

## **Greensmaster TriFlex**

HYBRID & HYDRAULIC RIDING GREENSMOWERS

### FEATURES

#### **Advanced Cutting Performance**

- Patent pending Double A-Arm Suspension for superior contour following
- Industry leading Flex technology and DPA cutting units for easy adjustment and precision
- Patented **Lift-In-Turn** feature provides a consistently level cleanup cut
- Enhanced clippings capture system for improved turf health

#### **Highly Productive and Versatile**

- Powerful 21 hp (15.6 kW) Briggs & Stratton® Vanguard Gasoline or 24.8 hp (18.5kW) Kubota® diesel engine
- Ample power for a wide range of applications both on and off the greens
- 10mph transport speed to save time and improve productivity

#### **Innovative Maintenance Enhancements**

- A Lift-Gate Footrest provides easy access to the center cutting unit for simplified maintenance and adjustments
- Tool-Free, Quick Change cutting units for greater versatility, simplified maintenance, and enhanced productivity
- Large, balloon-style tires ensure equal pressure on the turf to minimize tire marking and reduce scuffing in turns

## All-Electric Reel Technology (Hybrid models only)

- Custom designed, highly efficient electrical reel motors
- Electrical energy storage for peak power demands
- Sufficient power to verticut
- Energy savings mode for reduced fuel consumption
- Dial-In-Clip for consistent perimeter cut

### *energy* smart™

## **EdgeSeries**™ Reels

# Setting a new standard by which all other riding greensmowers will be measured.

The Greensmaster TriFlex and TriFlex Hybrid models are the first riding greens mowers delivering the productivity of a rider and the precision of a walker. Combining the innovative, Double A-Arm Suspension System with industry-leading Flex technology, the cutting units float freely over any terrain resulting in a superior quality of cut and aftercut appearance. And, superior cutting performance is only the beginning. A patented Lift-Gate Footrest and Tool-Free, QuickChange cutting units are just two of the many features that provide added versatility, simplified service, and ultimately, more productivity.





## Greensmaster TriFlex 3300/3320/3400/3420 Specifications

|                                      | GREENSMASTER 3300  | GREENSMASTER 3320  | GREENSMASTER 3400  | GREENSMASTER 3420   |  |  |
|--------------------------------------|--|--|--|---|--|--|
|                                      | TriFlex, MODEL 04510   | TriFlex <b>Hybrid</b> , MODEL 04530  | TriFlex, MODEL 04520   | TriFlex Hybrid, MODEL 04540   |  |  |
| ENGINE                               | Briggs & Stratton® Vanguard®, 21 HP (15.6 kW) @ 3600 rpm, 2-cylinder,<br>air cooled, gasoline engine, governed to 2920 high idle, 1650 rpm low idle.<br>Displacement: 38.3 cu-in. (627 cc)   |  | Kubota® D902, Tier 4i, 24.8 HP (18.5 kW<br>diesel engine, governed to 2880 high idl<br>55.0 cu-in. (902 cc) Radiator: cooled wit                 | le, 1560 rpm low idle. Displacement:  |  |  |
| FUEL CAPACITY                        | 6 gallons (22.7 liter) capacity.   |  | 6 gallons (22.7 liter) capacity. Biodiesel ready up to B20   |   |  |  |
| TRACTION DRIVE                       | 2WD parallel hydrostatic or 3WD series-  | parallel piston pump closed loop system. F   | oot pedal forward and reverse; infinitely va   | ariable.  |  |  |
| GROUND SPEED                         | Forward-mowing speed is variable from 0-5 mph (0-8 km/h), adjusted by stop on pedal mechanism. Mow speed setting does not affect transport speed. Maximum Greensmaster TriFlex transport speed is 10 mph (16.1 km/h), may be reduced by adjusting stop in footrest pan without affecting mow speeds. Reverse is 3 mph (4.8 km/h) maximum.  |  |  |   |  |  |
| CUTTING UNIT DRIVE                   | Single gear pump, valve block, series reel drive to 3 reel motors.   | 48V-5400 watt air-cooled brushless<br>permanent magnet generator<br>in parallel with 48V 9Ah battery<br>set powers three 48V- 1100 watt<br>brushless permanent magnet reel<br>motors.  | Single gear pump, valve block, series reel drive to 3 reel motors.   | 48V-5400 watt air-cooled brushless<br>permanent magnet generator in<br>parallel with 48V 9Ah battery set<br>powers three 48V-1100 watt brushless<br>permanent magnet reel motors.   |  |  |
| AUTOMATIC CLIP CONTROL               | N/A  | Yes  | N/A  | Yes   |  |  |
| STEERING                             |  |  | arm motion allowing a wide range of opera  | tor sizes. Steering cylinder has a  |  |  |
| ELECTRICAL SYSTEM                    | through shaft design for accurate straight line steering.  12-volt lead acid, group size U1, with 300 minimum cold cranking amps at 0° F and 34 minutes reserve capacity at 85° F/25 amps draw. 50 amp alternator. Ignition switch/key. Seat switch. Harness terminals and fuse slot available for optional lights installation.  Maintenance-free 12-volt battery with 585 minimum cold cranking amps at 0° F (-17.7° C) and 95 minutes minimum reserve capacity at 85° F (29.4° C) 60 amp alternator, circuit fused at 60 amps. Ignition switch/key. Seat switch. High temperature engine shut down. Harness terminals, fuse slot, and console switch location available for optional lights installation. |  | n reserve capacity at 85° F (29.4° C)<br>nps. Ignition switch/key. Seat switch.<br>rness terminals, fuse slot, and console<br>phts installation. |   |  |  |
| 48-VOLT SYSTEM FOR<br>Electric reels | N/A  | 4-12V 9Ah sealed, maintenance-free,<br>VRLA batteries. 48-volt system is<br>isolated from 12-volt including the<br>frame/chassis.  | N/A  | 4-12V 9Ah sealed, maintenance-free,<br>VRLA batteries. 48-volt system is<br>isolated from 12-volt including the<br>frame/chassis.   |  |  |
| CONTROLS                             | Ignition: Off/Run/Start. Throttle: Low - High Idle. Choke (AC only): Open /Closes choke plate. Parking Brake: Off - On. Traction Pedal: Rev/Neutral/Forward Joystick: Raises/lowers reels also tap off feature for clean up pass. Functional Control Lever sets neutral/mow/transport limits for traction pedal. Diagnostic Light: Indicates system faults to assist in resolving issues (04510 & 04520). InfoCenterTM Diagnostics (04530 & 04540).  |  |  |   |  |  |
| GAUGES                               | Hydraulic sight gauge, hour meter.<br>Low oil pressure warning light.  | Hydraulic sight gauge. InfoCenter™: Onboard LCD display shows gauges, alerts/faults, service reminders, electrical system diagnostics, low oil pressure, alternator, engine hours, engine rpm, voltage, functional control status, parking brake applied, reel speed setting, backlap control. New clip selection feature. | Hour meter, low oil pressure warning light, alternator warning light (on if not charging), glow plug indicator, high engine temperature.         | InfoCenter™: Onboard LCD display shows gauges, alerts/faults, service reminders, electrical system diagnostics, low oil pressure, alternator, engine hours, engine rpm, voltage, functional control status, parking brake applied, reel speed setting, backlap control. New clip selection feature. |  |  |
| TIRES/WHEELS/PRESSURE                | Three, 19 x 10.5 x 8, 4-ply rating pneum   | atic tubeless and demountable. Smooth tre  | ead. Tire pressure recommended: 12 - 18 ps   | i front and rear.   |  |  |
| BRAKES                               | Hand-actuated parking brake lever with   | two 6" (15.2 cm) diameter drum brakes mo   | ounted on the front wheel motors.  |   |  |  |
| HYDRAULIC OIL                        | 6.8 gallon (25.7 liter) tank   | 5.5 gallon (20.8 liter) tank   | 6.8 gallon (25.7 liter) tank   | 5.5 gallon (20.8 liter) tank  |  |  |
| LEAK DETECTION                       | Equipped with Turf Guardian™ Leak Detection System. System sounds an alarm and turns on a warning light with the loss of 3 to 5 ounces of hydraulic oil.   | Optional   |  |   |  |  |
| SOUND LEVEL                          | 80 dB(A) at operator's ear under normal  | conditions.  | 84 dB(A) at operator's ear under normal  | conditions.   |  |  |
| OVERALL DIMENSIONS                   | Wheel Track: 50.5" (128.3 cm) Wheel Base: 47" (119 cm) Length: 98" (249 cm) Width: 70.62" (179 cm) w/reels Height: 80.83" (205 cm)   | Wheel Track: 50.5" (128.3 cm) Wheel Base: 47" (119 cm) Length: 98" (249 cm) Width: 70.84" (180 cm) w/reels Height: 80.83" (205 cm)   | Wheel Track: 50.5" (128.3 cm) Wheel Base: 48.6" (123 cm) Length: 98" (249 cm) Width: 70.62" (179 cm) w/reels Height: 80.83" (205 cm)             | Wheel Track: 50.5" (128.3 cm) Wheel Base: 48.6" (123 cm) Length: 98" (249 cm) Width: 70.84" (180 cm) w/reels Height: 80.83" (205 cm)  |  |  |
| WEIGHT                               | 1161 lbs. (526 kg)   | 1257 lbs. (570 kg)   | 1286 lbs. (586 kg)   | 1406 lbs. (638 kg)  |  |  |
| WIDTH OF CUT                         | 59" (150 cm)   |  |  |   |  |  |
| GROUND CLEARANCE                     | 4.5" (11.4 cm)   |  |  |   |  |  |
| CUTTING UNIT SUSPENSION              | Double A-arm suspension utilizing sealed ball joints allows free cutting unit motion in pitch, roll, and yaw. The basket is directly mounted to the cutting unit displacing weight evenly over both cutting unit rollers eliminating the carrier frame, roller and pull links.   |  |  |   |  |  |
| QUICK CONNECT CUTTING UNITS          | Quick connect/disconnect feature for both the reel drive motor and cutting unit. No tools required.  |  |  |   |  |  |
| REEL SPEED                           | Approximately 2050 RPM at 2850 engine RPM. Adjustable.   |  |  |   |  |  |
| BACKLAPPING                          | Standard equipment.  |  |  |   |  |  |
| OPTIONAL ACCESSORIES                 | Canopy, verticutters, greens rollers, dethatchers, oil cooler.   |  |  |   |  |  |
| CERTIFICATION                        | Certified to meet ANSI specification B71.4 - 2004 and European CE standards.   |  |  |   |  |  |
| WARRANTY                             | Two-year limited warranty. Refer to the (  | Operator's Manual for further details.   |  | Two-year limited warranty. Refer to the Operator's Manual for further details.  |  |  |

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## Greensmaster TriFlex 3300/3320/3400/3420 Accessories

|                              | 8-BLADE DPA CUTTING UNITS 11-BLADE DPA CUTTING UNITS 14-BLADE CUTTING UNITS   |
|------------------------------|---|
| DPA CUTTING UNITS            | These cutting units will fit on the Greensmaster TriFlex Series.  |
| HEIGHT OF CUT<br>(HOC) RANGE | Cutting height is adjusted on front roller by two vertical screws and held by two locking cap screws. Bench HOC range is .062"297" (1.6-7.5 mm). With high HOC kit, range is297-1.0" (7.5-25.4 mm). Effective HOC may vary depending on turf conditions and bedknife installed.             |
| REEL WELDMENT                | Reels are 5" (13 cm) in diameter, 21" (53.3 cm) in length. <b>EdgeSeries™</b> Reels blades are welded to 5 stamped steel spiders, and heat treated. The reel is ground for diameter and concentricity, and relief grind.  |
| REEL BEARINGS                | Two stainless steel ball bearings, 30 mm inside diameter slip fit onto reel shaft retained by internally splined threaded insert. Low drag seals/slingers for added protection with o-ring sealed motor and counterweight. Reel position maintained by a wave washer with no adjusting nut. |
| MAINTENANCE                  | No grease zerks, sealed bearing design eliminates daily maintenance.  |
| REEL DRIVE                   | The reel weldment shaft is a 1.375" (35 mm) diameter tube with internally splined threaded insert.  |
| FRAME                        | Precision machined, die-cast aluminum cross member with two bolt-on die-cast aluminum side plates.  |
| AGGRESSIVENESS               | Aggressiveness stays constant throughout the life of the reel. Patented design.   |
| BEDKNIFE                     | Replaceable single edged, EdgeMaxTM Microcut Bedknife is standard on all cutting units.   |
| BEDKNIFE ADJUSTMENT          | Dual screw, indexed "click" adjustment to the reel; detents correspond to .0007" (.018 mm) bedknife movement for each position.   |
| FRONT & REAR ROLLERS         | Front: Not included with cutting unit, purchased separately. Option between full, narrow-spaced and wide-spaced Wiehle roller.<br>Rear: Steel full, 2" (5.1 cm) diameter with sealed bearings and through-shaft.  |
| GRASS SHIELD                 | Non-adjustable shield with adjustable cut-off bar to improve grass discharge from reel in wet conditions.   |
| TOTAL WEIGHT                 | 8-blade: 80 lbs. (30.4 kg) with aluminum Wiehle Roller. 11-blade: 83 lbs. (37.7 kg) with aluminum Wiehle Roller. 14-blade: 86 lbs. (39 kg) with aluminum Wiehle Roller.   |

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The Greensmaster<sup>\*</sup> TriFlex<sup>\*\*</sup> is manufactured in Tomah, WI ISO 9002 Certified Plant.

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## Greensmaster TriFlex 3300/3320/3400/3420 Accessories

### GREENSMASTER TRIFLEX ACCESSORIES

| TRIFLEX TRACTION UNIT ACCESSORIES |  |  |
|-----------------------------------|--|--|
| 04716                             | Off-Greens Kit (Anti Bobbing)            |  |
| 04722                             | Tri-Roller Kit                           |  |
| 04723                             | Spiker Kit                               |  |
| 04714                             | 3WD Kit                                  |  |
| 04730                             | Leak Detector                            |  |
| 04554                             | Light Kit                                |  |
| 04508                             | Seat Kit, Standard                       |  |
| 04729                             | Seat Kit, Premium                        |  |
| 121-3660                          | Armrest Kit - Standard                   |  |
| 119-7105                          | Armrest Kit - Premium                    |  |
| 119-1691                          | Hydraulic Oil Cooler Kit (Gas)           |  |
| 117-9314                          | Hydraulic Oil Cooler Kit (Diesel)        |  |
| 119-7129                          | 2WD Weight Kit (Gas) (ANSI compliant)    |  |
| 121-6665                          | 2WD Weight Kit (Diesel) (ANSI compliant) |  |
| 120-5750                          | 3WD Weight Kit (Gas) (ANSI compliant)    |  |
| 104-6540                          | Spark Arrestor Kit (Gas)                 |  |
| 120-1951                          | Spark Arrestor Kit (Diesel)              |  |
| 138-8579                          | Canopy                                   |  |
| 137-8130                          | Utility Bag Kit                          |  |
| 115-4754                          | Wireless Hour Meter                      |  |

| OPTIONAL TRIFLEX ACCESSORIES |   |  |
|------------------------------|---|--|
| 04720                        | Thatching Reel - TriFlex (set of 1)                       |  |
| 119-1128                     | Individual dynaBLADE, 2mm thickness                       |  |
| 117-6824                     | Individual dynaBLADE, 1.2mm thickness                     |  |
| 117-6839                     | Replacement dynaBLADE kit, 1.2mm<br>thickness (36 blades) |  |
| 117-6840                     | Replacement dynaBLADE kit, 2mm<br>thickness (36 blades)   |  |
| 121-6674                     | Individual Spring Steel Blade                             |  |
| 121-6675                     | Replacement Spring Steel Blade Kit (36 pcs)               |  |
| 04722                        | Greens Tri-Roller - TriFlex (set of 1)                    |  |
| 04723                        | Greens Spiker - TriFlex (set of 1)                        |  |

| TRIFLEX DPA CUTTING UNITS |                                   |
|---------------------------|-----------------------------------|
| 04651                     | EdgeSeries™ 8-Blade Cutting Unit  |
| 04653                     | EdgeSeries™ 11-Blade Cutting Unit |
| 04655                     | EdgeSeries™ 14-Blade Cutting Unit |

| TRIFLEX DPA CUTTING UNIT ROLLERS |   |  |
|----------------------------------|---|--|
| 04625                            | Full Roller DPA                                       |  |
| 04626                            | Narrow Wiehle Roller DPA                              |  |
| 04627                            | Wide Wiehle Roller DPA                                |  |
| 04249                            | Full Split Roller                                     |  |
| 04250                            | Wiehle Split Roller                                   |  |
| 04628                            | Solid Steel Roller Kit (Front Wide Wiehle, Rear Full) |  |
| 04716                            | Anti Bobbing Kit                                      |  |
| 71-1550                          | 2" Rear Wiehle Roller (cast iron)                     |  |
| 125-5180                         | Rear Roller Extension Kit                             |  |
| 120-9600                         | High Height of Cut Kit (.3594)                        |  |
| 04258                            | Extended Wiehle Roller                                |  |
| 04267                            | Narrow Wiehle Roller (for paspalum)                   |  |

| TRIFLEX DPA CUTTING UNIT ROLLER SCRAPERS /<br>BRUSHES / COMBS |  |  |
|---|--|--|
| 04646   | Rear Roller Scraper (Spring Loaded)                |  |
| 125-3503  | Front Wiehle Roller Scraper - Narrow               |  |
| 125-3504  | Front Wiehle Roller Scraper - Wide                 |  |
| 125-3505  | Front Roller Scraper - Full                        |  |
| 115-7377  | Front Wiehle Roller Scraper Brush - Narrow         |  |
| 115-7378  | Front Wiehle Roller Scraper Brush - Wide           |  |
| 115-7379  | Front Roller Scraper Brush - Full                  |  |
| 115-7380  | Front Wiehle Roller Scraper Comb - Narrow          |  |
| 115-7381  | Front Wiehle Roller Scraper Comb - Wide            |  |
| 115-7382  | Front Roller Scraper Comb - Full                   |  |
| 107-9561  | Anti Bobbing Roller - Scraper Kit (Front and Rear) |  |
| 121-2260  | Rear Roller Scraper - Adjustable                   |  |

| TRIFLEX DPA CUTTING UNIT ACCESSORIES |   |  |
|--------------------------------------|---|--|
| 04648                                | Universal Groomer Drive                           |  |
| 04802                                | Groomer Reel – Twin Tipped                        |  |
| 04270                                | Grooming Brush, Soft                              |  |
| 04271                                | Grooming Brush, Stiff                             |  |
| 04650                                | Rotating Rear Roller Brush                        |  |
| 115-1880                             | EdgeMax™ Microcut Bedknife                        |  |
| 115-1881                             | EdgeMax™ Tournament Bedknife                      |  |
| 93-4262                              | Microcut Bedknife<br>(HOC Range 1.58mm - 3.18mm)  |  |
| 93-4263                              | Tournament Bedknife<br>(HOC Range 3.2mm - 6.35mm) |  |
| 93-4264                              | Low Cut Bedknife<br>(HOC Range 6.35mm and higher) |  |
| 94-6392                              | Bedknife – High Cut                               |  |
| 108-4303                             | Extended Microcut Bedknife                        |  |
| 108-4302                             | Extended Tournament Bedknife                      |  |
| 63-8610                              | Bedknife – Fairway                                |  |
| 99-3794-03                           | DPA Bedbar, Aggressive (optional)                 |  |
| 106-2648-01                          | DPA Bedbar, Less Aggressive (standard equipment)  |  |
| 137-0879                             | EdgeMax™ Fairway Bedknife                         |  |

| TRIFLEX SERVICE KITS |  |
|----------------------|--|
| 44969                | 1000 hour filter Maintenance Kit -<br>Greensmaster TriFlex 3300 / 3320 |
| 44970                | 400 hour filter Maintenance Kit -<br>Greensmaster TriFlex 3400 / 3420  |

| BIO-HYDRAULIC FLUID / HYDRAULIC FLUID / OIL |  |  |
|---|--|--|
| 119-2157                                    | Bio-Hydraulic Fluid, 5 gal. (18.9 L)         |  |
| 119-2158                                    | Bio-Hydraulic Fluid, 55 gal. (208.2 L)       |  |
| 133-8086                                    | Premium Hydraulic Fluid, 5 gal. (18.9 L)     |  |
| 133-8087                                    | Premium Hydraulic Fluid, 55 gal. (208.2 L)   |  |
| 121-6393                                    | Premium Engine Oil SAE 30, 5 gal. (18.9 L)   |  |
| 121-6392                                    | Premium Engine Oil SAE 30, 55 gal. (208.2 L) |  |

| TOOLS    |                            |
|----------|----------------------------|
| 04399    | Turf Evaluator             |
| 125-5610 | Paper - Reel               |
| 125-5611 | Shim - Reel                |
| 94-9010  | Height of Cut Bar Assembly |



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