut.





of equipment."\* Superintendent

### **Cutting Performance**





The reel story.

Patented DPA Cutting Units are precision manufactured for perfect alignment to provide the highest quality of cut and minimal adjustments. Choose from an 8, 11 or 14-blade reel to achieve your desired cut.



Light footprint.

Large, turf-friendly tires distribute weight evenly over the entire tire profile to reduce marking and improve playability.

### Consistently level cleanup pass.

The Lift-in-Turn™ feature ensures a consistently level cut on the cleanup pass to minimize triplex ring.





Advanced clippings capture to improve turf health.

Grass baskets are engineered to catch every clipping by maintaining a constant gap between the reel blade and basket lip. Better clipping collection means a cleaner, healthier cut on every pass.

### **Greensmaster® TriFlex® Hybrid Mowers**



# A quantum leap in hybrid technology.

Built for reliability and efficiency, the Greensmaster TriFlex Hybrid models were designed with custom electrical components that ensure ample power for even the most rigorous mowing and thatching applications. The all-electric reel drive is highly reliable with mowing capabilities that match up to any hydraulic mower, providing hybrid technology you can count on for any task.



#### **EnergySmart.**™

Features that save time and energy, and enhance productivity and turf health combine to make the TriFlex Hybrid the first product to earn the EnergySmart™ label from The Toro Company.



### Maximize fuel economy to improve cost of ownership.

With more than enough horsepower and highly efficient components, the TriFlex Hybrid models operate efficiently in energy savings mode. While in this mode, engine RPM's are reduced and the all-electric reel drive maintains a constant reel speed. This results in reduced fuel consumption and noise while maintaining quality of cut, performance and productivity.



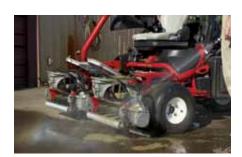
All-electric reel drive.

An all-electric reel drive system is powerful enough to easily manage greensmowing, verticutting, thatching, spiking and other applications.



On-board energy storage.

On-board energy storage delivers instant power when the reels are engaged to eliminate clip marks at start up for a superior quality of cut and aftercut appearance.



Sealed electrical components for worry-free wash down.

The electrical connectors and components are completely protected permitting machine wash down without worry.

# Maintenance innovations you can capitalize on.

No grease fittings and Tool-Free, Quick-Change cutting units raise the bar on productivity and lower your total cost of ownership. Innovations that reduce maintenance leave your technician with more time to tackle other important tasks, saving you time and money.



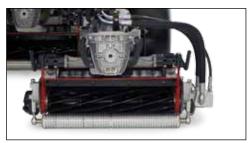
Advanced diagnostics.

To simplify maintenance and easily troubleshoot the unexpected, all TriFlex models are engineered with sophisticated, automotive-based diagnostics.



Easy access for easy maintenance.

A Lift-Gate Footrest provides easy access to the center cutting unit for simplified maintenance and adjustments.



Time savers.

Patented DPA Cutting Units with few adjustments and superior retention reduce cutting unit maintenance.



Jack points on all three wheels make removal of front and rear tires a breeze, and fluid sight levels on hydraulic and fuel tanks make daily visual maintenance checks fast and easy.

## Tool-Free, Quick-Change cutting units.







**Remove cutting units in minutes.** Facilitate routine maintenance activities like reel sharpening, simplify repairs and adjustments, and make it easy to change out seasonal accessories such as thatching reels or greens trirollers. Fast and easy cutting unit removal eliminates the need for a maintenance lift in your shop!





### InfoCenter™; Advanced control for Hybrid models.

Easily customize clip for different heights of cut and adjust other operational settings to gain complete machine control. Common operation information displayed includes: reel speed, hours of function, system voltage for reels, diagnostic descriptions, and much more.



Vital information at your fingertips.

Obtain helpful maintenance reminders and instant notification of potential problems to quickly troubleshoot issues with the InfoCenter.



The TriFlex® Series isn't just the best cutting greensmower, it's a highly versatile and productive machine. Whether you select a hydraulic or a hybrid model, gas or diesel, you'll have ample power to handle any greens or off-greens mowing task. The Tool-Free, Quick-Change cutting units can be switched out in minutes for thatching reels, greens rollers, or spikers to make the TriFlex your all-around workhorse machine.





More comfort for the operator.

Everything about the TriFlex operator console is designed for comfort with convenient fingertip controls, adjustable steering column and seat.



More power for higher performance.

A 13.4 kW (21 hp) Vanguard® Twin gasoline engine and a 17.5 kW (23.5 hp) Kubota® diesel engine, both in hybrid and hydraulic options, have ample power for any application.



Stay ahead of the game.

A generous 12.7 cm (5") ground clearance protects cutting units in transport and when climbing curbs. Fast 16 km/h (10 mph) transport speed also reduces travel time between greens.

## Innovations that improve turf health.

Maintaining a true, predictable ball roll and fast green speed is the ultimate challenge to staying competitive in today's golf game. The Greensmaster® TriFlex® Series riding greensmowers have innovations that improve turf health by reducing common issues on your greens, such as scuffing, gouging or mismatch. The Lift-in-Turn™ feature maintains a consistently level cut on the cleanup pass to minimize triplex ring. By reducing injury to the turf, you can improve the overall health of your greens and offer a perfect putting surface.



## Make your TriFlex even more productive with Toro attachments and accessories.

Transform the TriFlex in minutes with thatching reels, spikers, groomers and more. Choose from the attachments and accessories featured here and online at www.toro.com.



**Thatching Reel** 

Vertically cut into turf to reduce thatch and control horizontal grain growth. Designed with tungsten, carbide tipped dynaBLADES, Toro's thatching reel is durable, uses less power and removes more thatch, for healthier greens.



Rollers, Scrapers, Bedknives

Toro offers a wide variety of accessories to customize the DPA cutting units to suit your needs and work the best in your conditions.



Groomer

Groomers vertically cut into the turf canopy to reduce thatch and stand grass blades for a crisp, clean cut. Select between carbide tipped groomer blade, spring steel groomer blade, or a groomer brush.



**Greens Spiker Kit** 

Relieves soil compaction and controls organic matter to maintain turf health.



**Greens Tri-Roller Kit** 

Smooth and roll the turf's surface for an improved ball roll.



**Rotating Rear Roller Brush** 

Cleans rear roller of grass buildup to prevent leaving clumps on your turf.



Light Kit

Three lights – two in front and one in rear – for more visibility in low light conditions.

### Specifications Greensmaster® TriFlex® Series Greensmowers

Model	Greensmaster 3300TriFlex, Model 04510	Greensmaster 3320 TriFlex HYBRID, Model 04530	Greensmaster 3400 TriFlex, Model 04520	Greensmaster 3420 TriFlex HYBRID, Model 04540
Engine & Maximum Rated Horsepower	Briggs & Stratton <sup>o</sup> Vanguard <sup>o</sup> , 13.4 kW (21 hp), 2-cylinder, air cooled, gasoline engine, governed to 2920 high idle, 1650 rpm low idle. Displacement: 627 cc (38.3 cu-in.)		Kubota <sup>o</sup> D902, 17.5 kW (23.5 hp), 3-cylinder, liquid cooled, diesel engine, governed to 2880 high idle, 1560 rpm low idle. Displacement: 902 cc (55.0 cu-in.) Radiator: cooled with a 12-volt electric fan	
Fuel Capacity	22.7 liter (6 gallons) capacity			
Ground Speed	Forward Mowing Speed: 0-8 km/h (0-5 mph); Maximum Transport Speed: 16.1 km/h (0-10 mph)			
Cutting Unit Drive	Single gear pump, mono valve block, series reel drive to 3 reel motors.	48V-5400 watt air-cooled brushless permanent magnet generator in parallel with 48V 9Ah battery set powers three 48V-1100 watt brushless permanent magnet reel motors.	Single gear pump, mono valve block, series reel drive to 3 reel motors.	48V-5400 watt air-cooled brushless permanent magnet generator in parallel with 48V 9Ah battery set powers three 48V-1100 watt brushless permanent magnet reel motors.
Steering	Power steering with no-tool quick adjust steering arm. Through shaft steering cylinder for steering accuracy.			
Tires/Wheels/Pressure	Three, 19 x 10.5 x 8, 4-ply rating pneumatic tubeless demountable tires. Tire pressure recommended: 12-16 psi front and rear.			
Brakes	Hand-actuated (Drum Brake)			
Overall Dimensions	Wheel Tread: 128.3 cm (50.5") Wheel Base: 119 cm (47") Length: 249 cm (98") Width: 179 cm (70.62") with reels Height: 205 cm (80.83")	Wheel Tread: 128.3 cm (50.5") Wheel Base: 119 cm (47") Length: 249 cm (98") Width: 180 cm 70.84") with reels Height: 205 cm (80.83")	Wheel Tread: 128.3 cm (50.5") Wheel Base: 123 cm (48.6") Length: 98" (249 cm) Width: 179 cm (70.62") with reels Height: 205 cm (80.83")	Wheel Tread: 128.3 cm (50.5") Wheel Base: 123 cm (48.6") Length: 249 cm (98") Width: 180 cm 70.84") with reels Height: 205 cm (80.83")
Weight	1161 lbs. (527 kg)	1257 lbs. (570 kg)	1286 lbs. (586 kg)	1406 lbs. (638 kg)
Sound Level				
At Operator Ear	80 dBA	81 dBA	84 dBA	83 dBA
At Operator Ear In Energy Savings Mode	Energy savings mode not applicable	77 dBA	Energy savings mode not applicable	83 dBA
Bystander Noise at 50' (15.2 m)	NA	65 dBA	NA	65 dBA
Bystander Noise at 50' (15.2 m) In Energy Savings Mode	Energy savings mode not applicable	61 dBA	Energy savings mode not applicable	64 dBA
Cutting Specifications				
Width of Cut	150 cm (59")			
Height of Cut (HOC) Range	Bench HOC Range is 1.6-7.5 mm (0.062" - 0.297"). With high HOC kit, range is 7.3-25.4 mm (0.285"-1"). Effective HOC may vary depending on turf conditions and bedknife installed.			
Reel Weldment	13 cm (5") diameter, 53.3 cm (21") in length. High carbon steel blades are welded to 5 stamped steel spiders and heat treated to RC48-54 hardness.			
Reel Blade Options	8-Blade, 11-Blade, & 14-Blade Cutting Unit Options			
Front & Rear Rollers	Front roller options include: front narrow Wiehle roller, front wide Wiehle roller, front full roller, solid steel roller, anti-bobbing roller, and more.			
The Toro Greensmaster meets the specifications of your toughest jobs. For additional information and specifications, please visit our website at www.toro.com/triflex. Energy savings mode is only available on the TriFlex Hybrid models, engine RPM at 2400 RPM.				

#### TORO® PROFESSIONAL SERVICES

Toro Financing Many flexible financing options are available to meet your specific operational requirements.

Toro Genuine Parts Keep the productivity and performance of your equipment at its peak by using genuine Toro replacement parts. Find and identify your replacement parts online at www.Toro.com/ partsviewer.

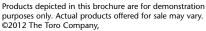
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Toro Controller Repair Provides irrigation controller boards ready for immediate board exchange to assure that downtime is minimal and your turf stays protected. Toro is the choice for reliability.

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\* Quotations in this brochure are based on actual customer comments - title, name and golf course were removed.

