



University of Pioneer

Pioneer is committed to developing new technologies and products to meet the increasing demands and challenges of synthetic turf fields. Pioneer has an on-site facility at the Cleveland headquarters that is continuously used to test and perfect products to keep up with the most current technology and demands from the industry.



SYNTHETIC TURF Maintenance Handbook

Paints | Stripers | Coatings | Equipment | Antimicrobials

Are synthetic turf paints truly different from other paints?

Paints that are specifically designed for synthetic turf offer significant performance differences than traditional grass paints. Paints that are designed for synthetic turf are designed for either durability or removability. Long lasting synthetic turf paints are designed to provide maximum adhesion to synthetic grass blades as well as exceptional flexibility. Removable paints are chemically engineered so that the resin system releases from the turf blades when a remover solution is applied.

The remover solution that is recommended is a helpful way to determine whether the removable paint is specifically designed for synthetic turf or is a modification of an existing product. If the recommended remover solution is a general cleaner, then the paint is almost certainly not formulated specifically for synthetic turf. Pioneer's Blitz™ remover solution is designed to remove GameLine® quickly and easily.

So how do you choose between longer-term paints and removable paints?

If you are unsure, choose a removable paint like GameLine®. There are many facilities that have installed synthetic turf fields certain that only one sport would be played on it. However, after installation, other sports quickly find reasons why playing on the new turf field is absolutely necessary.

How do I paint a synthetic turf field?

First, make sure your field is cleaned and groomed and your striping equipment is in good working order. Carefully measure your field – preferably using a field layout kit. Spray the paint undiluted with a Brite Striper® 3000 SP airless sprayer. Spray between 800–900 PSI using a new 317 airless tip. For detailed work, consider using a new 115 tip at 500–700 PSI.

Use as little paint as necessary to provide a good looking line. Rollers and brushes are not recommended as too much paint can be applied. Applying too much paint may make removing GameLine® more difficult. Too much paint can also make the painted areas harder than the rest of the field.

How do I remove synthetic turf paint like GameLine®?

The ideal conditions for paint removal occur when the air temperature is between 50 and 90 degrees. Apply Blitz™ remover solution and wait 2 minutes. Agitate with a Blitz™ machine or a deck brush. Rinse lightly with water. Repeat as necessary.

Check out our GameLine® Removable System video at www.pioneerathletics.com



ingredients matter.®



www.pioneerathletics.com

800.877.1500

PN15015

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www.pioneerathletics.com

1 SYNTHETIC TURF FIELD MARKING PAINT



SPECIFICATIONS	
For use on	Infilled polypropylene & polyethylene turf systems
Coverage per gallon	250 - 350 ft. x 4 in. (varies by speed and substrate)
Ideal air temperature at application	50° – 90° F
Applied by	Airless striper set between 700-1000 psi
Recommended tip size	.317 or .319
Dry time @ 70° F	Dry to touch in 1 hour. Completely dry in 48 - 72 hours.*
Removal	Blitz remover solution, agitation, and clean water

*High humidity & cool temperatures will result in longer dry times

GameLine®

GameLine is the perfect call when you need quality gloss paint that lasts one or two games and removes easily.

- Highly effective, industry proven removable synthetic turf painting system
- Maximum performance under the spotlight
- Ideal for short-term applications
- Removes easily with Blitz™ GameLine Remover Solution or Blitz™ HT
- Ideal for infilled turf systems
- Available in 25 colors; custom colors available.

GameLine® Colors:

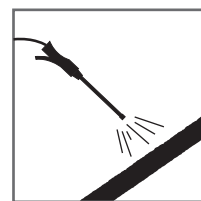


CUSTOM COLORS AVAILABLE

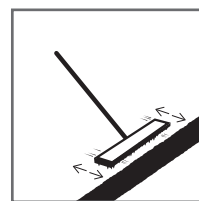
GameLine System Process



1. Paint



2. Apply Blitz or Blitz HT GameLine remover solution.



3. Agitate.



4. Rinse with water.

GameLine® Clear

- A clear, removable, bulk synthetic turf paint
- Used as a base coat before painting over inlaid lines and logos, making removal much easier

GameLine® Fast Dry

A special formula designed to dry faster than traditional GameLine® in cool, damp environments

10 SYNTHETIC TURF ACCESSORIES

the Gawryla Grip



- Synthetic turf lining system
- Unlike nails or stakes, Gawryla Grips don't puncture or damage synthetic turf
- Firmly anchors string while painting lines
- Made of robust, high strength-to-weight ratio PVC
- Carefully designed by a sports turf manager
- Manufactured by Pioneer Athletics

"Our crew has been painting lines on all sorts of artificial turf for over 15 years now, it has always been frustrating to stretch strings for line painting on artificial turf. The Gawryla Grip has been a true breath of fresh air for line stretching. From the first time we used it everyone involved couldn't believe how simple it made attaching the line to the turf for painting. AWESOME PRODUCT!"

*Paul Curtis,
Groundskeeper, Beaver Stadium
Grounds Crew, Penn State*

"The easy grip handle makes stretching strings easy. Once it's stretched all you have to do is set the grip down, give it a small push and you're ready to paint"

*Mitch Tracey,
Sports Turf Manager, Campus Rec
Service University of Maryland*



mPact-4-Turf



- Powered by AEGIS Microbe Shield® technology.
- Imparts a durable, invisible barrier which is protected from odors and stains caused by bacteria, mold and mildew.
- Ideal for treating heavy traffic areas like sidelines and coach's boxes. Designed to last for up to 30 days between applications

EPA Registered



Titan T.G.

- 5 gallon pail of highly dilutable, one-step disinfectant
- Kills harmful microbes that can cause disease on plastic surfaces
- EPA registered, neutral pH for player safety
- Also available in 55 gallon packaging TTG05

Synthetic Turf Repair Kit



- A two-component, 100% epoxy adhesive designed for high strength repairs of artificial turf
- Meets FIFA standards for bond and shear strength
- Kit contains 6 cartridges, 12 static mixers, 1 dual-cartridge assembly gun, 1 tool box

STRK



Ultrabound® Turf 527

- A moisture-curing, one-component, polyurethane adhesive specifically designed for the repair of existing outdoor turf
- For interior and exterior applications, excellent weather resistance.
- Meets FIFA requirements for bond and shear in sports-turf applications.

STRC

9 SYNTHETIC TURF MAINTENANCE

GreensGroomer®

- The GreensGroomer is a synthetic sports turf groomer that works with all infill material.
- Patented brush design with super-duty brushes lifts turf fibers, leaving them in a plush, upright position
- Brush pattern increases efficiency and performance when brushing infill to low areas left after play
- Synthetic brushes resist wear and will not rot
- Optional Spring Tine Rake combs through infill, relieving compaction and assuring a soft, level playing surface
- Optional 6' tow-behind magnet available for collecting ferrous



SPECIFICATIONS	
Main Frame	2 in. square tube (11 gauge) with 1-1/2 in. (10 gauge) square tube cross bars
Draw Bar	One piece 2" square tube
Length	64 in. (72 in. with rear brush attachment) 106 in. overall including the draw-bar
Width	72 inches
Weight	375 lbs.
Runing Gear	2 pneumatic tires (16 x 650-8) Ribbed 2-ply with oil impregnated Grafoil bushings
Brushes	(16) Blue super duty synthetic brushes with flat bristles attached to polypropylene head 4-12"; 8-18"; 4-41"
Tines	3 rows of 14 tines, 3/16" diameter w/ 40° tip bend, 7/8" spacing

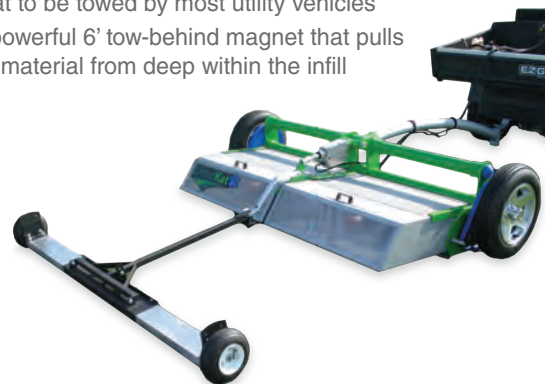
Integrated GreensGroomer®

- Same brush features as the standard unit
- Integrated unit comes with built-in tine rake that features a handle unit for tine adjustment
- Follow-up brush and magnet hitch kit included



LitterKat®

- Ground driven sweeper designed to remove debris from the turf surface without displacing infill material
- 12-volt actuator for easy brush depth adjustments
- Dual 12-volt vibrators in the collection baskets allow any infill material that is collected to be quickly returned to the field
- All aluminum construction with a durable powder coat finish allows the LitterKat to be towed by most utility vehicles
- Equipped with a powerful 6' tow-behind magnet that pulls unwanted ferrous material from deep within the infill



SPECIFICATIONS	
Frame Width	73" All aluminum construction; 87" with wheels
Drive Mechanism	Direct drive gear with rigid gear guards
Draw Bar	56" x 3" diameter aluminum with adjustable hitch
Length	36 in. (72in. overall including the draw-bar)
Basket	31"L x 35.5"W x 9"D perforated and removable
Wheels	4 Bolt 4.80 x 12 pneumatic with bearings
Electric	(12v) Linear actuator for lifting baskets (12v) Vibrators (1 per basket)

2 SYNTHETIC TURF FIELD MARKING PAINT

GameLine® Aerosol



The only industry-proven removable aerosol paint for synthetic turf fields.

- Convenient, easily removable paint with the quality and durability of a permanent paint
- Ideal for short-term applications
- Removes easily with Blitz GameLine® Remover Solution
- The only aerosol paint proven to remove with zero ghosting or staining

GameLine® Aerosol Colors



SPECIFICATIONS	
For use on	Synthetic turf
Application temp	25° – 90° F ¹
Ideal air temperature at application	Aerosol striping machine, marking stick, marking pistol, or by hand
Dry time @ 70° F	Dry to touch in 20 minutes. Completely dry in 1 hour.*
Removal	Blitz remover solution, agitation, and clean water

¹ Keep cans warm if painting in cold weather

*High humidity & cool temperatures will result in longer dry times



NEW!

GameLine Aerosol Striping Machine

Before we started to use Pioneer's GameLine system, it took a large crew multiple hours of scrubbing on their hands and knees. Now, our crew is able to remove all of the paint in only two hours, with absolutely no ghosting. The simple three-step removal process saves us time and a lot of energy.

Randy Philipson
Director of Engineering & Operations
Mercedes-Benz Superdome
New Orleans, LA

WHERE YOU HAVE SEEN GAMELINE®

- | | | |
|--------------------------------|----------------------------------|-------------------------------|
| Super Bowl XLVII | Duck Commander Independence Bowl | Quick Lane Bowl |
| Super Bowl XLVIII | East West Shrine Game | R+L Carriers New Orleans Bowl |
| All State Sugar Bowl | Famous Idaho Potato Bowl | Raycom Media Camellia Bowl |
| Autozone Liberty Bowl | Gildan New Mexico Bowl | Russell Athletic Bowl |
| Beef 'O' Brady's Bowl | GoDaddy Bowl | Senior Bowl |
| Birmingham Bowl | Goodyear Cotton Bowl Classic | St. Petersburg Bowl |
| Buffalo Wild Wings Citrus Bowl | Hawai'i Bowl | U.S. Army All-American Game |
| Capital One Bowl | Little Caesar's Pizza Bowl | Under Armour All-America Game |
| Chick-fil-A Bowl | Military Bowl | |
| College Football Playoff | NFL Hall of Fame Game | |

3 SYNTHETIC TURF FIELD MARKING PAINT



ExtremeLine™

- Preferred choice for long-lasting applications on infilled synthetic turf systems
- Provides a uniform, high-gloss field marking with less paint build-up
- Extremely durable and non-removable



SeasonLine®

- Designed to remain on your field throughout one sports season
- Wears off over time, depending on weather and traffic
- Quality, gloss paint that stands up to rugged play
- For use on infilled turf systems

SPECIFICATIONS	
For use on	Infilled polypropylene & polyethylene turf systems
Coverage per gallon	250 - 350 ft. x 4 in. (varies by speed and substrate)
Ideal air temperature at application	60° – 90° F
Applied by	Airless striper set between 900-1000 psi
Recommended tip size	.317 or .319
Dry time @ 70° F	Dry to touch in 1 hour. Completely dry in 48 - 72 hours.*
Removal	Non-removable

**High humidity & cool temperatures will result in longer dry times*

SPECIFICATIONS	
For use on	Infilled polypropylene & polyethylene turf systems
Coverage per gallon	250 - 350 ft. x 4 in. (varies by speed and substrate)
Ideal air temperature at application	56° – 90° F
Applied by	Airless striper set between 900 - 1000 psi
Recommended tip size	Airless: .317 or .319
Dry time @ 70° F	Dry to touch in 1 hour. Completely dry in 48 - 72 hours*
Removal	Over time with normal wear and weather. SeasonLine remover solution available if needed, but will require significant time & effort

**High humidity & cool temperatures will result in longer dry times*

8 SYNTHETIC TURF MAINTENANCE

Field Crewzer™

Pioneer's Field Crewzer is the premier sweeper that removes litter and debris while returning infill back into the field.

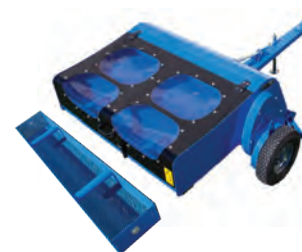
- A robust, counter-rotating brush lifts surface debris into a primary hopper
- Infill granules are returned to the surface while debris is shaken into one of two easily-removable hoppers at the rear of the machine
- Can be pulled by most golf carts and utility vehicles
- The Field Crewzer is lifted up by an electric actuator for transporting



SPECIFICATIONS	
Dimensions L/W/H	99.2" / 59" / 47.3"
Working width	47.3"
Drive	Honda GX240 gasoline 5.4 kW / 7.2 HP
Transport width	59"
Attachment (semi-mounted)	drawbar trailed
Container capacity	100 L.
Back bogey tires	11" x 7"
Front contact wheels	11" x 7"
Air pressure	2 bar
Weight	970 lbs.

Crewzer™ Junior

- For the quick and efficient collection of surface debris such as leaves, paper, seeds, glass, plastic, and more
- Features a ground driven rotary brush that picks up surface debris
- A mechanical vibrating screen separates the debris from any crumb rubber that accumulates
- The crumb rubber is redistributed evenly back onto the field
- Debris is collected into an easily removable hopper
- An affordable solution for cleaning artificial turf fields with incredible results



SPECIFICATIONS	
Length without attachment in approximate inches	48
Length with attachment in approximate inches	91
Working width in approximate inches	48
Height in approximate inches	24
Outside width in approximate inches	65
Ground drive	2 wheels at 16" diameter each

7 AIRLESS STRIPERS

Airless Field Marking Machines

The newest advances in industry proven airless striping technology. Performance. Affordability.

Brite Striper® 3000 & Brite Striper® 3000 SP

Power and versatility in an affordable airless sprayer. Pioneer's airless stripers offer the newest advances in industry proven airless striping technology, the highest level of performance and a model to fit every budget.

Both models feature:

- Sturdy and lightweight frame
- Phenomenal reach thanks to a 50' hose for logos and wide-area spraying
- Smooth ride, even on rough fields, thanks to large pneumatic tires and optional floating spray box
- Steady, adjustable pressure from 0-3000 PSI
- Warranty-backed Honda GX160 engine

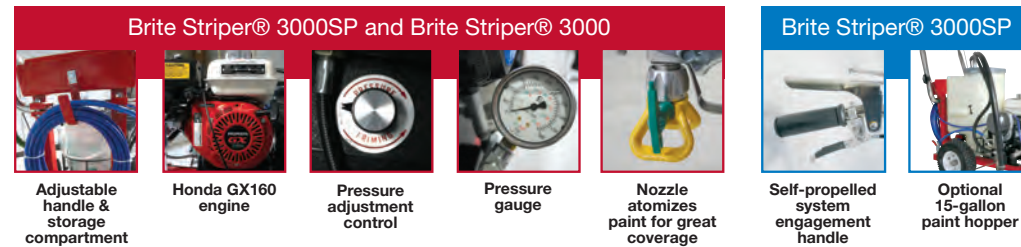
Brite Striper® 3000 SP (Self Propelled) adds:

- Breakthrough belt-and-chain drive system and adjustable speed to deliver great, straight lines
- Optional 15-gallon paint hopper



**BRITE STRIPER
3000^{SP}
SELF-PROPELLED**

**BRITE STRIPER®
3000**



Brite Striper® 3000SP and Brite Striper® 3000

- Adjustable handle & storage compartment
- Honda GX160 engine
- Pressure adjustment control
- Pressure gauge
- Nozzle atomizes paint for great coverage

Brite Striper® 3000SP

- Self-propelled system engagement handle
- Optional 15-gallon paint hopper

Graco® FieldLazer S100

When the ground gets rough, the FieldLazer S100 gets going. If you've got rough terrain, then take a look at this:

- A tall-wheel, lightweight cart designed for rough terrain
- Easy-to reach operator controls located on the handle, including a safety shut-off switch for shutdown
- A dependable Honda GX35 4-stroke engine

Graco® FieldLazer S200

Meet your new rear-gun-mount specialist. The FieldLazer lives up to its name: 60% less vibration at the spray tip compared to other rear gun mount sprayers makes for precise lines. With the FieldLazer S200 you get:

- The ability to place guns near the rear axle for applying straighter long lines and smooth curved lines
- Better gun visibility
- A reliable Honda GX120 engine



S100

S200

4 SYNTHETIC TURF FIELD MARKING PAINT

SPECIFICATIONS	
For use on	Nylon turf systems
Coverage per gallon	250 - 350 ft. x 4 in. (varies by speed and substrate)
Ideal air temperature at application	50° - 90° F
Applied by	Airless striper set between 900 - 1000 psi Low-pressure at 40 psi (paint must be diluted)
Recommended tip size	Airless: .317 or .319 Low pressure: 9504
Dry time @ 60° F	Dry to touch in 1 hour. Completely dry in 3 days
Removal	Non-removable

**High humidity & cool temperatures will result in longer dry times*

SPECIFICATIONS	
For use on	Nylon turf systems
Coverage per gallon	250 - 350 ft. x 4 in. (varies by speed and substrate)
Ideal air temperature at application	60° - 90° F
Applied by	Airless striper set between 500 - 1000 psi
Recommended tip size	.317 or .319
Dry time @ 60° F	Dry to touch in 1 hour. Completely dry in 48 - 72 hours*
Removal	Non-removable

**High humidity & cool temperatures will result in longer dry times*



Titan®

- Exclusive formula contains Halogen® 2000 for outstanding brightness
- Creates long-lasting lines
- Maintains flexibility and crisp, bright lines throughout the season and severe weather
- Dries to a smooth, flexible coating which is less abrasive to players and less slippery than other turf paints
- Designed specifically for nylon, non-infilled turf systems
- Available in 24 colors; custom colors available



Titan® Extreme

- Glossy paint for nylon surfaces that mimics the feel of the turf itself
- Softer, more flexible paint that evenly coats the turf blades
- Designed for long-term applications and extreme durability

5 GAMELINE REMOVAL EQUIPMENT

P-REX™

- An innovative design that turns synthetic turf paint removal into a one person job
- Saves man-hours by facilitating all three steps of the GameLine® removal process: applies remover solution, agitates, sprays with water
- All residual liquid is instantly vacuumed by a 60", patent-pending head into a 55 gal. recovery drum
- A perfect tool for those with frequent field changeovers
- Built on a robust, zero-turn vehicle platform and features two 35-gallon rinse water holding tanks
- GameLine® Blitz remover solution is stored in a 16 gallon tank and applied via 60" rear-mounted boom sprayer
- 3 quick-release, 20" brush heads with electric lift clear a 60" wide path -- great for end zones and logos
- Alternate line-remover brushes available
- All wheels have spray nozzles to remove paint and minimize tracking

Vehicle:

- Single 852 cc engine
- Can apply Blitz, agitate, rinse and extract simultaneously or in any combination
- 60" cleaning and extracting path
- Highly maneuverable, zero-turn platform that can operate forward and reverse while cleaning and extracting
- 9 1/2 feet long
- All electric control systems



Extraction System:

- Custom designed extraction plate
- Maximizes paint extraction
- Minimizes infill extraction
- Dual intake manifold for increased vacuum lift
- High rise vacuum bar for easy transportation
- Easy drain system



Brushes:

- Custom brushes with a blend of natural and synthetic fibers
- Quick Release brushes for easy cleaning

Water system:

- Quick Release spray nozzles
- Wheel rinse to all four tires to eliminate tracking



See more at: pioneerathletics.com/prex

6 GAMELINE REMOVAL EQUIPMENT

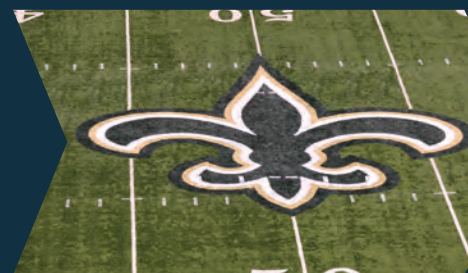
"The P-REX remover and extractor allows for quick and efficient removal of logos and lines, without any wear and tear on the turf. The rubber infill displacement is minimal and I was very pleased at how little infill actually gets extracted. For a facility with no floor drains like us, this is the perfect piece of equipment. I wished we had gotten one sooner."

Thomas McAfee
Alamodome
San Antonio, TX

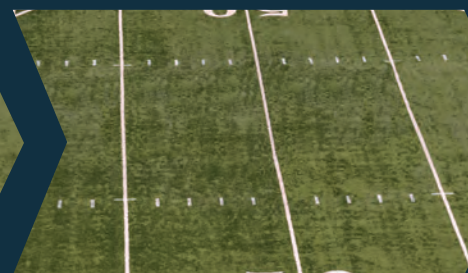
"It is much faster and better than any other machine we have used and well worth it. Logos that took us hours to remove are cleaned off in minutes and the field is ready to paint shortly after that."

Chad Wilken
Mercedes-Benz Superdome
New Orleans, Louisiana

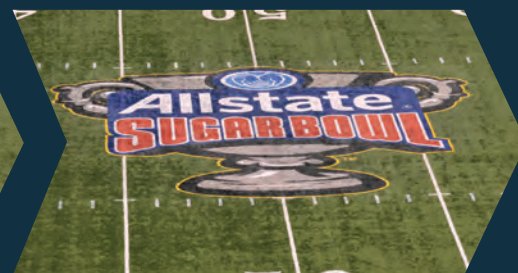
GameLine® and the P-REX are the choices of the Mercedes-Benz Superdome for quick field conversions between collegiate and professional games.



PAINT



REMOVE



PAINT AGAIN



Blitz™ GameLine Remover Solution

- Easily and quickly remove temporary synthetic turf paint, logos or stencils
- Contains no harsh solvents
- Just apply, agitate with Blitz™ Remover Machine, then wash away with water
- Blitz™ GameLine Remover Solution is designed to work with GameLine® Removable Paint

Premium Backpack Sprayer

4.8 gallon tank, 29.5 wand length, 90 psi operating pressure, and 69.7 hose length
BPSP

Blitz HT GameLine® Remover Solution

- GameLine synthetic turf paint remover solution is designed for the hours when field temps are at their peak
- Helps remove temporary synthetic turf paint when field surface temperatures are at their peak--generally between 11 a.m. and 3 p.m.
- Just apply, agitate with Blitz Remover Machine, then wash away with water
- Blitz HT Remover Solution is designed to work with GameLine Removable Paint.

Blitz™ Walk-Behind Remover Machine

- Easy-to-use brush engagement
- 5.5 HP Honda engine
- 7 Adjustable positions for height of brush
- 8" Pneumatic wheels
- Padded hand grip handle collapses for easy storage and transport