LIMITED WARRANTY

For a period of six months from date of purchase, PIONEER MANUFACTURING COM-PANY 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 six months. 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 PIO-NEER MANUFACTURING authorize outside repair on any unit nor will PIONEER MAN-UFACTURING reimburse any customer for unauthorized work. Prior to returning any part or machine, the CUSTOMER must obtain a RETURN MATERIAL AUTHORIZA-TION CODE. Call toll free 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 STAR LINER. 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 STAR LINER have been paid in full.

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

TABLE OF CONTENTS

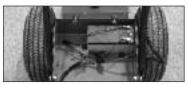
THE STAR LINER™
Before You Use Your Striper
Charging Instructions
OPERATION & CARE
Striping with the Star Liner2-4
Striping Tips
How to Store
IDENTIFYING PROBLEMS & PARTS
Parts List & Parts Explosion Drawings5-6
Trouble Shooting the Star Liner
Limited Warranty

Upon receipt of the Star Liner, please immediately remove and inspect the striper for any damage and/or missing parts. If any damage is seen, please contact the delivering company and Pioneer Customer Service immediately. Pioneer Customer Service can be reached at 800.877.1500 between the hours of 8am and 5pm EST.

BEFORE YOU USE YOUR STRIPER

TROUBLESHOOTING







The Star Liner comes fully assembled. The battery is not connected and needs to be charged before using. Loosen the two black screws located at the back of the unit and remove the back cover. Open up the charger pack and use the second connection assembly pictured on the charger pack. Plug one end into the battery cable assembly and the other into the charger. Plug the charger into 110 volt outlet to charge up. Red light means it is charging. Green light means it is fully charged. Disconnect the charger and connect the battery cable to the striping cable, replace the back cover and tighten screws.



Your Star Liner has a fold down handle which will have to be extended and you will have to insert the lower handle bar bolts and hand tighten.



Before striping, make sure the spray nozzle assembly is tight and properly aligned

CALL OUR CUSTOMER SERVICE REPS FROM 8:00am - 4:45pm (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 800.877.1500 x 3341 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

TROUBLESHOOTING

The Star Liner is the industry's easiest and most economical line striper, featuring Pioneer's exclusive "Plug & Stripe" technology. Now anyone can stripe a field like a professional.

a.) If the striper will not start upon arrival, do the following:

- 1.) Make sure you charged the battery.
- 2.) Check fuse, shipping may have caused some movement.
- 3.) Make sure switch is on the "On" position.

b.) The spray pattern is to narrow or too large.

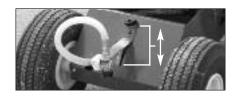
- 1.) Adjust the nozzle assembly up or down to the desired width.
- 2.) Replace the nozzle, as it may have been worn beyond it's normal usage.

c.) Striper will not spray or the pump is pulsating.

- 1.) The paint has not been properly shaken in the carton. Remove and properly follow carton's instructions.
- 2.) The nozzle tip is clogged. Remove, clean and/or replace.
- 3.) The nozzle screen is clogged. Remove, clean and/or replace.
- 4.) The Star Stripe container is empty. Replace with a new, properly prepared Star Stripe paint container.
- 5.) If this problem persists, use the Clean Out Hose assembly to flush the system and retry a properly prepared Star Stripe container.

STRIPING WITH THE STAR LINER

- a.) We recommend that you test and familiarize yourself with the operation of the Star Liner in an inconspicuous area before striping your field.
- b.) Upon first use, plug the Clean Out Hose into the Star Liner's female plug on the machine. Insert the Clean Out Hose into a bottle or pail of clean water.
- c.) When you are ready to spray, turn the handle switch to the "On" position. You should see the Star Liner spray through the nozzle assembly. This should give an idea of the spray width. Turn the striper switch to the "Off" position before making any adjustments.
- d.) To adjust the spray width, slide the spray nozzle up (to increase width) or down (to decrease width).



- e.) When you are ready to paint, disconnect the Clean Out Hose assembly from the Star Liner's female plug assembly. Following the paint preparation instructions on the Star Stripe Paint carton, prepare for placement on the Star Liner.
- f.) Insert the Star Stripe on the striper's plate assembly by inserting the male end of the carton through the slot. The slot on the plate assembly is designed to hold the carton in place. When secure and using two hands, snap on the Star Liner's female plug assembly on the carton's male fitting.



g.) Once secure, slowly lower the tray to the bumper. Align the machine to the starting point and begin to stripe.



CLEAN OUT OF THE STAR LINER

The Star Liner is shipped with a clean out hose, an empty quart bottle and a quart of P.H.D. Athletic Striper cleaning solution. Use the empty quart bottle to combine water and a few ounces of P.H.D. to make the clean out solution.

- a.) Once you are finished striping for the day, or if you have discontinued striping for an extended period of time (30 minutes or more), you will be required to flush the Star Liner free of any and all paint. Failure to do so will void warranties and may cause damage to your Star Liner.
- b.) Before flushing the Star Liner, make sure you are in an area away from your fields. To flush, insert the Clean Out Hose's male end into the striper's female plug with the machine in the Off position. When secure, put the other end of the clean out hose into the quart of water/P.H.D. mix. Turn on the striper and watch for the hoses to be free of all paint.
- c.) To flush out completely, it is recommended that you flush with the water/P.H.D. mix using step "b" above.
- d.) Removing the nozzle tip and screen and allowing them to soak in the P.H.D. solution will allow them to be free of any debris. Never clean the nozzle with any sort of foreign object, as it will enlarge the hole and not give you a true line when striping.

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 (CONTINUED)

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

- a.) Flush machine out thoroughly
- b.) Remove pump hose and spray Pioneer's F102, WD-40 or equivalent into pump to lubricate
- c.) Do not leave battery charger connected
- d.) If possible, store the Star Liner in an indoor facility to avoid any issues with cold temperatures.
- f.) Charge battery once a month over storage periods.

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

- a.) "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.
- b.) 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.
- c.) 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 liquids/vapors.
- d.) 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.

STRIPING TIPS

- a.) When striping, always have the machine in motion before opening the spray valve, thus eliminating a heavy "blob" of paint at the beginning.
- b.) The most simple method for running test lines is to apply lines on paper or in a 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.
- c.) Periodically clean or replace the nozzle screen and nozzle tip located inside the spray nozzle assembly.
- d.) Do not run your pump dry. This will greatly add wear and tear on your pump and shorten its life.
- e.) It is best to let the striper fully charge and run it out the first few times it is used to cycle the battery. It will also give you a good gauge on the striping time you have per charge.
- f.) It is recommended you consider purchasing a back-up battery for quick turn-arounds and heavy usage of the Star Liner.

PIONEER STAR STRIPE PAINT IS SPECIFICALLY DESIGNED TO WORK WITH THE STAR LINER. ANY OTHER PAINT USED WITH THIS MACHINE MAY RESULT IN POOR LINE PERFORMANCE, CLOGGING AND/OR PUMP DAMAGE AND MAY VOID ANY AND ALL WARRANTIES ASSOCIATED WITH THE STAR LINER

TRANSPORTATION

In the event that you have to move the Star Liner to another location, it is recommended that you disconnect the battery before transporting to avoid any wire connector damage. Disconnect paint to avoid any accidental discharge

HOW TO STORE

As previously stated (page 3), run the water and P.H.D. mix through the machine. Cleaning your machine thoroughly cannot be overemphasized. A little extra effort at the end of each job will save you time and money. As stated previously, run water or P.H.D. solution through the machine.

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.

CLEAN OUT OF THE STAR LINER



PARTS LIST - MODEL STAR LINER

PARTS LIST - MODEL STAR LINER

KEY#	PART#	DESCRIPTION
1	1000	Switch (Handlebar)
2	1007	Handle w/wiring
3	1017	Handle Hardware Kit
4	1003	Wheel
5	1018	Hose - Pump to Paint
6	1019	Hose - Pump to Nozzle
7	1008	Nozzle Check Valve
		Assembly
8	0114P	Nozzle Cap
	0115P	Nozzle Screen (Plastic)
	0134	Nozzle Tip 3" to 4-1/2"
	1574	Nozzle Tip 4-1/2" to 6"
	0130	Nozzle Tip 6" to 8"
9	1016	Height Adjustment Plate

KEY	# PART #	DESCRIPTION		
	1001	Pump		
	1004	Battery Charger		
	1005	Battery		
	1010	Female Quick Disconnect		
	1011	Clean-out Hose Assembly		
	1015	Rubber Bumper		
	1009	Container Paint Plug		
	1024	3 Amp Fuse		
	PHDQ	P.H.D. Quart		
KEY# PART#		TIP# DESCRIPTION		

KEY#	PART #	TIP#	DESCRIPTION
	0134	5003	3" to 4-1/2" wide line
	1574	6503	4" to 6" wide line
	1577	6504	4" to 6" wide line (heavier application of paint)
	1576	8003	5" to 7" wide line

