

**TORO.** Count on it.

# ProCore™ 648



**TORO.** Count on it.

# The new look in aerators.

## ProCore™ 648

- Innovative wheel placement
- Efficient aeration
- High productivity
- Deeper, high-quality holes
- TrueCore™ ground following
- Series/parallel 3-wheel drive
- Smooth, quiet, powerful operation
- No more crushed cores

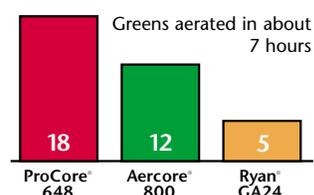
If you think the Toro® ProCore 648 looks unique, you're right. From the innovative wheels within the coring path, to the large 48" (122 cm) aeration swath, there's nothing ordinary about Toro's newest aerator. Years of research, customer input, testing and attention to detail went into making the ProCore 648 the most productive and efficient walking aerator on the market.



## Count on Productivity

### Aerate 18 greens in about 7 hours.

With a wide coring swath, brisk speed and faster cleanup, the ProCore 648 is the most productive walk aerator for your course. Competitive comparison chart is based on 6,500 ft.<sup>2</sup> (604 m<sup>2</sup>) greens, 1,000 ft. (305 m) between greens, 2" x 2" (5.1 cm x 5.1 cm) hole spacing and standard turnarounds.





## No more crushed cores.

The unique design of the ProCore 648 puts the wheels in front of the aeration head so that you can make pass after pass without running over cores or freshly aerated turf. This prevents damage to the turf and the fresh holes, and makes cleanup easier. Consistently round holes are achieved by the elastomer RotaLink™ geometry that ensures tines remain vertical as they enter and exit the ground. The individually floating turf holders prevent turf lift when the tines exit the ground to maintain a true and level surface.



Tires located in front of the aerator never leave wheel ruts that are common on freshly aerated greens, tees and sports fields.



# One work shift. One machine.

The ProCore™ 648 gets the job done faster than ever. You can aerate all 18 greens in about 7 hours\* thanks to a 48" (122 cm) aeration swath. In fact, the ProCore 648 has the highest productivity rating of any walk aerator on the market. From quicker turnarounds to faster transport speed, everything about the ProCore 648 is built for productivity. You'll move swiftly from aeration to cleanup and your course will be back in playing condition in record time.

\*Assumes average 6,500 sq./ft. (604 m<sup>2</sup>) greens, 2" x 2" (5.1 cm x 5.1 cm) linear hole spacing, 1,000 feet (305 m) between greens at maximum transport speed and standard "tear-drop" style turnarounds.

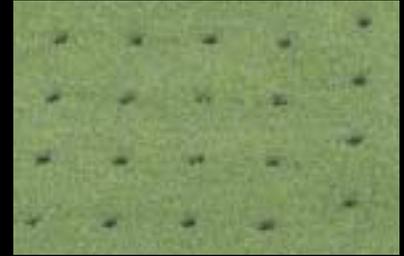


# Solid on slopes.

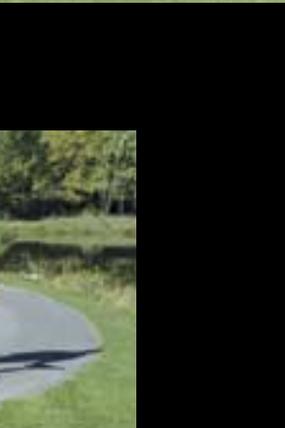
Traditional walking aerators do not maintain consistent hole depth, spacing and hole quality on undulations. The ProCore 648 has solved these challenges with the TrueCore™ system, the industry's first automatic ground following system, and a 3-wheel drive, series/parallel hydrostatic drive train. The TrueCore sensing system automatically maintains tine depth on the fly to match the ground undulations, providing consistent coring as deep as 4" (10.2 cm). The patented 3-wheel series/parallel traction drive, combined with high-torque, low-speed wheel motors, prevents slippage for reliable traction and even hole spacing.



Choose needle, mini-hollow, mini-solid, hollow, slotted or solid tines.



Clean, deep and consistent aeration holes — even on challenging terrain.





## Easy and safe to operate.

The controls on the ProCore™ 648 are simple and intuitive, allowing minimal training to get up and running fast. A single switch on the handle controls the tine head and a handle bail engages forward and reverse. No shifting required. Select the desired tine depth and spacing and you're ready to go. Even the comfortable transport speed and forward transport direction are operator-friendly. A fail-safe system stops the machine and lifts the coring head when the handle bail is released for any reason.



Hole spacing adjusts quickly and easily using a simple lever.



Tine depth is adjustable down to an industry-leading 4" deep (10.2 cm).

# Works as hard as you do.

To give the ProCore its uncommonly smooth operation, the action of the tine arms are modeled after a 6-cylinder engine. The arms work in pairs to counterbalance the coring action. This precision configuration virtually eliminates hopping, rocking and unnecessary vibration. That's something operators will appreciate during and after the aeration process. They'll also value the rugged and powerful 23 hp (17.2 kw) Kohler® engine.

It has ample strength to drive the tines deep across the 48" (122 cm) aeration width. The Toro® RotaLink™ mechanism allows the tines to enter and exit the ground cleanly for high quality results. The coring head is belt driven for durability and reliability, and it relies on large, sealed bearings to eliminate grease points. A full complement of accessories is also available for your ProCore 648.

Windrower



Directs cores into neat, narrow rows for easy collection and removal

Tire scrapers



Removes any soil accumulation from rear tires

Tine holders



Customize your aeration with a choice of four tine holders

Belly-mount weight kit



Up to two additional 60 lbs. (28.6 kg) weights can be added to ensure maximum penetration in hard soil



# Specifications for ProCore™ 648

## Coring

**Width:** 48" (122 cm)

**Depth:** Down to 4" (10.2 cm)

**Head:** Heavy-duty crank shaft with six "I-beam" tine arms

**Depth control:** TrueCore™ system for full-time, automatic contour following

## Hole Spacing

**Detent 1:** 1.5" (3.8 cm) 16,000 sq. ft./hr. (1,488 m<sup>2</sup>/h) max

**Detent 2:** 2.0" (5.1 cm) 21,350 sq. ft./hr. (1,983 m<sup>2</sup>/h) max

**Detent 3:** 2.5" (6.4 cm) 26,700 sq. ft./hr. (2,479 m<sup>2</sup>/h) max

**Detent 4:** 3.0" (7.6 cm) 32,000 sq. ft./hr. (2,975 m<sup>2</sup>/h) max

## Productivity

Able to aerate 18 - 6,500 sq. ft. (604 m<sup>2</sup>) greens in about 7 hours at 2" (5.1 cm) hole spacing.

## Speed & Direction

**Forward:** 0-3.5 mph (0-5.7 km/h)

**Reverse:** 0-2.0 mph (0-3.2 km/h), fully variable

## Tines/Diameter

**Needle tines:** 3/16" (5 mm), 5/16" (8 mm)

**Solid tines:** 3/8" (9.5 mm), 7/16" (11 mm), 1/2" (13 mm), 5/8" (16 mm)

**Side-eject tines:** 1/4" (6.4 mm), 1/2" (13 mm)\*, 5/8" (16 mm)\*, 3/4" (16 mm)

**Hollow tines:** 3/8" (9.5 mm), 1/2" (13 mm)\*, 1/2" (13 mm), 5/8" (16 mm)\*, 5/8" (16 mm)

\*Extended hollow or side eject tine, 1/2" (13 mm) or 5/8" (16 mm), required for 4" (10.2 cm) aeration depth.

## Tine Holders

**3-tine:** 2.6" (6.6 cm) lateral spacing

**4-tine:** 2" (5.1 cm) lateral spacing

**Mini-tine:** 1.6" (4.1 cm) lateral spacing

**Needle-tine:** 1.6" (4.1 cm) lateral spacing

## Controls

Ignition switch, throttle, choke, parking brake, traction lever for forward and reverse, coring head raise/lower switch, selector knob for aeration spacing, TrueCore™ ground following switch, system reset, and aeration depth selector.

## Engine

**Model:** Kohler® 2-cylinder, air-cooled, gasoline

**Rating:** 23 HP (17.2 kW) @ 3000 rpm

**Displacement:** 41 cu. in. (674 cc)

## Noise

**Operator Ear:** 82 dB(A)

## Capacities

**Fuel:** 7.5 gal. (28.4 l)

**Engine oil w/filter:** 2 qt. (1.9 l)

**Hydraulic oil:** 3.0 gal. (11.3 l)

## Electrical

**Battery:** 12 volt, 300 cold cranking amps @ 0°F

**Instrumentation:** Hour/tachometer

**Controller:** Micro-processor logic control for troubleshooting

## Tires

**Front & rear:** 20 x 10-10, 2-ply rated, smooth tread, tubeless

## Brakes

**Service:** Dynamic through hydrostatic transmission

**Parking:** Hand-actuated on handle

## Dimensions

**Overall length:** 104.5" (265.4 cm)

**Overall width:** 50" (127.3 cm)

**Height w/head raised:** 45.0" (114.3 cm)

**Wheel base:** 44.5" (113.0 cm)

**Ground clearance:** 4.75" (12.1 cm)

**Weight (less fuel):** 1,590 lbs. (722 Kg)

## Drive Train

Patented 3-wheel drive, series/parallel hydrostatic, closed loop

## Attachments/Accessories

Tine heads, windrower, tire scrapers, weight kit

**Certification:** ANSI B71.4-1999, CE & EU machinery directives

**Warranty:** Two year or 500 hour limited warranty. Refer to the Operator's Manual for further details.

## TORO® PROFESSIONAL SERVICES

**Toro Financing** A full service offering for all your equipment and irrigation purchases. Flexible financing options can be tailored to meet your operational needs.

**Toro Protection Plus Extended Protection Plan** Protect your budget and your equipment investment. Plans are available for both new and used equipment and you can choose from various terms to fit your financing terms.

**Toro Genuine Parts** Keep the productivity and performance of your equipment at its peak. Learn about Performance Parts pricing and MVP kits. Find replacement parts online at [Toro.com/partsviewer](http://Toro.com/partsviewer).

**Toro Training** Toro Factory Service Schools are available. Explore the training and customer care areas of [Toro.com](http://Toro.com) and [ToroNSN.com](http://ToroNSN.com) for readily available education and training materials.

**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.

**Toro NSN®** An industry-first support network that provides reliable, around-the-clock irrigation central control system trouble-shooting and operation assistance. Call 1-800-ASK-TORO.

Products depicted in this brochure are for demonstration purposes only.

Actual products offered for sale may vary.

©2004 The Toro Company, 8111 Lyndale Ave. S., Bloomington, MN 55420-1196  
Part No. 04-030-T. Printed in U.S.A.

[www.toro.com](http://www.toro.com)



**Count on it.**