AERATING TINES

- Original
- DuraTine™ XL and XLT Series NEW
- VenTine™ series
- Deep Tines
- Others

GreensAire™ 24-OPC

GreensAire™ 30

Performaire™ 60 and 80

Quick Aerator

GreensAire™ 60

GENUINE PARTS

JACOBSEN®
A Textron Company

When Performance Matters.™

The Dilemma:

Superintendents know aeration is good for their course. It controls thatch, increases green speed, improves soil exchange and maintains an effective root system throughout the growing season. Healthy turf depends on good aeration practices.

On the other hand, superintendents don't like aeration because it wrecks the course, temporarily halts play and costs money. Often golfers avoid a course that has just been aerated. They go on down the road.

If you're like most superintendents, you would like to find a way to do what you need to do in less time and with less disruption. The Jacobsen® Original and new DuraTine™ XL and XLT systems allow your team to keep rolling. Shouldn't your tine work harder than you do? Can you really afford disruption on your course any longer than necessary?

Our new DuraTines last up to 4 times longer than our Original tines and as much as 75% longer than competitive equivalents. What is one hour of play worth to your golf course? Choose the tine that will energize your team and keep the equipment moving.

What if you could aerate less without any loss in agronomy benefits?

The PGA recommends you remove 20% of surface area each year. With the new Jacobsen quad tine holder, you can remove 11.9% of material in two passes. Compare that to the Toro ProCore 648 that requires 3 times to achieve the same result.

Plus, you get the legendary hole quality from Jacobsen that allows your turf to heal quicker. When you want genuine speed and productivity, the GA 24 with a quad tine holder and DuraTine XL tines by Jacobsen becomes the aeration system of choice. Not only can you aerate your course more quickly, but also less often and with better hole quality, all while following PGA guidelines for healthy turf management.

- Which aerator is really the most productive?
- Which aerator costs less?
- Which aerator allows you to aerate less?
- Which aerator is more maneuverable?

For improved performance, check out the DuraTine XL tine with quad tine holder from Jacobsen. It's the new standard in aeration.

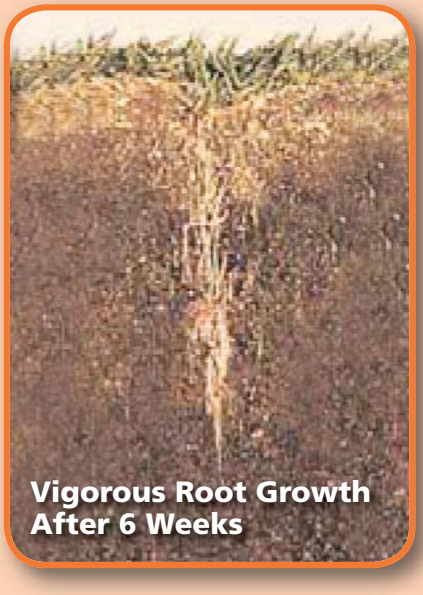
DuraTines are designed and crafted to Jacobsen's exacting standards for the GreensAire™ 24-OPC, the GreensAire 30 and the GreensAire 60.

The Value of Aerification

Aerification is one of the most important yet dreaded cultural practices when it comes to golf course maintenance. It disrupts the playing surface, is usually done during the prime playing seasons and according to most golfers, has no redeeming features. In reality, aerification is a vital cultural practice because of what it does to improve the overall health and appearance of your turf. Through aerification you can:

1. Extract excessive accumulation of organic material
2. Improve soil/gas exchange
3. Stimulate new root development
4. Stimulate microbial activity
5. Improve the plant's ability to withstand biotic and abiotic stresses

After Core Cultivation



Vigorous Root Growth After 6 Weeks

Application Guide

The chart to the right is a general guideline of when different types of tines can and should be used.

- ● ***Is*** recommended for the particular application
- ● ***Generally*** recommended for the particular application (but can depend on soil conditions – rocks, hardness)
- ● ***Is not*** recommended for the particular application

Tine Type	Core Size	Greens	Tees / Approaches	Fairways	Minimal Disruption	Soil Changing Greens
Solid	Small (1/4")	●	●	●	●	●
	Medium (3/8" - 1/2")	●	●	●	●	●
	Large (5/8" - 3/4")	●	●	●	●	●
Top Eject	Small (1/4")	●	●	●	●	●
	Medium (3/8" - 1/2")	●	●	●	●	●
	Large (5/8" - 3/4")	●	●	●	●	●
Side Eject	Small (1/4")	●	●	●	●	●
	Medium (3/8" - 1/2")	●	●	●	●	●
	Large (5/8" - 7/8")	●	●	●	●	●

Top Eject Tines

- Designed to remove solid cores/material; economical; large range of sizes

Side Eject Tines

- Remove solid cores / material; quickly exits the side of the tine through a slot. The slot helps to avoid plugging in more challenging soils that can occur with top eject tines.

Solid Tines

- Aerate without cleaning up the mess left behind with top eject or side eject tines. Especially popular in the smaller sizes for aerating in summer months to relieve stress on the greens.

Venting Tines

- Venting is designed to slit / puncture the turf more frequently to promote infiltration of water and act as a "vent" for excessive water to escape; it also allows air to be exchanged throughout the root system.

Slicing Blades

- Similar to venting tines; slicing blades leave virtually no surface disturbance. Allows play to be resumed immediately.

The Jacobsen Difference

About our process:

Utilizing state-of-the-art equipment and a proprietary 3-step heat treat process, our Original and DuraTine series are manufactured in a controlled atmosphere with precise temperature, times and quenching mechanics to produce excellent performance consistency to the parts. This ensures manufacturing repeatability and reliability.

The DuraTine XL and DuraTine XLT hollow tines were engineered utilizing a heavier alloy steel and proprietary heat treat process to maximize performance, wear and eliminate breakage without compromising the hole quality Jacobsen has been known for.

Raw material is thoroughly inspected by a metallurgical staff for correct initial hardness, dimensions and steel structure. It is tagged for traceability purposes. This tag travels through the manufacturing process and is kept in our files for future reference, if needed.

Before each order is produced, the first part is inspected by our quality personnel. Material in process is constantly monitored for critical dimensions, before and after each operation. All XLT tines are shot blasted externally and internally to remove traces of imperfections produced during the carbide tip brazing process. This ensures clean surfaces for cleaner holes and smooth ejection of cores. Finished product is then sample checked and examined by our metallurgical staff.

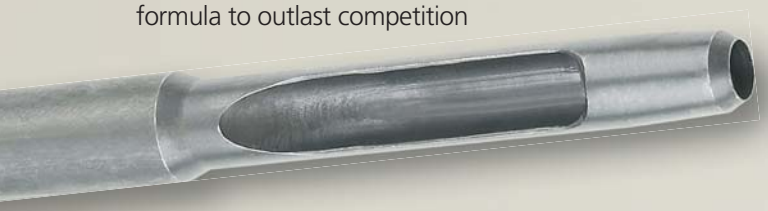
Coating is the last part of the process. This coat extends shelf life against corrosion. This coating is environmentally friendly and meets strict North American and European standards. Jacobsen DuraTines (XL and XLT) are then packaged carefully to protect against potential damage during handling and transportation.

The new premium (DuraTine XL) and ultra premium (DuraTine XLT) tines for Jacobsen have a performance enhanced surface which improves the life and the performance of the tines through better abrasion resistance, strength & overall toughness of the parts.

Jacobsen Original, DuraTine™ XL & XLT

More productive, less disruptive

- Jacobsen tines use special alloy steels and strict manufacturing tolerances to ensure best field performance
- DuraTines are designed and manufactured to outlast competitive equivalents by up to 75%
- New heat treat process offers a harder surface skin with tougher cores resulting in longer sidewall life with less breakage
- Jacobsen Duratine XLT tine with carbide tips have a new formula to outlast competition



Original
Hole Quality & Economical

- Conventional / standard duty tines
- Made of 1010 steel
- Made of .036" and .049" wall thickness (for hollow tines)
- Available tines include: Top Eject and Side Eject

NEW DuraTine™ XL
Increased Productivity

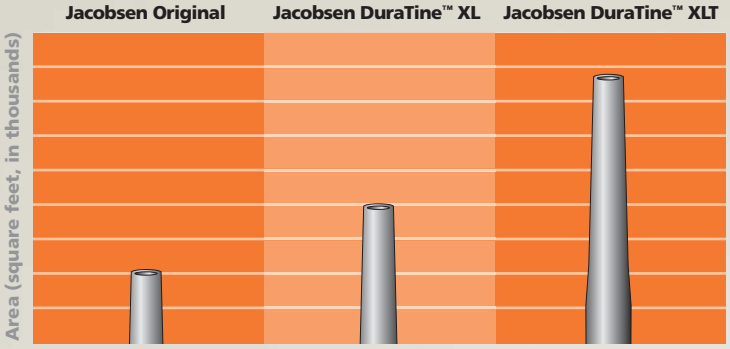
- Made of 4130 and 4140 hardened steel
- Made of .065" wall thickness (for hollow tines)
- Trivalent coating to prohibit corrosion for improved hole smoothness and appearance
- Available tines include: Side Eject, Top Eject, and Solid
- Longer tip life; stronger than the Original

NEW DuraTine™ XLT
Ultimate Toughness

- Made of 4140 hardened steel
- Made of .065" wall thickness (for hollow tines)
- Trivalent coating to prohibit corrosion for improved hole smoothness and appearance
- Shot-blasted
- Available tines include: Side Eject and Top Eject
- The longest tip life; *carbide* tips provide less wear and breakage

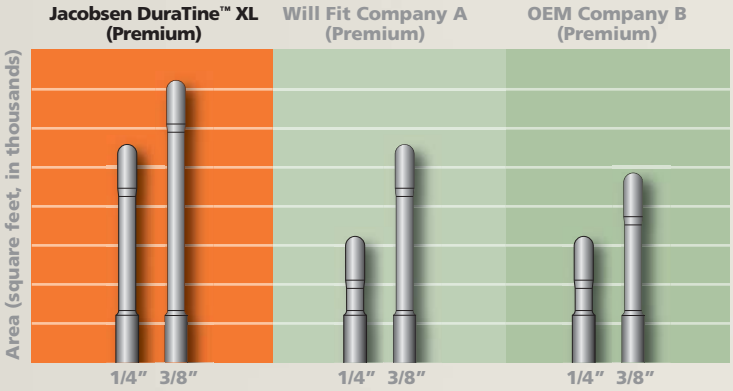
The following competitive data was collected over several months of testing at various golf courses and sports fields. Our mission is to ensure we have the best product offering in the marketplace.

5/8" Top Eject Tines Jacobsen Evaluation



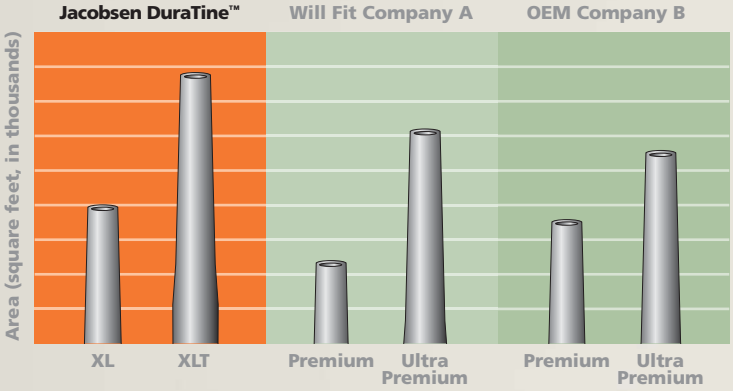
- Jacobsen DuraTine XL (premium) tines lasted 90% longer than our Original tines – almost twice as long!
- Jacobsen DuraTine XLT (ultra premium) tines lasted 271% longer than our Original tines – almost 4 times the life!

1/4" and 3/8" Solid Tines Competitive Evaluation



- Jacobsen 1/4" DuraTine XL (premium) tines lasted 75% longer than the next closest competitor's premium tines
- Jacobsen 3/8" DuraTine XL (premium) tines lasted 28% longer than the next closest competitor's premium tines

Jacobsen 5/8" Top Eject Tines Competitive Evaluation



- Jacobsen 5/8" DuraTine XL (premium) tines lasted 66% longer than premium tines from "Will Fit Co. A" and 11% longer than "OEM Company B"
- Jacobsen 5/8" DuraTine XLT (ultra premium) lasted 26% longer than ultra premium tines from "Will Fit Co. A" and 39% longer than "OEM Company B"

Product Selection Guide

Get the right tines to fit your specific aerator, needs and application.

Original

- 1010 steel
- .036" and .049" wall thickness (hollow tines)
- Economical

Top Eject

Side Eject

DuraTine™ XL

- 4130 / 4140 steel
- .065" wall thickness (hollow tines)
- Trivalent coating
- Longer life tips

Side Eject

Top Eject

Solid

DuraTine™ XLT

- 4130 / 4140 steel
- .065" wall thickness (hollow tines)
- Trivalent coating and shot-blasted
- Carbide tips (longest tip life)

Side Eject

Top Eject

	Rocky Soil	Sandy Soil	Wear Resistance
Original	Yes	Yes	Good
DuraTine™ XL	Yes	Yes	Better
DuraTine™ XLT	No	Yes	Best

All Tines (Sorted by Mount Size)

Mount Diameter	Hole / Core Size	Type	Duty	Part Number	Wall Thickness	Hole / Core Length	Total Length	Application
1/2" (13 mm)	1/4" (6 mm)	Side Eject	Original	523864	Solid Side Eject	2.50" (64 mm)	4.00" (102 mm)	Primarily used for light aeration for soil-based greens and overseeding
	1/4" (6 mm)	Side Eject	DuraTine XLT	4180561	Solid Side Eject	2.50" (64 mm)	4.00" (102 mm)	Primarily used for light aeration for soil-based greens and overseeding with no rocks where tine wear rate is a problem
	1/4" (6 mm)	Solid	DuraTine XL	4180562	Solid	3.13" (79 mm)	5.03" (128 mm)	Primarily used for light aeration on greens without removing cores
5/8" (16 mm)	1/4" (6 mm)	Top Eject	Original	517486	.036"	2.50" (64 mm)	4.28" (108 mm)	Less penetration (use on hard soils)
	1/4" (6 mm)	Solid	DuraTine XL	4180563	Solid	3.09" (78 mm)	5.00" (127 mm)	Primarily used for light aeration on greens without removing cores
	3/8" (10 mm)	Top Eject	Original	517487	.049"	2.50" (64 mm)	4.28" (108 mm)	Less penetration (use on hard soils)
	3/8" (10 mm)	Solid	DuraTine XL	4180564	Solid	3.25" (83 mm)	5.00" (127 mm)	For drought conditions or areas that won't take water
	1/2" (13 mm)	Side Eject	DuraTine XLT	4180565	.065"	2.50" (64 mm)	4.50" (114 mm)	Medium aeration or soil change with less penetration on greens where tine wear rate or plugging is a problem.
	1/2" (13 mm)	Top Eject	Original	517488	.049"	2.50" (64 mm)	4.28" (108 mm)	Light aeration with less penetration. Use on hard soils / sports turf.
	1/2" (13 mm)	Top Eject	DuraTine XL	4180566	.065"	2.50" (64 mm)	4.28" (108 mm)	Medium aeration or soil change with less penetration on greens where tine wear rate is a problem.
	1/2" (13 mm)	Top Eject	DuraTine XLT	4180567	.065"	2.50" (64 mm)	4.28" (108 mm)	Medium aeration or soil change with less penetration on greens in soils with no rocks where tine wear rate is a problem.
3/4" (19 mm)	3/8" (10 mm)	Top Eject	Original	523421	.036"	3.25" (83 mm)	5.00" (127 mm)	Medium aeration or soil change in greens with no rocks
	1/2" (13 mm)	Top Eject	Original	523472	.036"	3.75" (95 mm)	5.53" (140 mm)	Medium aeration or soil change in greens with no rocks
	1/2" (13 mm)	Top Eject	DuraTine XL	4181740	.065"	3.75" (95 mm)	5.53" (140 mm)	Medium aeration or soil change in greens where tine wear rate is a problem
	1/2" (13 mm)	Solid	DuraTine XL	4180568	Solid	3.75" (95 mm)	5.53" (140 mm)	Medium aeration without removing cores
	5/8" (16 mm)	Side Eject	DuraTine XL	4180569	.065"	2.72" (69 mm)	4.50" (114 mm)	Medium aeration or soil change with less penetration in greens or fairways where tine wear rate or plugging is a problem.
	5/8" (16 mm)	Side Eject	DuraTine XLT	4180570	.065"	2.72" (69 mm)	4.50" (114 mm)	Medium aeration or soil change with less penetration in greens or fairways in soils with no rocks where tine wear rate or plugging is a problem.
	5/8" (16 mm)	Top Eject	Original	517489	.049"	2.50" (64 mm)	4.28" (108 mm)	Medium aeration or soil change with less penetration in greens or fairways
	5/8" (16 mm)	Top Eject	DuraTine XL	4180571	.065"	2.50" (64 mm)	4.28" (108 mm)	Medium aeration or soil change with less penetration in greens or fairways where tine wear rate is a problem.
	5/8" (16 mm)	Top Eject	DuraTine XLT	4180572	.065"	2.50" (64 mm)	4.28" (108 mm)	Medium aeration or soil change with less penetration in greens or fairways in soils with no rocks where tine wear rate is a problem.
	5/8" (16 mm)	Top Eject	Original	523028	.049"	3.75" (95 mm)	5.53" (140 mm)	Medium aeration or soil change in greens or fairways
	5/8" (16 mm)	Top Eject	DuraTine XL	4180574	.065"	3.75" (95 mm)	5.53" (140 mm)	Medium aeration or soil change in greens or fairways where tine wear rate is a problem.
	5/8" (16 mm)	Top Eject	DuraTine XLT	4180575	.065"	3.75" (95 mm)	5.53" (140 mm)	Medium aeration or soil change in greens or fairways in soils with no rocks where tine wear rate is a problem.
	5/8" (16 mm)	Solid	DuraTine XL	4180573	Solid	3.22" (82 mm)	5.00" (127 mm)	Medium aeration without removing cores
	3/4" (19 mm)	Solid	DuraTine XL	4180576	Solid	3.22" (82 mm)	5.00" (127 mm)	Heavy aeration without removing cores
7/8" (22 mm)	3/4" (19 mm)	Side Eject	Original	834973	.049"	3.75" (95 mm)	5.53" (140 mm)	Intensive aerification or soil change in fairways. Soil must be irrigated and in good condition.
	3/4" (19 mm)	Top Eject	Original	523273	.049"	3.75" (95 mm)	5.53" (140 mm)	Intensive aerification or soil change in greens. Soil must be irrigated and in good condition.

Product Selection Guide

Tines for: GA24 (Sorted by Core Size)

Hole / Core Size	Type	Duty	Part Number	Wall Thickness	Mount Diameter	Hole / Core Length	Total Length	Application
1/4" (6 mm)	Side Eject	Original	523864	Solid Side Eject	1/2" (13 mm)	2.50" (64 mm)	4.00" (102 mm)	Primarily used for light aeration for soil-based greens and overseeding
		DuraTine XLT	4180561	Solid Side Eject	1/2" (13 mm)	2.50" (64 mm)	4.00" (102 mm)	Primarily used for light aeration for soil-based greens and overseeding with no rocks where tine wear rate is a problem
	Top Eject	Original	517486	.036"	5/8" (16 mm)	2.50" (64 mm)	4.28" (109 mm)	Less penetration (use on hard soils)
	Solid	DuraTine XL	4180562	Solid	1/2" (13 mm)	3.13" (79 mm)	5.03" (128 mm)	Primarily used for light aeration on greens without removing cores
		DuraTine XL	4180563	Solid	5/8" (16 mm)	3.09" (78 mm)	5.00" (127 mm)	Primarily used for light aeration on greens without removing cores
3/8" (10 mm)	Top Eject	Original	517487	.049"	5/8" (16 mm)	2.50" (64 mm)	4.28" (109 mm)	Less penetration (use on hard soils)
	Solid	DuraTine XL	4180564	Solid	5/8" (16 mm)	3.25" (83 mm)	5.00" (127 mm)	For drought conditions or areas that won't take water
1/2" (13 mm)	Top Eject	Original	517488	.049"	5/8" (16 mm)	2.50" (64 mm)	4.28" (109 mm)	Light aeration with less penetration. Use on hard soils / sports turf.
		DuraTine XL	4180566	.065"	5/8" (16 mm)	2.50" (64 mm)	4.50" (114 mm)	Medium aeration or soil change with less penetration on greens where tine wear rate is a problem.
		DuraTine XLT	4180567	.065"	5/8" (16 mm)	2.50" (64 mm)	4.50" (114 mm)	Medium aeration or soil change with less penetration on greens in soils with no rocks where tine wear rate is a problem.
5/8" (16 mm)	Top Eject	Original	517489	.049"	3/4"(19 mm)	2.50" (64 mm)	4.28" (109 mm)	Medium aeration or soil change with less penetration in greens or fairways
		DuraTine XL	4180571	.065"	3/4"(19 mm)	2.50" (64 mm)	4.28" (109 mm)	Medium aeration or soil change with less penetration in greens or fairways where tine wear rate is a problem.
		DuraTine XLT	4180572	.065"	3/4"(19 mm)	2.50" (64 mm)	4.28" (109 mm)	Medium aeration or soil change with less penetration in greens or fairways in soils with no rocks where tine wear rate is a problem.
	Solid	DuraTine XL	4180573	Solid	3/4"(19 mm)	3.22" (82 mm)	5.00" (127 mm)	Medium aeration without removing the cores

Tines for: GA30 & GA60 (Sorted by Core Size)

Hole / Core Size	Type	Duty	Part Number	Wall Thickness	Mount Diameter	Hole / Core Length	Total Length	Application
1/4" (6 mm)	Side Eject	Original	523864	Solid Side Eject	1/2" (13 mm)	2.50" (64 mm)	4.00" (102 mm)	Primarily used for light aeration for soil-based greens and overseeding
		DuraTine XLT	4180561	Solid Side Eject	1/2" (13 mm)	2.50" (64 mm)	4.00" (102 mm)	Primarily used for light aeration for soil-based greens and overseeding with no rocks where tine wear rate is a problem
	Top Eject	Original	517486	.036"	5/8" (16 mm)	2.50" (64 mm)	4.28" (108 mm)	Less penetration (use on hard soils)
	Solid	DuraTine XL	4180562	Solid	1/2" (13 mm)	3.13" (79 mm)	5.00" (127 mm)	Primarily used for light aeration on greens without removing cores
		DuraTine XL	4180563	Solid	5/8" (16 mm)	3.09" (78 mm)	5.00" (127 mm)	Primarily used for light aeration on greens without removing cores
3/8" (10 mm)	Top Eject	Original	517487	.049"	5/8" (16 mm)	2.50" (64 mm)	4.28" (108 mm)	Less penetration (use on hard soils)
		Original	523421	.036"	3/4"(19 mm)	3.25" (83 mm)	5.00" (127 mm)	Medium aeration or soil change in greens with no rocks
	Solid	DuraTine XL	4180564	Solid	5/8" (16 mm)	3.25" (83 mm)	5.00" (127 mm)	For drought conditions or areas that won't take water
1/2" (13 mm)	Side Eject	DuraTine XLT	4180565	.065"	5/8" (16 mm)	2.50" (64 mm)	4.50" (114 mm)	Medium aeration or soil change with less penetration on greens where tine wear rate or plugging is a problem.
	Top Eject	Original	517488	.049"	5/8" (16 mm)	2.50" (64 mm)	4.28" (108 mm)	Light aeration with less penetration. Use on hard soils / sports turf.
		DuraTine XL	4180566	.065"	5/8" (16 mm)	2.50" (64 mm)	4.50" (114 mm)	Medium aeration or soil change with less penetration on greens where tine wear rate is a problem.
		DuraTine XLT	4180567	.065"	5/8" (16 mm)	2.50" (64 mm)	4.50" (114 mm)	Medium aeration or soil change with less penetration on greens in soils with no rocks where tine wear rate is a problem.
	Top Eject	Original	523472	.036"	3/4" (19 mm)	3.75" (95 mm)	5.53 (140 mm)	Medium aeration or soil change in greens with no rocks
		DuraTine XL	4181740	.065"	3/4" (19 mm)	3.75" (95 mm)	5.53 (140 mm)	Medium aeration or soil change in greens where tine wear rate is a problem.
	Solid	DuraTine XL	4180568	Solid	3/4" (19 mm)	3.75" (95 mm)	5.53 (140 mm)	Medium aeration without removing cores
5/8" (16 mm)	Side Eject	DuraTine XL	4180569	.065"	3/4" (19 mm)	2.72" (69 mm)	4.50" (114 mm)	Medium aeration or soil change with less penetration in greens or fairways where tine wear rate or plugging is a problem.
		DuraTine XLT	4180570	.065"	3/4" (19 mm)	2.72" (69 mm)	4.50" (114 mm)	Medium aeration or soil change with less penetration in greens or fairways in soils with no rocks where tine wear rate or plugging is a problem.
	Top Eject	Original	517489	.049"	3/4" (19 mm)	2.50" (64 mm)	4.28" (108 mm)	Medium aeration or soil change with less penetration in greens or fairways
		DuraTine XL	4180571	.065"	3/4" (19 mm)	2.50" (64 mm)	4.28" (108 mm)	Medium aeration or soil change with less penetration in greens or fairways where tine wear rate is a problem.
		DuraTine XLT	4180572	.065"	3/4" (19 mm)	2.50" (64 mm)	4.28" (108 mm)	Medium aeration or soil change with less penetration in greens or fairways in soils with no rocks where tine wear rate is a problem.
	Top Eject	Original	523028	.049"	3/4" (19 mm)	3.75" (95 mm)	5.53" (140 mm)	Medium aeration or soil change in greens or fairways
		DuraTine XL	4180574	.065"	3/4" (19 mm)	3.75" (95 mm)	5.53" (140 mm)	Medium aeration or soil change in greens or fairways where tine wear rate is a problem.
		DuraTine XLT	4180575	.065"	3/4" (19 mm)	3.75" (95 mm)	5.53" (140 mm)	Medium aeration or soil change in greens or fairways in soils with no rocks where tine wear rate is a problem.
	Solid	DuraTine XL	4180573	Solid	3/4" (19 mm)	3.22" (82 mm)	5.00" (127 mm)	Medium aeration without removing cores.
3/4" (19 mm)	Side Eject	Original	834973	.049"	7/8" (22 mm)	3.75" (95 mm)	5.53" (140 mm)	Intensive aerification or soil change in fairways. Soil must be irrigated and in good condition.
	Top Eject	Original	523273	.049"	7/8" (22 mm)	3.75" (95 mm)	5.53" (140 mm)	Intensive aerification or soil change in greens. Soil must be irrigated and in good condition.
	Solid	DuraTine XL	4180576	Solid	3/4" (19 mm)	3.22" (82 mm)	5.00" (127 mm)	Heavy aeration without removing cores

Venting

- Frequent venting should be done in between the core aerations to facilitate gas exchange and hydraulic permeability. Venting should be done every 2 to 4 weeks through the summer months to generate and maintain active macropores.
- **VenTines™ are a perfect way to do this with minimal course disruption.**
- The Jacobsen VenTine is a flat bladed tine that when oriented in the direction of travel will create a slice in the turf with narrow sides, but a longer slot. This slot will remain open for 10 – 14 days, permitting a continuous exchange of excessive water with atmospheric gases.

VenTines™ (Sorted by Core Size)

Hole / Core Size	Type	Part Number	Wall Thickness	Mount Diameter	Hole / Core Length	Total Length	Application
3/16″ x 5/8″ (6 mm)	Venting	2702060	Solid	5/8″ (16 mm)	3.13″ (79 mm)	4.38″ (111 mm)	GA24 / GA30 / GA60 For slit venting and quick healing
3/16″ x 3/4″ (6 mm)	Venting	2703529	Solid	3/4″ (19 mm)	3.75″ (95 mm)	6.00″ (152 mm)	GA30 / GA60 For slit venting and quick healing

Deep Tine Aeration

- This practice is becoming more and more popular with courses as they recognize the benefits and productivity improvements. Deep tine aeration has shown to be the most effective for reducing compaction in many studies. You can achieve deeper root growth and better venting, high productivity and good hole quality that allows for quick healing.
- Suitable on fairways, sports fields, parks and municipalities. Can aerify up to 16″.

Deep Tines for: PerformAire 60 / 80 (Sorted by Core Size)

Hole / Core Size	Type	Part Number	Wall Thickness	Mount Diameter	Hole / Core Length	Total Length	Application
5/16″ (6 mm)	Solid	4162302	Solid	5/16″ (6 mm)	6.50″ (165 mm)	8.50″ (216 mm)	Venting and compaction reduction
		4162303	Solid	5/16″ (6 mm)	9.00″ (229 mm)	11.00″ (279 mm)	Venting and compaction reduction
7/16″ (10 mm)	Side Eject	4162327	.095″	5/8″ (16 mm)	5.50″ (140 mm)	9.00″ (229 mm)	Thatch removal and compaction reduction
1/2″ (13 mm)	Side Eject	4162329	.127″	3/4″ (19 mm)	5.50″ (140 mm)	9.00″ (229 mm)	Thatch removal and compaction reduction
		4162334	.095″	3/4″ (19 mm)	8.50″ (216 mm)	12.00″ (305 mm)	Thatch removal and compaction reduction – light duty use (tine has .47″ / 12 mm shank)
		4162333	.095″	3/4″ (19 mm)	8.50″ (216 mm)	12.00″ (305 mm)	Thatch removal and compaction reduction
		4164080	.127″	3/4″ (19 mm)	8.50″ (216 mm)	12.00″ (305 mm)	Thatch removal and compaction reduction – rough terrain conditions (heavy-duty tube)
	Solid	4162306	Solid	1/2″ (13 mm)	8.75″ (222 mm)	10.75″ (273 mm)	Venting and compaction reduction
		4162307	Solid	1/2″ (13 mm)	12.00″ (305 mm)	14.00″ (356 mm)	Venting and compaction reduction
		4162308	Solid	1/2″ (13 mm)	14.00″ (356 mm)	16.00″ (406 mm)	Venting and compaction reduction
5/8″ (16 mm)	Side Eject	4162335	.120″	1″ (25 mm)	8.50″ (216 mm)	12.00″ (305 mm)	Thatch removal and compaction reduction
		4162336	.162″	1″ (25 mm)	8.50″ (216 mm)	12.00″ (305 mm)	Thatch removal and compaction reduction – rough terrain conditions (heavy-duty tube)
3/4″ (19 mm)	Side Eject	4162337	.188″	1 1/4″ (32 mm)	10.5″ (267 mm)	14.00″ (356 mm)	Thatch removal and compaction reduction
		4162330	.188″	1 1/4″ (32 mm)	6.50″ (165 mm)	9.75″ (248 mm)	Thatch removal and compaction reduction
	Solid	4162309	Solid	3/4″ (19 mm)	10.00″ (254 mm)	12.25″ (248 mm)	Venting and compaction reduction
		4162310	Solid	3/4″ (19 mm)	12.00″ (305 mm)	14.00″ (356 mm)	Venting and compaction reduction
		4162311	Solid	3/4″ (19 mm)	14.00″ (356 mm)	16.00″ (406 mm)	Venting and compaction reduction
7/8″ (22 mm)	Solid	4162312	Solid	7/8″ (22 mm)	12.00″ (305 mm)	14.00″ (356 mm)	Venting and compaction reduction
		4162314	Solid	7/8″ (22 mm)	14.00″ (356 mm)	16.00″ (406 mm)	Venting and compaction reduction

Quick Aerator Tines (Sorted by Core Size)

Hole / Core Size	Type	Part Number	Wall Thickness	Mount Diameter	Hole / Core Length	Total Length	Application
6″	Slicing Knife	521155	.19″	N/A	5.50″ (140 mm)	7.50″ (191 mm)	All-season aerations and renovation
1/2″	Coring	515196	.13″	7/8″ (22 mm)	5.50″ (140 mm)	7.50″ (191 mm)	Thatch removal and compaction reduction
3/4″	Coring	515197	.13″	7/8″ (22 mm)	5.50″ (140 mm)	7.50″ (191 mm)	Thatch removal and compaction reduction
--	Spoon	520404	.13″	7/8″ (22 mm)	5.50″ (140 mm)	7.50″ (191 mm)	Turf building and fall renovation

Do more with less!

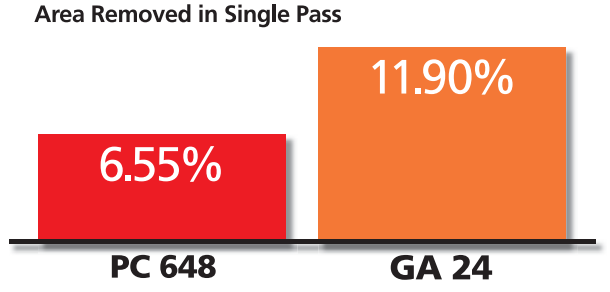
Introducing the system that outperforms...

Quad Tine Holders

Improve your core aeration productivity by more than 80%!

Introducing the new quad tine holders and matching turf guard for the Jacobsen® GreensAire® 24 greens aerator. Enjoy the industry's best hole quality and get higher productivity than ever before. The USGA recommends that you remove 20 percent of your greens area by core aerating every year. The GreensAire 24 with the new quad tine holders will remove 11.90 percent of the area covered with each aeration!

Productivity of GA 24 with new Quad Holders vs. Toro PC 648 with Quad Holders



GA 24: Spacing 1"x1" fixed. Test area 576 sq. in. Actual holes punched 349. Area removed 68.55 sq. in. Toro PC 648: Spacing minimum 2" lateral, 1.5" longitudinal. Test area 2304 sq. in. Theo. holes punched 768. Area removed 150.86 sq. in. Both aerators set up with 1/2" ID Coring Tines and optional Quad tine holders.

This means that even if you only use one GreensAire 24-OPC for all of your greens, you can accomplish your goal in TWO aerations vs. THREE using a Toro ProCore 648. Plus, with its best in class hole quality and staggered grid pattern, the holes will heal more quickly and be less noticeable in a shorter period of time.

Punching holes in the competition

The Toro ProCore 648 with its optional quad tine holders and set to its closest spacing will only remove 6.55 percent of the area covered. This is due to the fact that it can only achieve 1.5-inch x 2.0-inch spacing vs. 1-inch x 1-inch on the GreensAire 24 with quad holders. Since both machines travel at approximately the same speed in this mode (0.76 - 0.77 mph), two GreensAire 24 aerators will cover the same amount of greens in the same time while each one does 81.7 percent more useful work (area removal)!

Part #058231 Quad Tine Holder Kit for 1/2" Coring (5/8" OD) Tines
Contact your local Jacobsen dealer and order today!

Call 1.888.922.turf or www.jacobsen.com to find out more.

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