Pioneer
ATHLETICS

BRITE STRIPER 1100

INSTRUCTION MANUAL AND PARTS LISTING

800-877-1500 | www.pioneerathletics.com

TABLE OF CONTENTS

Brite Striper 1100

Assembly Instructions

Operation & Care

Trouble Shooting & Parts

For product updates, athletic field striping tips, and maintenance tips, register your new field marking machine at:

pioneerathletics.com/register or: **800-877-1500**

If you have any questions concerning assembly or operation, please call our **CUSTOMER SERVICE DEPARTMENT at: 800.877.1500**

TOOLS NEEDED FOR ASSEMBLY:

Snap ring pliers or a screwdriver and a set of hex key wrenches.

Remove Brite Striper 1100 – two people necessary to lift

1. Remove handle bar.
2. Assemble Adjustable Spray Box.
   Parts required:
   1. Snap Ring
   2. Adjustable Spray Box
      a) Slide adjustable spray box bar on the front axle
      b) Attach carriage bolt, washer, lock washer and wingnut
      c) Attach snap ring on end of axle to prevent spray box from sliding off

   SIDE PLATES SHOULD BE ABLE TO MOVE UP AND DOWN BY HAND.
3. Assemble handle.
   Parts required:
   1. Handle
   2. Handle adjustment bolts
      a) Slide handle into frame
      b) Insert handle adjustment bolts
      c) Attach paint control lever to handle
      d) Insert switch/meter bracket

NOTE: TEST CONTROL TRIGGER TO MAKE SURE CABLE IS ADJUSTED PROPERLY. CABLE SHOULD HAVE SMALL AMOUNT OF SLACK.

Use hex key wrenches to adjust side plates for proper width. Adjust bar length by unscrewing the wing nut and setting desired height. Tighten wing nut to secure new position. Side plates may need to be adjusted up or down depending on the height of spray box bar. Do not over-tighten side plates.

Before Starting:

The Brite Striper 1100 is shipped as a ready to use striper, complete with a premium, sealed battery and charger. Before operating, follow these directions.

1. Check all hose connections and fittings, making sure they are tight.
2. Any fittings, if replaced, should have Teflon tape applied before tightening. Do not force fittings.

CHARGING

Charger Operation:

Initialization: Red Light On, Green Light Off: Monitor Circuit verifies appropriate battery voltage levels and good electrical continuity.

Bulk Charge: Red Light On, Green Light Off: Constant Current at Full Power. Switch to Absorption at 75%-80% full recharge.

Absorption Charge: Red Light On, Green Light Flashing: Constant Voltage at Absorption Level. This conditions the battery for maximum performance. Transition to Float Maintenance either by charge current threshold or fixed absorption timer.

Float Charge: Red Light Off, Green Light On: Constant Voltage at Float/Maintenance Level. Keeps battery fully charged and maintains optimum specific gravity. Charge reset monitor protects battery against deep discharge from excessive appliance current draw.

Indicator Light Operation:

Red: When the red light is On, the charger is functioning normally and it is in the process of fully charging the battery. The charger will automatically apply the optimum charging voltage and current values to the battery in the proper timing sequence.

Green: When the green light is On and the red light is Off, the battery charger is in the storage/float/maintenance mode of operation. In this mode the charger will maintain the battery at optimum voltage levels to maintain full charge.

Flashing Green: When the green light is flashing and the red light is On, the battery is approximately 80% charged. Do not use the battery until the green light stops flashing, indicating that the battery is fully charged.

Red and Green Alternating: This is an abnormal indication. Check all connections between the charger and the battery. If this condition persists, contact technical support for assistance.

NOTE: FOR MORE INFORMATION ABOUT THE CHARGER AND TROUBLESHOOTING, PLEASE REFER TO THE BATTERY TENDER MANUAL PROVIDED WITH YOUR MACHINE.

BATTERY STATUS INDICATOR

The D-130 Battery Status Indicator:

A unique battery fuel gauge that recognizes both the discharge and charge cycle of your battery. It will sense the current charging condition of the battery , display the percentage remaining capacity and display a charge trend arrow (▼ or ▲).

The D-130 will continue to measure capacity and trend as long as it is connected to the battery. When an additional “load” is applied to the battery, the capacity will decrease according to the load applied.

When the load is removed the digital readout will remain at the last shown level and the trend arrow will switch to (▲). The rebound indicates the battery is starting to recover, but the digital readout of the capacity will hold at its lowest level unless you reset the unit by disconnecting and reconnecting the D-130 to the battery.

**If you continue to use the D-130 without disconnecting it, the D-130 will show the last capacity until the battery falls below this point, then continue to decline with use.*

When a charger is attached to the system, the digital readout of capacity will remain the same, up to an hour, with an (▲) arrow indicating that it is receiving a charge, before the digital readout will start to advance. Note, with some batteries, the very top rating for a charged battery (12.7 volts) or 100% rating will not stay at 100% even though it may be fully charge. This is normal.

Each battery charges differently and may be fully charged but only show 95% instead of 100%. This is a normal occurrence with batteries since not all batteries will hold the same top-end percentage when fully charged and is not an indication of a poor or defective battery.

When you reconnect the D-130 to the battery, the display will show the current status of the battery at that moment. Please disconnect it from the battery if not being used for prolonged periods to avoid continued battery drain.

- ▲ = Recovery or Charge / ▼ = Discharge or Drain
- Sweet Spot: The place where your specific battery holds a steady output.
- Cold Temp=quicker discharge.
- No two batteries act alike.
- Understand your battery and charger.
- During operation the bigger the load (electrical draw on the battery), the bigger rebound recovery when the load is removed.
- No display is shown when the battery voltage is less than 6 volts or if the battery connections to the D-130 are reversed.

Machine Operation:

1. The Brite Striper 1100 needs to be charged completely before you can use it. The striper is shipped with an automatic charger.
2. Once charged, test-run the machine with water to see how it operates. You may wish to practice with paint in an off-area before starting your job.
3. Strain and make sure your paint is diluted to a minimum of 1 part paint to 1 part water for Pioneer natural grass paints. We strongly recommend the use of Pioneer Brite Stripe Pre-Mix paint. Insert your paint bucket, with lid fully attached, into the bucket holder.
4. Insert both the discharge and suction tubes through the lid's pour spout. Do not stripe without the lid in place, as this will cause a safety hazard.
5. Start your striper by turning the switch to the On position. Slowly open the ball valve on the suction tube to achieve your desired pressure.
6. Adjust the ball valve to the desired pressure and walk at your normal striping speed. If pump is rapidly cycling, open ball valve until cycling stops. Cycling for more than 15 seconds can damage pump motor. It is best to operate the pump only when striping since the pump is self priming. This will greatly reduce wear.
7. When done or when changing paint, place pick-up tube in clean bucket of water with P.H.D. Cleaner. Turn on pump until water comes out clean.

Striping Tips:

1. When striping, always have the machine in motion before opening the spray valve, thus eliminating a heavy "blob" of paint at the beginning.
2. Simplest method for running test lines is to apply lines on paper or in an off-area. For a sharp cut-off at the end of a line, place paper or cardboard at the end, so the line is square.
3. Periodically clean or replace the nozzle screen and nozzle tip located inside the spray box assembly. Inspect and clean the strainer on the suction tube with each use.
4. Do not run your pump dry. This will greatly add wear and tear on your pump and shorten its life.

Clean-Up Process:

1. All parts of your Pioneer Brite Striper, except those enclosed in the component box, should be cleaned immediately after each use. We recommend Pioneer P.H.D. Cleaner. A clean, lint-free rag should be used to wipe dry the machine.
2. We recommend putting the pick-up tube into a bucket with a dilution of 2 gallons water to one cup P.H.D. Run the striper until you no longer see any paint and water is clearly coming through the tip.
3. A final step should then be to remove the nozzle cap and clean the nozzle tip and screens. This can easily be done by placing all three parts in a small amount of P.H.D. and allow them to soak for a few minutes. An old tooth brush can be used for stubborn spots. Rinse the nozzle assembly parts with clean water and allow to air dry.

CAUTION: DO NOT USE WIRE OR ANY OTHER OBJECT TO CLEAN NOZZLE TIP AS THIS MAY CAUSE TIP ORIFICE TO BECOME ENLARGED WHICH WILL RESULT IN POOR PERFORMANCE WHEN STRIPING.

How To Store:

Cleaning your machine thoroughly cannot be overemphasized. A little extra effort at the end of each job will save you time and money when it is time to stripe again. As stated previously, run a gallon or so of water and P.H.D. solution through the machine. Be sure to clean out the screen inside the nozzle assembly and filter on the suction tube.

DO NOT EXPOSE THE COMPONENT BOX TO WATER. DO NOT HOSE DOWN THIS MACHINE, AS IT IS ELECTRICAL AND MAY CAUSE PERMANENT DAMAGE. BE SURE TO CLEAN OUT THE PUMP SYSTEM. FAILURE TO DO THIS MAY RESULT IN FAILURE AND MALFUNCTION OF THE UNIT.

When Storing for an Extended Period:

1. Flush machine out thoroughly.
2. Remove hoses and drain.
3. Lubricate spray valve (shut-off valve).
4. Keep battery charger connected.

Normal Wear:

Warranty will not cover repair where normal use has exhausted the life of the part. Line stripers, like all mechanical devices, need periodic parts replacement and service to perform well. It should be remembered that the service life of any equipment is dependent on the care it receives and the conditions under which it has to operate.

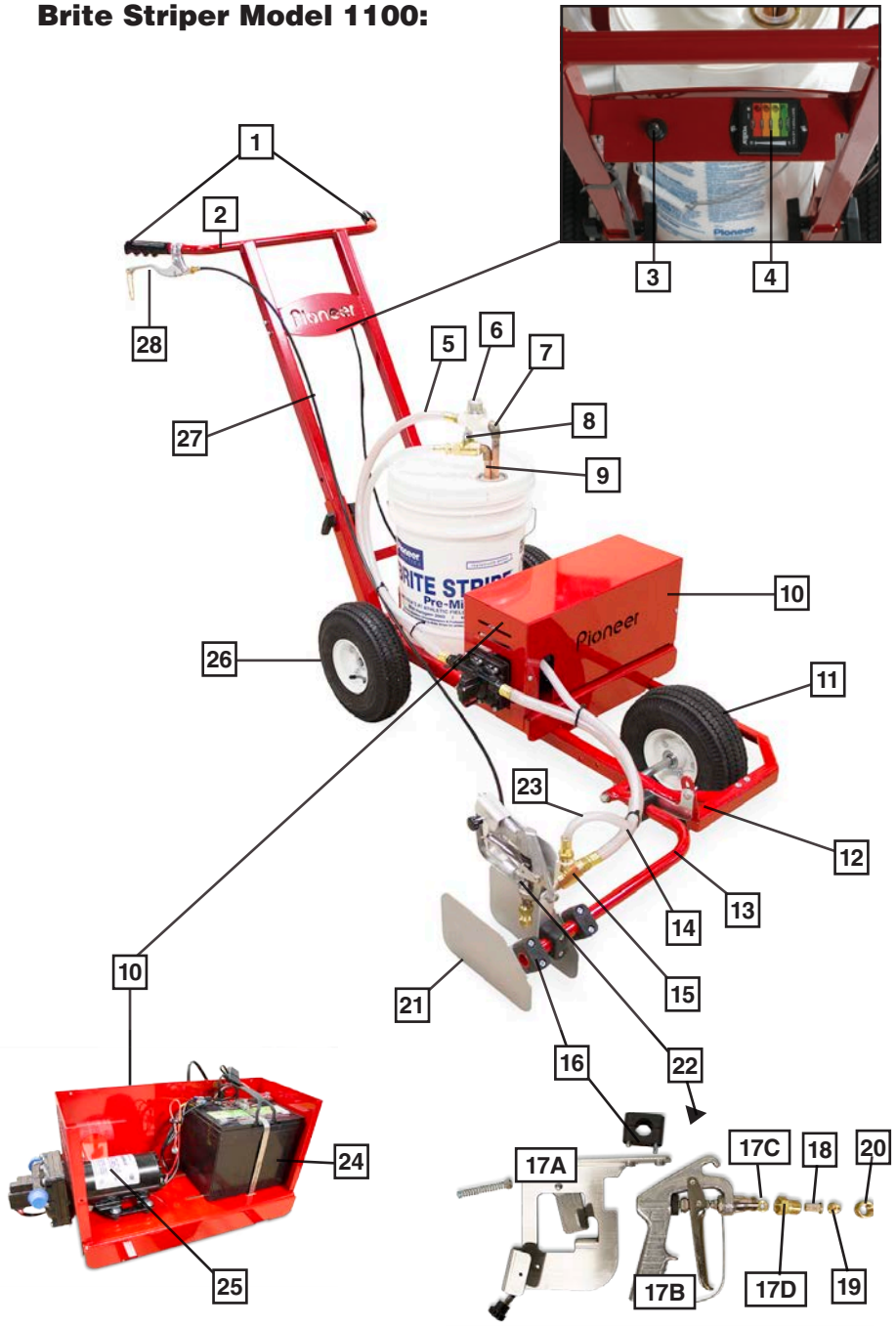
Brite Striper Model 1100:

KEY#	PART#	DESCRIPTION
1	2035	Hand Grip
2	1621	Handle
--	1625	Frame
--	1600	Nut & Bolt Kit
3	1110	Switch
4	1152	Battery Meter
5	1136	Hose Paint 36” (1/2” Pick-Up Tube)
6	1165	Strainer 1/2”
7	1118	Pick-Up Tube (Copper 18”)
8	1117	Shut-Off Ball Valve 1/2”
9	1116	Return Tube (Copper 16”)
10	1153	Component Box
--	1105	Wire Black
--	1106	Wire Orange
--	1107	Wire Yellow
11	1216	Front Tire
--	1531	Front Axle
12	1542	Height Adjustment Bracket
13	1546	Spray Arm
14	1120	20” Paint Hose (1/2” Pump to Spray Nozzle)
--	1178	Hose Clamp
15	1122	Tee 1/2”
--	1124	Adapter 1/2” to 1/4”
--	0104	Tee w/Nipple
--	1125	1/4” Plug
16	1544	Side Plate or Nozzle Assembly Clamps
17A	1685	Gun Bracket
17B	0028t	Spray Gun
17C	0020	Gun Rebuild Rit
17D	1681	Shut Off Tip Extension
18	0115	Nozzle Screen
19	0108	Nozzle Tip
20	0114	Nozzle Cap
21	1524	Side Plate
22	1680	Shut-Off Gun Kit
23	1158	3/8” Hose Paint 60”
24	1151	Battery
--	2050	Battery Strap
25	1160	Pump
--	1164	Pump Fitting
26	1215	Rear Tire
--	1528	Rear Axle
27	1636	Control Cable
28	1505	Control Lever
--	1150	Battery Charger
--	1155	Bracket Holder

OPTIONAL ACCESSORIES

--	1212	12’ Hand Hose with Wand
--	5088	Female Quick Disconnect

Brite Striper Model 1100:



Pump Precautions:

CAUTION "Intermittent Duty" is defined as; operated and/or frequently started within a period of time that would cause the motor to reach its maximum thermal limits. Once the maximum thermal limit is obtained, the motor must be allowed to return to ambient temperature before resuming operation.

DO NOT use to pump flammable liquids. Never operate the pump in an explosive environment. Arcing from the motor brushes, switch or excessive heat from an improperly cycled motor may cause an explosion.

DO NOT assume fluid compatibility. If the fluid is improperly matched to the pumps' elastomers, a leak may occur. Pumps used to transfer hazardous or hot (max. temperature 170˚F {76˚C} viton only) chemicals must be in a vented area to guard against the possibility of injury due to harmful or explosive liquid/vapors.

DO NOT operate the pump at pressures which cause the motor to exceed the amperes rating indicated on the name plate. Various pump models are equipped with thermal breakers to interrupt operation due to excessive heat. Once the temperature of the motor is within proper limits it will automatically reset and the pump will start operation without warning.

CAUTION To prevent electrical shock, disconnect power before initiating any work. In the case of pump failure, the motor housing and/or pumped fluid may carry high voltage to components normally considered safe.

Pressure Switch Operation:

The pressure switch reacts to outlet pressure, and interrupts power at the preset shut-off pressure indicated on the pump label. When outlet pressure drops below a predetermined limit (typically 15-20 PSI.{1-1.4 bar} less than the shut-off pressure) the switch will close and the pump will operate until the shut-off (high) pressure is achieved. The shut-off pressure is set to factory calibrated standards. See the motor label for specific pump specifications.

CAUTION Improper adjustment of the pressure switch may cause severe overload or premature failure. Failures due to improper adjustment of the pressure switch will not be covered under the limited warranty.

If the flow rate is very low, the pump may re-pressurize the outlet faster than the fluid is being released, causing rapid cycling (On/Off within 2 seconds). If the pump is subjected to rapid cycling during normal operation, or for infrequent periods, damage may occur.

STRIPER DOES NOT STRIPE A FULL LINE

1. Was paint strained?
2. Check paint level.
3. Check the screens for clogs. Clean as needed.
4. Check the suction tube strainer for clogs. Clean as needed.
5. Check nozzle tip for proper alignment - horizontal.
6. Is the ball valve on the suction tube in the open position?
7. Check the operating pressure.
8. Check the shut-off valve for clogs - clean.
   Adjust control cable.
9. Check paint line hose for clogs - clean.

STRIPER WILL NOT SHUT OFF COMPLETELY

1. Check control cable adjustments. Adjust as needed.

STRIPER WILL NOT TURN ON

1. Is the battery connected to pump– connect.
2. Is the battery charged – check battery status indicator.
3. Check all connections inside component box.
4. Is On/Off switch in the upright position?

STRIPER USES TOO MUCH PAINT

1. Opening in nozzle tip enlarged – replace with new nozzle tip.
2. Pump building too much pressure – adjust with ball valve.

CHECK IF PUMP WILL NOT START

1. Fuse
2. For correct voltage (±10%) and electrical connections
3. Pressure switch operation and correct voltage at switch or motor wires (as equipped)
4. Rectifier or motor for open or grounded circuit

Continued on next page.

TROUBLESHOOTING

CHECK IF MACHINE WILL NOT PRIME (no discharge/motor runs)

1. Out of product
2. Strainer for debris
3. Inlet tubing/plumbing for severe vacuum leak
4. Inlet/Outlet tubing severely restricted (kinked)
5. Debris in pump inlet/outlet valves
6. Proper voltage with the pump operating (±10%)
7. Pump housing for cracks

CHECK IF MACHINE LEAKS FROM PUMP HEAD OR SWITCH

1. For loose screws at switch or pump head
2. Switch diaphragm ruptured or pinched
3. For punctured diaphragm if fluid is present at bottom drain

CHECK IF MACHINE WILL NOT SHUT-OFF (pressure switch equipped)

1. Output line closed and no leaks
2. For air trapped in outlet line or pump head
3. For correct voltage to pump (±10%)
4. Inlet/Outlet valves for debris or swelling
5. For loose drive assembly or pump head screws
6. Pressure switch operation/adjustment incorrect

CHECK IF YOU EXPERIENCE NOISY/ROUGH OPERATION

1. Mounting feet that are compressed too tight
2. Does the mounting surface multiply noise (flexible)
3. For loose pump head or drive screws
4. Is the pump plumbed with rigid pipe causing noise to transmit

Call our Customer Service Reps From 8:00am - 4:45pm (EST) 1-800-877-1500

Call us with any questions you may have concerning the care,assembly, operation, or maintenance of this product. Before you call be sure that unsatisfactory operation is not due to inadequate care or cleaning, abuse, or neglect. This may save you time and money.
See our warranty for specific coverage.

If you Ship the Product:

Prior Authorization Must be Received Before Return

Carefully pack unit and send it prepaid and adequately insured. Attach a postage-affixed letter, detailing the complaint, to the outside of the carton. **BE SURE TO SHOW RETURN AUTHORIZATION CODE NUMBER ON OUTSIDE OF ENVELOPE.**

For Any Repairs, Including Warranty Repairs:

Call **800.877.1500** for repair cost estimates, and full service information, **INCLUDING RETURN AUTHORIZATION CODE NUMBER, BEFORE SENDING YOUR UNIT.**

Send Your Unit, Freight Prepaid To:

Pioneer ATHLETICS

Pioneer Manufacturing Company
4529 Industrial Parkway
Cleveland, Ohio 44135

LIMITED WARRANTY

For a period of three years from date of purchase, PIONEER MANUFACTURING COMPANY will replace for the original PURCHASERS, any part or parts* of the line Striper (a five (5) year limited warranty against rust-out on stainless steel tanks), found upon examination by a PIONEER FACTORY-trained representative, to be defective in material or workmanship or both; this is the exclusive remedy. This warranty is pro-rated as to cover 100% of the cost of materials, parts and labor for the first twelve months of ownership, 60% the second twelve months, and 40% for the third twelve month period. The customer is responsible for all remaining costs. The customer may elect to return the entire unit to the factory at his expense for repair. Or he may, at his expense, return the defective part for factory inspection AND replacement. In no case will PIONEER MANUFACTURING authorize outside repair on any unit nor will PIONEER MANUFACTURING reimburse any customer for unauthorized work. Prior to returning any part or machine, the CUSTOMER must obtain a RETURN MATERIAL AUTHORIZATION CODE. Call toll free 1-800-877-1500. This warranty gives the customer specific legal rights as well as other rights which may vary by state. There are no WARRANTIES which extend beyond the face hereof and the warranties set forth above are in lieu of all other warranties, EXPRESS or implied, including any and all implied warranties of merchantability or fitness for a particular purpose, and any other obligation or liability on the part of PIONEER.

PIONEER SHALL IN NO EVENT BE RESPONSIBLE OR LIABLE TO THE OWNER OR ANY THIRD PARTY FOR INDIRECT, SPECIAL OR CONSEQUENTIAL DAMAGES WHETHER ARISING FROM DEFICIENCIES IN THE DESIGN, MANUFACTURE, LABELING OR OPERATION OF THE BRITE STRIPER OR FROM ANY OTHER CAUSE WHATSOEVER AND WHETHER BASED ON TORT, CONTRACT, WARRANTY, STRICT LIABILITY OR OTHERWISE. IN ANY EVENT, PIONEER MANUFACTURING COMPANY INC.'S RESPONSIBILITY IS LIMITED TO THE COST OF THE PRODUCT ITSELF.

No representative employee, agent of Pioneer, or any other person has any authority to assume for Pioneer any additional or other liability or responsibility, other than as described above, in connection with the BRITE STRIPER. Either direct or indirect acceptance of this limited warranty constitutes approval of, and agreement with, all of its terms and conditions by the owner. This limited warranty becomes effective only when all invoices for the Brite Striper have been paid in full.

* The battery, battery charger and pump are covered exclusively by the manufacturer's warranty.

PN13010 Rev. 3/13

Brite Stripe Ultra-Friendly

Zero-VOC, EPA recognized environmentally friendly field marking paint.

In addition to the brightness and durability you expect from Pioneer paints, Brite Stripe Ultra-Friendly adds an all-new proprietary formulation of thickeners, pigments and agents that combine to leave users satisfied and fields they manage greener than ever.

Brite Stripe

Not Standard. Industry Standard.

It turns out that Brite Stripe is the number one choice at the professional, collegiate, prep and recreational levels throughout North America because Brite Stripe delivers an MVP performance every time. Brite Stripe is just another of many examples that to Pioneer Athletics, Ingredients Matter.

GameDay Ultra-Friendly

When it's All on the Line.

An exclusive formula for exclusive excellence. Use GameDay premium field marking paint for championships, special events and other nationally televised occasions. The higher concentration of premium pigments will have your field looking its best! Now available as Ultra Friendly with Zero VOC's.

MAX

The Brilliant, Unbeatable White.

Premium pigments make this line shine. Max combines a dense and rich formula with great brighteners for closeup-ready results. Looking for lines that are up to 500% brighter for that "glowing white" effect on TV? Max is the athletic field marking paint for you!

ingredients matter®

Pioneer
ATHLETICS

Visit our website or call us for more information
on the following athletic field and facility products:

ULTRA-FRIENDLY ZERO-VOC PAINTS | SYNTHETIC TURF FIELD MARKING PAINTS

AEROSOL AND BULK FIELD MARKING PAINTS | FIELD MAINTENANCE

FACILITY MAINTENANCE | STENCILS, MATS, WALLPADS AND WINDSCREENS

FIELD LAYOUT GUIDES | SPORTS ACCESSORIES | FIELD MARKING EQUIPMENT

Become a Facebook Fan!
www.facebook.com/pioneerathletics

Follow us on Twitter!
www.twitter.com/pioneerathletic

Phone: 800-877-1500
Fax: 800-877-1511
www.pioneerathletics.com
4529 Industrial Parkway
Cleveland, OH 44135