



BRITE STRIPER[®]

1100

INSTRUCTION MANUAL & PARTS LISTING

BRITE STRIPER[®] 1100

Versatility

The 1100 handles all athletic field needs with ease. So simple to operate that anyone can do a professional job.

BUILT STURDY FOR YEARS OF SERVICE

Heavy-gauge welded steel frame rolls smoothly on three large, fully pneumatic wheels. The 1100 has a cable-operated control valve to paint crisp lines.

SIMPLE DESIGN - LOW MAINTENANCE

The 1100's simple design means low maintenance. Easy to clean system allows user to fill empty pail with water and P.H.D. solution and run cycle to clean paint lines.

FULLY ADJUSTABLE SPRAY BOX

Change line width easily from 2" to 8".
Two-headed sprayer standard.

Optional 6', 12', 20' & 25' Hand Hose with Wand Available.

Get professional results on yardline stencils, endzones and out-of-bounds

Check Out Our Website At: www.pioneerathletics.com

Paints

Stripers

Stencils

Interactive Field

Sports Accessories

Instructional Videos

Field Specifications

Windscreens

Wallpads



Replacement parts for all of Pioneer's machines are fully stocked and available for immediate delivery. We also carry replacement parts for many other airless line strippers. Call your local representative or Pioneer for more information.

Call 800.877.1500

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

TOOLS NEEDED FOR ASSEMBLY

Snap ring pliers or screwdriver

Allen Wrenches (supplied in hardware kit)

ASSEMBLY INSTRUCTIONS FOR BRITE STRIPER® MODEL #1100

After Removing Box from Shipping Carton:

STEP 1.

Remove Brite Striper 1100 – two people necessary to lift

STEP 2.

Remove handle bar

STEP 3.

Handle Assembly

Parts required:

a. Handle

b. Handle adjustment bolts

Step 1: Slide handle into frame

Step 2: Insert handle adjustment bolts

Step 3: Attach paint control lever to handle

Step 4: Insert switch/meter bracket

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

STEP 4.

Adjustable Spray Box

Parts required:

a. Snap ring

b. Adjustable spray box

Step 1: Slide adjustable spray box bar on the front axle

Step 2: Attach carriage bolt, washer, lock washer and wingnut

Step 3: Attach snap ring on end of axle to prevent spray box bar
from sliding off

Use supplied allen wrenches to adjust side plates for proper width. Adjust bar length by loosening wing nut and setting desired height, retighten wing nut. Side plates may need to be adjusted up or down depending on the height of spray box bar. Use supplied allen wrenches. Do not over-tighten side plates. **SIDE PLATES SHOULD BE ABLE TO MOVE UP AND DOWN BY HAND.**

BEFORE STARTING

The Brite Striper 1100 is shipped as a ready to use striper, complete with a premium, sealed battery, automatic 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.

CHARGER OPERATION

Intitialization: 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. Tranisition 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.

GREEN FLASHING.

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 & 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.

APPLICATION INFORMATION

- ***Always operate the charger in a well ventilated area.***
- ***If no indicator lights come on after you plug in the AC cord, then check the AC power receptacle.***
- ***If the green indicator light comes on too soon, check the battery and the output connections from the charger.***
- ***It may take a long time for the green light to come on when charging a large battery***

OPERATION OF MACHINE

1. The Brite Striper 1100 needs to be charged completely before you can use. 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 on the left hand side of the component box and slowly open the ball valve on the suction tube to you achieve your desired pressure.
6. Adjust the ball valve to the pressure you feel desire 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 with P.H.D Cleaner. Turn on pump until water comes out clean.

STRIPING TIPS

When striping, always have the machine in motion before opening the spray valve, thus eliminating a heavy "blob" of paint at the beginning.

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.

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.

Do not run your pump dry. This will greatly add wear and tear on your pump and shorten its life.

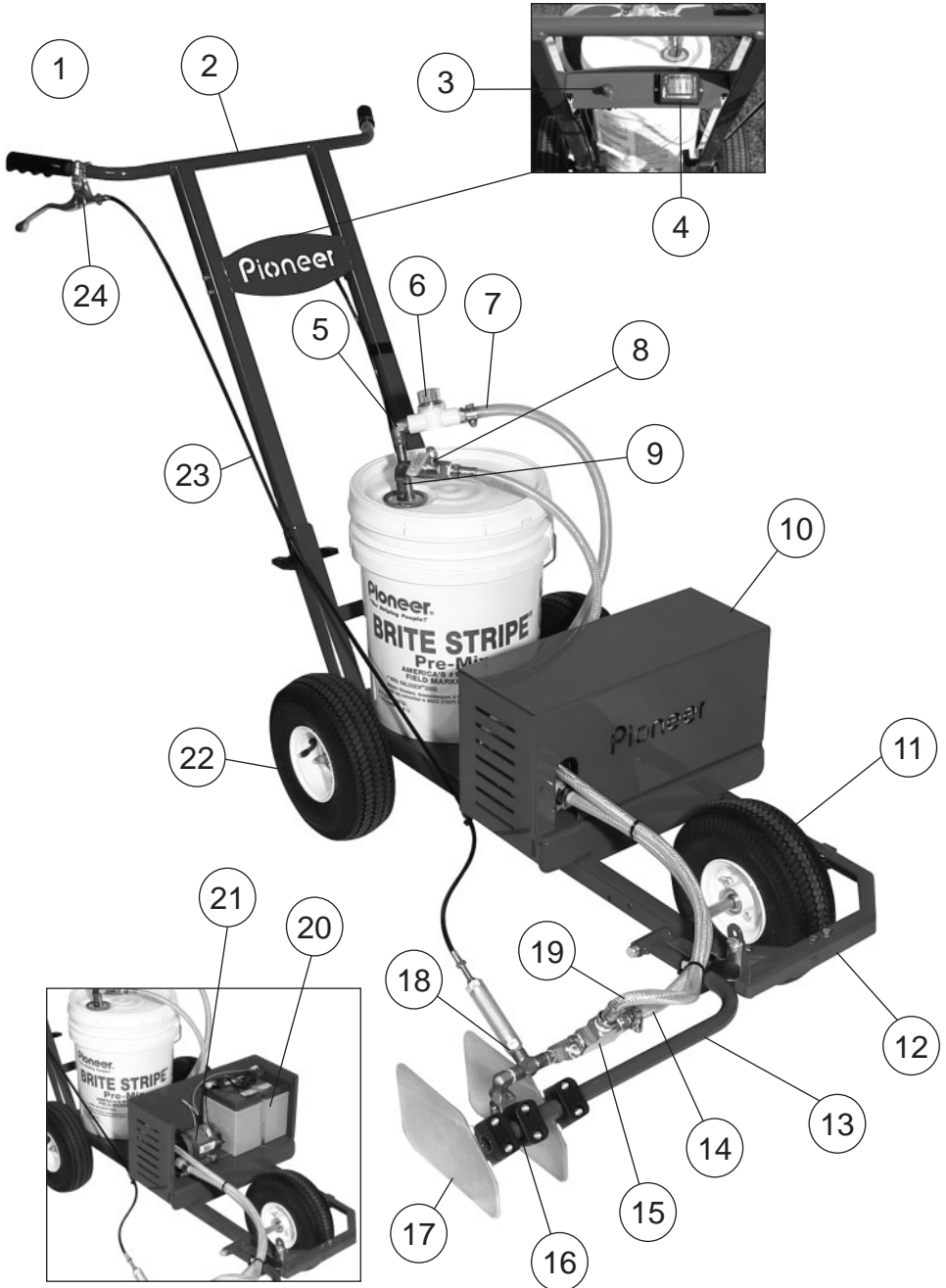
PARTS LIST

BRITE STRIPER® MODEL 1100

KEY#	PART #	DESCRIPTION	KEY#	PART #	DESCRIPTION
1	1503	Hand Grip	15	1122	Tee 1/2"
2	1621	Handle	--	1124	Adapter 1/2" to 1/4"
--	1625	Frame	--	0104	Tee w/Nipple
--	1600	Nut & Bolt Kit	--	1125	1/4" Plug
3	1110	Switch	16	1541	Nozzle Assy. w/9508 Tip
4	1152	Battery Meter	--	1513	Male x Female Elbow
5	1118	Pick-up Tube (Copper 18")	--	0116	Nozzle Body
6	1165	Strainer 1/2	--	0115	Nozzle Screen
7	1136	Hose Paint 36" (1/2" Pick-up Tube)	--	0108	Nozzle Tip 9508
8	1117	Shut-off Ball Valve 1/2	--	0114	Nozzle Cap
9	1116	Return Tube (Copper 16")	17	1524	Side Plate
10	1153	Component Box	--	1544	Side Plate Clamp
--	1105	Wire Black	18	1635	Shut-off Valve
--	1106	Wire Orange	19	1158	3/8" Hose Paint 60"
--	1107	Wire Yellow	20	1151	Battery
11	1216	Front Tire	--	2050	Battery Strap
--	1531	Front Axle	21	1160	Pump
12	1542	Height Adjustment Bracket	--	1164	Pump Fitting
13	1546	Spray Arm	22	1215	Rear Tire
14	1120	Hose Paint 20" (1/2" Pump to Spray Nozzle)	--	1528	Rear Axle
--	1178	Hose Clamp	23	1636	Control Cable
			24	1505	Control Lever
			--	1150	Battery Charger
			--	1155	Bucket Holder
			Optional Accessories:		
			--	1212	12' Hand Hose with Wand
			--	5088	Female Quick Disconnect

PARTS LIST

BRITE STRIPER® MODEL 1100



CLEAN-UP TIPS

All parts, 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.

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.

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 RIGID OBJECT TO CLEAN NOZZLE TIP AS THIS MAY CAUSE TIP ORFICE 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.

IMPORTANT: 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 your striper for an extended period of time, do the following:

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.

PUMP PRECAUTIONS

- “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.**

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 psc. {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.

TROUBLE SHOOTING

A. STRIPER DOES NOT STRIPE FULL LINE

1. Was the paint strained?
2. Check the 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.

B. STRIPER WILL NOT SHUT OFF COMPLETELY

1. Check control cable adjustments. Adjust as needed.

C. 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?

D. STRIPER DOES NOT STRIPE FULL LINE

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

E. PUMP WILL NOT START

CHECK:

- Fuse
- For correct voltage ($\pm 10\%$) and electrical connections
- Pressure switch operation and correct voltage at switch or motor wires (as equipped)
- Recifier or motor for open or grounded circuit

F. WILL NOT PRIME (No discharge/Motor runs)

CHECK:

- Out of product
- Strainer for debris
- Inlet tubing/plumbing for severe vacuum leak
- Inlet/Outlet tubing severely restricted (kinked)
- Debris in pump inlet/outlet valves
- Proper voltage with the pump operating ($\pm 10\%$)
- Pump housing for cracks

G. LEAKS FROM PUMP HEAD OR SWITCH:

CHECK:

- For loose screws at switch or pump head
- Switch diaphragm ruptured or pinched
- For punctured diaphragm if fluid is present at bottom drain

H. PUMP WILL NOT SHUT-OFF: (Pressure switch equipped)
CHECK:

- Output line closed and no leaks
- For air trapped in outlet line or pump head
- For correct voltage to pump ($\pm 10\%$)
- Inlet/Outlet valves for debris or swelling
- For loose drive assembly or pump head screws
- Pressure switch operation/adjustment incorrect

I. NOISY/ROUGH OPERATION:
CHECK:

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

***CALL OUR CUSTOMER SERVICE REPS
FROM 8:00am - 5:00pm (EST) 800.877.1500***

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 1-800-877-1500 for repair cost estimates, and full service information. **INCLUDE RETURN AUTHORIZATION CODE NUMBER BEFORE SENDING YOUR UNIT.**

SEND YOUR UNIT WITH FREIGHT PREPAID TO:

**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, 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.

also available from
Pioneer[®]

Brite Stripe[®] Pre-Mix

Convenient Ready-to-use formula

- Premium grade paint with Halogen 2000[®] for greater brightness
- Fast-drying with professional results
- No dilution necessary
- Unsurpassed resistance to severe weather
- Concentrated and homogenized for smooth consistency
- Finely ground ingredients will not clog your striping machine
- Painted areas are ready in about one hour

GameDay[®]

The Ultimate Field Marking Paint

- Exclusive formula provides the brightest, whitest lines in the industry
- Premium field marking paint for special events, playoffs and high profile teams
- Higher concentration of premium pigment and optical brightener than any other natural turf paint
- Ideal choice for major championships and other nationally televised events

STENCILS

Pioneer's Athletic Field Stencils are made of rugged, easy to use clean plastic for years of use. They are lightweight enough for one person to handle and pre-marked for easy assembly

- Helmet Stencil Kit allows you to customize your field with your schools helmet design.
- Available Stencil Kits: Yardline Stencil Kit, Hash Mark Kit, Letter Stencil Kit.
- Custom Stencils made with our new stencil technology means fewer pieces. Customizing your field has never been as easy or affordable.

P.H.D.

Specially Design Cleaning Concentrate

- Specially designed to clean Pioneer Athletic Field Marking Machines.
- Biodegradable
- Contains no flammable solvents
- Economical - highly concentrated, P.H.D. cleans more at less cost
- Fast Acting - Leaves no soap scum or residue. Keeps your athletic field marker cleaner and brighter longer.

Call 800.877.1500

to order BRITE STRIPER[®] Accessories

BRITE STRIPE® pre-mix

ATHLETIC FIELD MARKING PAINT

with Halogen® 2000 for Exceptional Brightness

Easy to Use

- Homogenized to prevent separation in the container.
- Finely ground ingredients will not clog your machine.

Convenient

- Painted areas are ready to use in one hour.
- Equipment can be washed with soap and water.

Applications

- Football & Soccer Fields
- Walkways • Campsites
- Band Practice Areas
- Tracks • Golf Courses
- Volleyball Courts
- Baseball Fields
- Bicycle Paths
- Grass & Clay Tennis Courts
- Grass Parking Areas
- Any grass or paved areas

Packaging

Five gallon pails

HIGHLIGHTS

- Premium grade • Now contains Halogen® 2000 for greater brightness • Unsurpassed resistance to severe weather • Fast-drying • Concentrated • Easy-to-use • Professional results • Homogenized for smooth consistency



Improved Formula

- Now 400% brighter under UV light.
- Up to 25% brighter in sunlight.

Brite Stripe® Available in a Variety of Colors

- Pioneer offers 16 standard colors and an unlimited variety of custom colors.
- Customize your fields with your school colors or logo.

Phone: 800.877.1500

www.pioneerathletics.com Fax: 800.877.1511

Pioneer®
"The Striping People"®

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Cleveland, OH 44135