Pioneer® ATHLETICS
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STARLINER™

USER'S MANUAL

VERSION 7

(800) 877-1500
pioneerathletics.com

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General Information

This manual applies to the StarLiner V7

To the New Owner

CONGRATULATIONS ON THE PURCHASE OF YOUR NEW STARLINER

INSIDE THE BOX, YOU WILL FIND:

- StarLiner Electric Striping Machine
- Charger
- Spray Box w/Hose
- Star P.H.D Ultra-Friendly Cleaner
- Envelope Containing:
  - Clean out hose
  - Striping Tips
  - Paint Connector Plug
  - Operating Manual

NOTE –Upon receipt of the StarLiner, remove and inspect the unit for any damage and/or missing parts. If any damage is noticed, please contact the delivering company and Pioneer Athletics Customer Service immediately. Pioneer Athletics Customer Service can be reached at 800-877-1500 between the hours of 8:00 a.m. and 4:30 p.m. EST.

StarLiner owners and operators must read this manual carefully. It contains operation and maintenance information that will help you achieve years of dependable service.

The owner's responsibilities include, but are not limited to, making certain that the operators:

- read and understand the manual before attempting to operate or repair the unit.
- are qualified and physically able individuals, properly trained in the operation and maintenance of this equipment. Before they are allowed to operate or maintain this machine, they must be familiar with its safe operation, operator controls, and decals.
- know they are responsible for their own safety as well as the safety of other persons within the vicinity. Remember, the operator is responsible for accidents or hazards occurring to other people or their property.
- who cannot read and understand English have this material explained to them.

IMPORTANT: As the owner/operator you can prevent accidents. You are responsible for accidents or injuries occurring to yourself, other people or property.

IMPORTANT: Never let children or untrained people operate or service the equipment. Local regulations may restrict the age of the operator.

Using this Manual

This manual contains general operation information as well as basic adjustment and maintenance information. Since operating conditions vary considerably, all conditions cannot be addressed individually. Through training and experience, operators should develop safe operating practices suitable to most conditions.

Directions used in this manual (example RIGHT or LEFT) refer to directions when in the operator position and facing forward, unless otherwise stated.

Though current at the time of printing, photographs and illustrations shown may vary slightly from your unit due to subsequent production changes. Pioneer reserves the right to redesign and change the machine as deemed necessary, without notification. If a change has been made to your machine which is not reflected in this manual, contact Pioneer for current information.

Warranty Registration

To activate your warranty policy the unit must be registered, by the Purchaser, with Pioneer within thirty (30) days following the date of purchase.

https://pioneerathletics.com/register/

IMPORTANT: Any unauthorized modification, alteration, or use of non-approved attachments voids the warranty and releases Pioneer from any liability arising from subsequent use of this equipment. Do not use or operate any attachment not approved by Pioneer.

IMPORTANT: Damage caused by unauthorized replacement parts is not covered by this warranty. Manufacturer expressly excludes liability for defects or damage caused by such 'unauthorized' articles or service.

Model and Serial Number

This manual is for the StarLiner Model V7 unit only.

The model number is required when the unit is registered with Pioneer Athletics. It will also assure you of the correct service parts when replacement becomes necessary.

Parts and Service

Use original replacement parts, or parts that are equivalent in overall performance, that are available from Pioneer. To obtain prompt, efficient service, always provide the following information when ordering parts:

1. Correct part description – See Parts List
2. Correct part number – See Parts List
3. Correct model number – V7

In some instances, you may be required to provide proof of proper maintenance to be able to receive warranty credit. This proof may consist of copies of repair orders and/or receipts for replacement parts (fluids, filters, etc.). The date the service was completed should also be included.

The Maintenance Record, found elsewhere in this manual, provides you a place to record the service items that have been done on this unit. Record the date, and the service performed.

All warranty repair and service must be handled through Pioneer Athletics. Any unauthorized repairs will void in full the warranty of this unit.

Safety Precautions

This safety alert symbol is used to call attention to a message intended to provide a reasonable degree of PERSONAL SAFETY for operators and other persons during the normal operation and servicing of this equipment.

NOTICE	Denotes helpful information or performance improvement advice

WARNING	Denotes a hazard or unsafe practice which **COULD** result in severe personal injury or death.

This manual uses two other words to highlight information:

IMPORTANT – calls attention to special mechanical information.

NOTE – emphasizes general information worthy of special attention.

The owner's responsibilities include, but are not limited to:

- making certain that the operators and mechanics read and understand this manual and all decals before operating this machine.
- making certain that before the operators and mechanics are allowed to operate or maintain this machine, they must be familiar with its safe operation, operator controls, and decals.
- ensuring that the operators and mechanics know they are responsible for their own safety as well as the safety of other persons within the vicinity. Remember, the operator is responsible for accidents or hazards occurring to other people or their property.

Improper use, adjustment, or maintenance by the operator, mechanic or owner can result in injury or

death. Reduce the potential for injuries by following these safety instructions. Pay close attention to the safety alert symbol "" and the instructions that follow it. Failure to comply with these instructions may result in personal injury or death.

Incorrect usage of this equipment may result in severe injury or death. Personnel operating and maintaining it should be trained in its proper use. They should read this manual completely and thoroughly before attempting to set-up, operate, adjust, or service this equipment.

Safe Operating Practices

Always follow all safety instructions to avoid serious injury or death.

 Never allow persons to operate this unit without proper instruction or allow children to operate the unit. Allow only responsible adults who are familiar with these instructions to operate.

Safe Operation

 Evaluate the terrain to determine how to properly and safely perform the job. Only use approved accessories and attachments.

 Do not use any unauthorized attachment or modify the unit.

 Always be alert and inspect area for hazards such as rocks, metal objects and other debris which may impede movement. Remove these objects before starting. Watch out for holes or deep depressions.

 Always operate unit in daylight or with adequate working lights.

 Never operate the unit when there is a risk for lightning.

Personal Safety

 Always wear appropriate clothes and safety shoes with slip- resistant soles when operating this unit.

 Always wear safety goggles or safety glasses with side shields.

 Do not operate the unit if you are fatigued, sick or while under the influence of alcohol or drugs.

Operation

 Always keep safety shields and covers in place, except for servicing.

 Stop the pump before removing the spray head assembly or mounting arm. Never clear the spray nozzle tip with the pump running.

 Follow daily and weekly checklists, making sure hoses are tightly secured and bolts are tightened. Never operate a poorly maintained unit.

 Do not move unit into flammable materials.

 Always be aware of the surroundings while using this unit.

 Always maintain a safe distance from people and pets when operating.

Slope Operation

 Slopes are a major factor in loss-of-control which can result in severe injury or death. All slopes require extra caution. Use extreme caution when operating on slopes.

 Operate a safe distance (minimum of 10 feet) away from drop-offs, retaining walls, drainage ditches, embankments, water, and other types of hazards this will reduce the risk of injury or death.

 Do not operate on wet grass. Slippery conditions reduce traction which could cause sliding and loss of control.

 Another consideration for safe operating on slopes is to be aware of what is located at the bottom of the slope. Extreme caution should be used when there is a hazard located at the bottom of the slope. Some examples are:

- Water; i.e., lake, river, pond
- Cliffs
- retaining walls
- Roads, highways
- Buildings
- Rocks

These are just a few examples of situations when caution must be used when operating on a slope.

There are many other possibilities too numerous to mention. Just remember to always exercise extreme caution when operating on any slope.

Children

Tragic accidents can occur if the operator is not alert to the presence of children. Children are often attracted to the unit and the marking activity. Never assume that children will remain where you last saw them.

Never leave the unit unattended with children present.

Children or bystanders may be injured if they attempt to move or to operate the unit while unattended.

Keep children out of the marking area and under the watchful care of a responsible adult other than the operator.

Be alert and turn the unit off if children enter the direct area.

Never allow children to operate the unit.

Service Precautions

Unless specifically required, DO NOT have the pump running when servicing or making adjustments to the unit.

Read and observe all safety warnings in this manual.

Before working on the spray head, make certain the battery is disconnected so that pump cannot be accidentally started.

Always wear adequate eye protection when:

- servicing the spray head.
- servicing the battery.
- replacing paint box

Exercise caution when releasing spring tension from any of the snap fittings, i.e., the paint box, spray box hose.

Keep nuts and bolts tight. Keep equipment in good working condition.

Never tamper with safety devices. Check their proper operation regularly.

Use original replacement parts, they are available from Pioneer.

- The unit may not comply with the warranty if unapproved parts, accessories, or attachments are used.

Battery Service Precautions

Battery posts, terminals, and related accessories contain lead and lead compounds, chemicals known to the State of California to cause cancer and reproductive harm. Wash hands after handling.

Charge batteries in a well-ventilated open area, away from sparks and flames. Unplug charger before connecting or disconnecting from battery. Wear protective clothing and use insulated tools.

Avoid skin and clothing contact with battery acid.

- Always wear eye protection when checking the battery. Acid can cause serious injury to skin and eyes. If contact occurs, flush area with clean water and call a physician immediately. Acid will also damage clothing.
- Do not drink the battery electrolyte.
- Do not allow open flame near the battery when charging.
- Hydrogen gas forms inside the battery. This gas is both toxic and flammable and may cause an explosion if exposed to flame. Always disconnect the negative (black) battery cable(s) before disconnecting the positive (red) cable(s). Always connect the positive (red) battery cable(s) before connecting the negative (black) cable(s).
- Do not open the battery.
- Clean the battery terminals with a solution of four parts water and one part baking soda if they become corroded.

Shorts caused by battery terminals or metal tools touching metal components can cause sparks. Sparks can cause a battery gas explosion which will result in personal injury.

- Prevent the battery terminals from touching any metal parts when removing or installing the battery.
- Do not allow metal tools to short between the battery terminals and metal parts.

Incorrect battery cable routing could cause damage to the unit and battery cables. This can cause personal injury.

Paint Handling Precautions

To avoid personal injury or property damage, use extreme care when handling paint.

- Paint in the box is a liquid. The paint box is not under pressure, but if the connection is not secure, the paint will flow out when box is turned upright.
- If paint is spilled, immediately turn box so that the nozzle is pointing up and away from the open port. Soak up paint with rags and rinse with water.
- Clean all paint from the unit, rinse the paint tray and dry unit completely.

Safety and Instructions Decals

The decals are designed to give the operator and mechanic operational and service information. Use these decals as an extension of this manual. Do not remove or obliterate the decals. Replace unreadable or missing decals.

It is the owner's responsibility to make certain that the operators and mechanics read and understand all decals before operating this machine.

WARNING

Specific safety warning decals are located on the equipment near the immediate areas of potential hazards. Do not remove or obliterate these decals. Replace them if they become non-readable.

Operation

Safe Operating Practices

WARNING

Do not leave the battery connected when not in use for extended time. This will drain the battery.

Refer to the Safety Precautions section of this manual for operational and personal safety information.

WARNING

Do not operate the StarLiner without all covers properly in place and secured. Failure to do so could result in damage to the electronic components or paint box.

Preparing for Painting

Step 1: Charging and Battery

A. Open the battery compartment using the Battery Cover Thumb Screw; turn counter-clockwise to loosen. Lift the Battery Cover panel up to reveal the inside components.

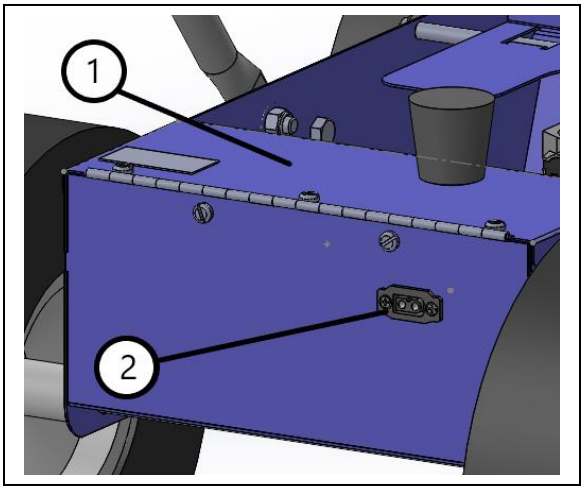
B. Connect the Y-Splitter Cable to: 1) the Rear Charging Port Cable; 2) the Battery Cable w/Fuse Holder terminal cable and 3) the Circuit Board Cable.

C. The charger should be plugged into a working 120VAC outlet. The light on the charger will appear green when plugged in and ready to use.

D. Connect the wire from the Charger to the Rear Charging port at the rear of the machine. Swing up the protective spring-loaded cover. Insert the yellow terminal into the exposed jack. Make sure to align the terminal with the jack – it will only insert in the correct orientation.

E. When the charger is connected to the battery, the light will turn red. If the light does not turn red, check the fuse and wire connections. The battery should remain charging, uninterrupted, until the light changes to green. Once the light changes to green, unplug the battery and unplug the charger from the wall.

Battery Compartment



1. **Battery Compartment –** this compartment is where the battery is stored.

2. **External Charger Port –** This is where the external charger is connected to the unit. This will charge the battery when connected to a 120V outlet.

Step 2: Handle Setup

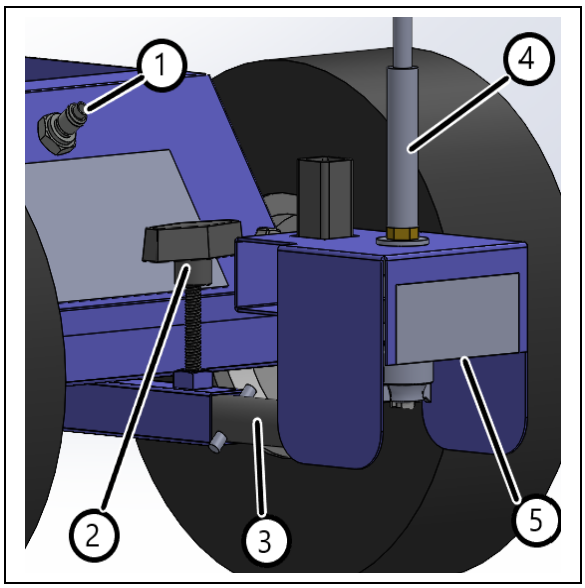
A. Loosen the black plastic X-Handle Nuts located at mid-point of the handle.

B. Remove the lower black plastic X-Handle Nuts and 5/16”-18 x 3/4” Hex Head bolts from StarLiner main body

C. Straighten the handle by pivoting the Upper Handle Assembly up and away from main body unit until the Upper Handle is parallel with the Lower Handle. It will be in place when the handle snaps into place.

D. Tighten the mid-handle Wing Nuts. Align the lower bolt holes on the lower handle with the main frame. Reattach the bolts and Wing Nuts.

Step 3 Setup and Operation of the Spray Box



1. **Paint Hose Quick Connect** – Connection used to join the Self-Coiling Hose to the main body
2. **Adjustment Arm Lock Knob** – used to lock in the Adjustment Arm for the distance from the unit Spray Head – used to spray the paint onto the surface
3. **Adjustment Arm** – used to move the Adjustment Arm to the desired distance from the unit Connection used to join the Self-Coiling Hose to the main body
4. **Self-Coiling Paint Hose** – used to bring paint from the pump to the Spray Head
5. **Spray Head** – used to spray the paint onto the surface

A. Located on each side and the front of the StarLiner main body is a square tube. Insert the Adjustment Arm to select where to apply paint.

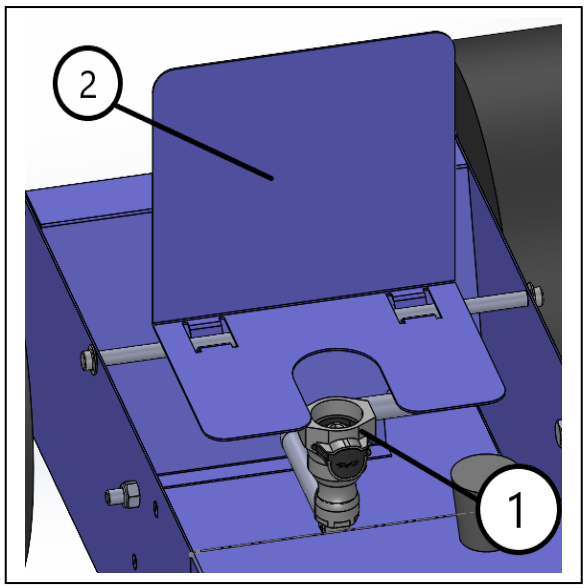
B. Insert the T-Knob winged bolt into the nut. This bolt tightens and locates the Height Adjustment Arm.

C. Locate the Plastic Head Thumb Screw, on the rear of the Spray Head, and loosen it by turning it counter-clockwise. Slide the Spray Box through the square hole over the Adjustment Arm and tighten the thumb screw at the desired height. The Spray Box will have a paint spray nozzle installed and the Self-Coiling Paint Hose attached.

D. Connect the Spray Box paint hose by pushing the quick-connect onto the male connector on the font of the StarLiner. You will hear an audible click when a positive connection is made. Be sure the paint hose does not interfere with or become pinched by the tire or any moving parts. To disconnect, press the metal thumb tab on the white quick-connect. The connector should pop off from the male connector.

E. Adjust the height of the Spray Box to the desired position and retighten the Thumb Screw, turning clockwise. To change the line width, raise or lower the spray box

Step 4: Paint Box Tray



1. **Paint Box Quick Connect** – StarLiner Paint Box is connected here to allow the paint to flow to the pump.
2. **Paint Box Tray** – StarLiner Paint Box is placed here when in use.

A. Thoroughly mix the paint box as directed on the packaging.

B. Locate the port on the bladder of the paint box. Pull the spout up to fully expose the neck of the bladder.

C. Remove the shipping cap and replace with the

quick connect paint plug.

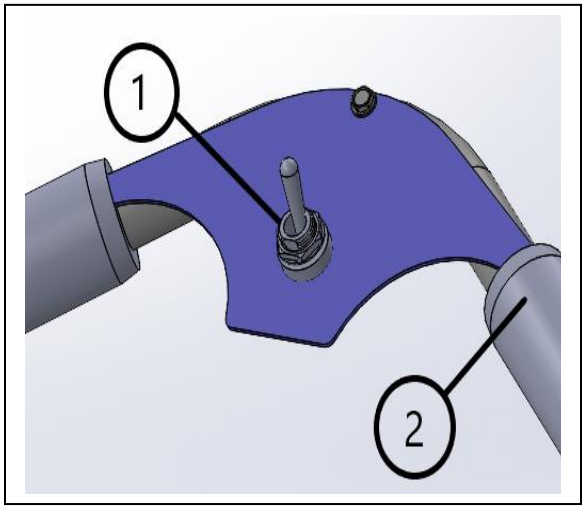
A. Tilt the Paint Tray towards the front of the machine. The slot should be facing upwards.

B. Slide the paint box onto the tray making sure the neck slides into the slot on the tray.

C. Connect the Paint Box Quick Connect to the paint box quick connect firmly. An audible “Click” should be observed.

D. Tilt the paint box and tray upright vertically, the bottom of the box will touch the battery cover

Step 5: Test the Operation



1. **On/Off Toggle Switch** – this switch turns on the main pump, which will start the flow of paint. This switch is located on the handle, between the hand grips.
2. **Upper Handle** – this is the upper half of the handle system that is unfolded

A. We recommend trying the StarLiner with water before using paint. Connect the clean-out hose to the quick connect on the StarLiner. You will hear an audible click when the hose is connected properly. After connecting, place the clean-out hose in a container filled with water. Turn the On/Off Toggle Switch to the “ON” position. The pump should draw the water from the container.

B. Move the StarLiner in a forward direction to check the line width. Turn the On/Off Toggle Switch to the “OFF” position to stop the flow of water.

C. Adjust your line width accordingly by moving the Spray Box up or down the Adjusting Arm. You can also change tips to achieve different line widths.

D. When you are ready to use the paint, disconnect the clean-out hose by pressing the button on the top of the Quick Connect fitting located on the machine side of the hose. The Clean-out hose should pop off. Follow the paint preparation instructions on the StarLine paint carton.

E. Insert the StarLine Paint Box carton onto the StarLiner Paint Tray assembly. The plastic lip of the paint bag will slide through the slot in the front edge of the Paint Tray. This will hold the bag in place while connecting to the quick connection. Support the box and connect the StarLiner paint connector with the StarLiner paint. You will hear an audible click when the proper connection is made.

F. Once secure, stand the StarLiner Paint box up vertically, the bottom of the box will touch the battery cover. You are now ready to begin striping. We recommend practicing in an off area so you can get accustomed to the operation of all switches and to select the tip that best suits your needs.

WARNING

Always support the spray box with your hand when adjusting the height or sliding the spray arm in and out. Failure to do so may cause damage to the spray box or spray arm.

NOTICE

Water typically sprays 1/3 farther than paint

WARNING

Pioneer StarLine Paint is specifically designed to work with the StarLiner machine. ANY other paint used with this machine may result in poor performance, clogging and/or pump damage.

NOTICE

Not using Pioneer StarLine Paint will void any and all warrantees associated with the StarLiner.

NOTICE

Walking speed plays the largest part in how far you can paint with one box of paint.

NOTICE

Battery Life:

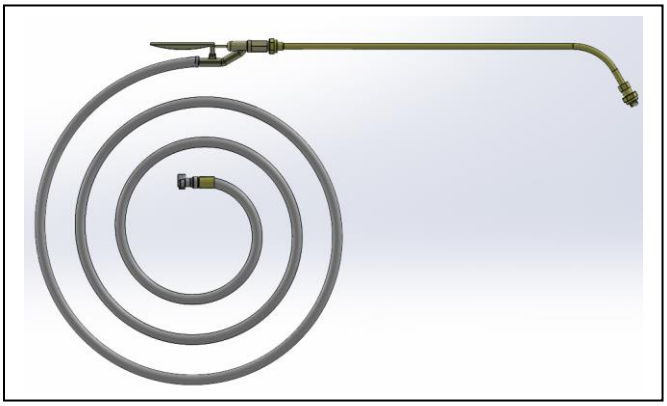
The battery life is approximately 4-6 hours of continuous operation.

Optional Equipment

Spray Wand Assembly

A Spray wand Attachment can be added to the StarLiner. This will allow the user to paint to an area.

Part Number 1033



Spray Tip Options		
Part	**Tip Number**	**Description**
0134	5003	2” to 4” 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

Cleaning of the StarLiner

Once you are finished striping, it is recommended that you flush the StarLiner paint lines free of paint. Failure to do so may cause damage to your StarLiner. The StarLiner is shipped with a clean-out hose and a gallon of Star P.H.D. cleaner

WARNING

Do not expose the main component box to water. Do not hose down this machine, as it has an electrical system and may cause permanent damage

A. Disconnect the paint box from the unit.
B. Insert the Clean-out Hose to the Paint Box Quick Connect on the main pump hose.
C. Dip the Clean-out hose in a supply of water.
D. Turn the StarLiner “On” and let run for a short time. Let machine sit for several minutes, this will help get all of the loose paint out. Then turn the StarLiner “On” and let run, when the solution comes out clear from the tip, the hoses are properly cleaned.
E. Remove the hose from the water and remove the Clean-out hose.
F. Unscrew the cap on the Star P.H.D. cleaner box and screw on the Container Paint Plug adapter, then push onto the Quick Connection. You will hear an audible click when properly connected.
G. Once secure, stand the StarLiner P.H.D. cleaner box up vertically, the bottom of the box will touch the battery cover.
H. Turn the StarLiner “On” and let run for a short time. Let machine sit for several minutes, this will help get all of the loose paint out. Then turn the StarLiner “On” and let run, when the solution comes out clear from the tip, the hoses are properly cleaned. Remove and clean the spray nozzle tip and screen. Finally, clean the hose connections for the StarLine paint box and StarLiner.

WARNING

Do not use wire or any other rigid object to clean the nozzle tip, as this may cause damage. This will result in poor spray performance

Striping Tips

- When striping, it is recommended to have the StarLiner in motion before turning it on. This will eliminate the possibility of having a large area of paint at the beginning of the line.
- Always test in an off area
- Be sure you are familiar with all functions of the StarLiner
- For a sharp cut off, place a piece of cardboard at the end of the line.
- Clean or replace the nozzle tip and screen after every use.
- Do not run your pump dry. This will greatly add wear and tear to your pump and shorten its life.
- When transporting the StarLiner in a vehicle, disconnect the StarLiner paint box and battery. This will help you avoid accidental paint discharge.
- When folding the handle, be cautious to not pinch any wires.

How to Store

1. Flush the StarLiner thoroughly.
2. Clean off all loose paint.
3. Remove hoses and dry completely.
4. Store StarLiner in a heated building (if possible).
5. Remove the battery and charge once a month when not in use.

Troubleshooting

The majority of operating problems that occur with a system can be traced to improper adjustments or delayed service. A consistently applied preventative maintenance program, as outlined in the *Maintenance* section of this manual, will prevent many problems. The following chart is designed to help you locate a problem by suggesting probable causes and the recommended solutions.

SYMPTOMS	PROBABLE CAUSES	SUGGESTED REMEDIES
StarLiner will not start	Battery low on electricity	Make sure the battery is charged
	Electricity circuit not completed	Check the fuse
		Make sure the battery barrel connection is plugged in
		Make sure the pump blade terminals are plugged in
		Make sure Toggle Switch blade terminals are plugged in
	No paint flow	Make sure the tip is not clogged
The Spray pattern is too narrow or wide	Spray Box not in the correct position	Adjust the nozzle assembly up or down
		Re-shake the paint box to be sure it is properly mixed
		Replace screen or nozzle, it may have become clogged or worn beyond use

SYMPTOMS	PROBABLE CAUSES	SUGGESTED REMEDIES
Battery	Battery not charged fully; Check voltage	Place voltmeter probes on battery terminals – red probe to positive terminal, black probe to negative terminal. Reading should be 12v to 13v. If volts drop at rapid rate, the battery is no longer good. If the reading does not drop below 12v, the battery is still good.
Battery Charger	Battery Charger not showing Green	Charger not plugged into an outlet
		Not connected to the battery; Light appears green. When the charger is first connected to the battery, the light should change from green to red. It will remain red while the battery charges, and will turn green when the battery is fully charged.
	Charger is defective	If the light is not present after you plug it in, the charger is defective. The charger continues to charge the battery after the light turns to green. Do not leave the charger plugged in for long periods of inactive use.

SYMPTOMS	PROBABLE CAUSES	SUGGESTED REMEDIES
Handle Toggle Switch	Wire damaged or cut	Cut the wire and splice the wire to reattached. To check the switch, disconnect the battery and flip the switch to the off position. Check for continuity by sticking probes into the back crimps on the blue wire and white wire. The meter should read zero. With the probes in the same location, toggle the switch to the “on” position. If continuity is present, the switch is good.
Fuse	Fuse Fault Protection (Blown Fuse)	The wires are attached in reverse. This means that the fuse wire is attached to the black terminal on the battery
	Overheated or seized pump	Allow pump to cool. Remove cover of pump to examine the inner diaphragm; check for broken, split or other damage. Replace if necessary. Check for plugs in the tubing leading to or from the pump.
	Damaged or cut wires touching the positive to the negative	Examine the wires and replace if damaged.
	Faulty circuit board.	See Circuit Board Section

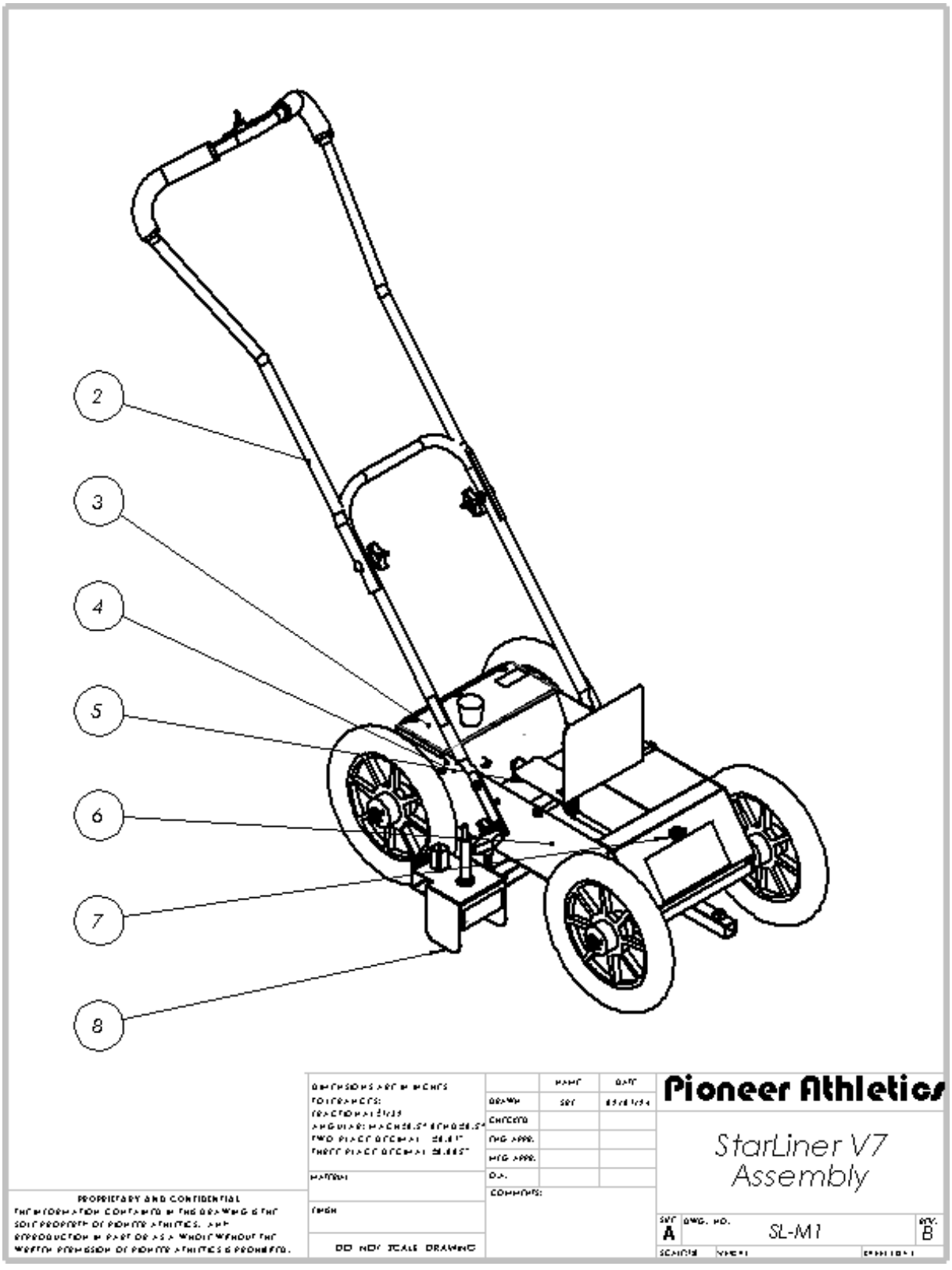
SYMPTOMS	PROBABLE CAUSES	SUGGESTED REMEDIES
Pump	Pressure switch screw on the pump is not turned all the way in	Using a small screw driver, turn the set-screw clockwise until fully turned in to stopping
	Clogging from poorly shaken, expired or frozen paint	Res-hake paint box. Replace expired paint. Replace frozen paint.
	Faulty circuit board.	See Circuit Board Section
Circuit Board	Visual check Burned-out or Defective circuit board or Damaged wires	Replace Circuit Board
	Check Voltage	With a fully charged battery, connect the voltmeter to the harnesses between the circuit board and pump. Place the red probe on the red wire and black probe to the black wire When the battery is disconnected, the reading should be 0.0v. • When the battery is connected and the toggle switch is in the “Off” position, the reading should be between 5.3v and 5.9v. If the reading is 0.0v, the circuit board or the wiring between the battery and circuit board may be defective. If the toggle switch is in the “On” position, the reading should be between 12v and 13v.

Maintenance Record

Date:	Maintenance/Service Performed:	Date:	Maintenance/Service Performed:
Date:	Maintenance/Service Performed:	Date:	Maintenance/Service Performed:
Date:	Maintenance/Service Performed:	Date:	Maintenance/Service Performed:
Date:	Maintenance/Service Performed:	Date:	Maintenance/Service Performed:
Date:	Maintenance/Service Performed:	Date:	Maintenance/Service Performed:

Drawings & Part List

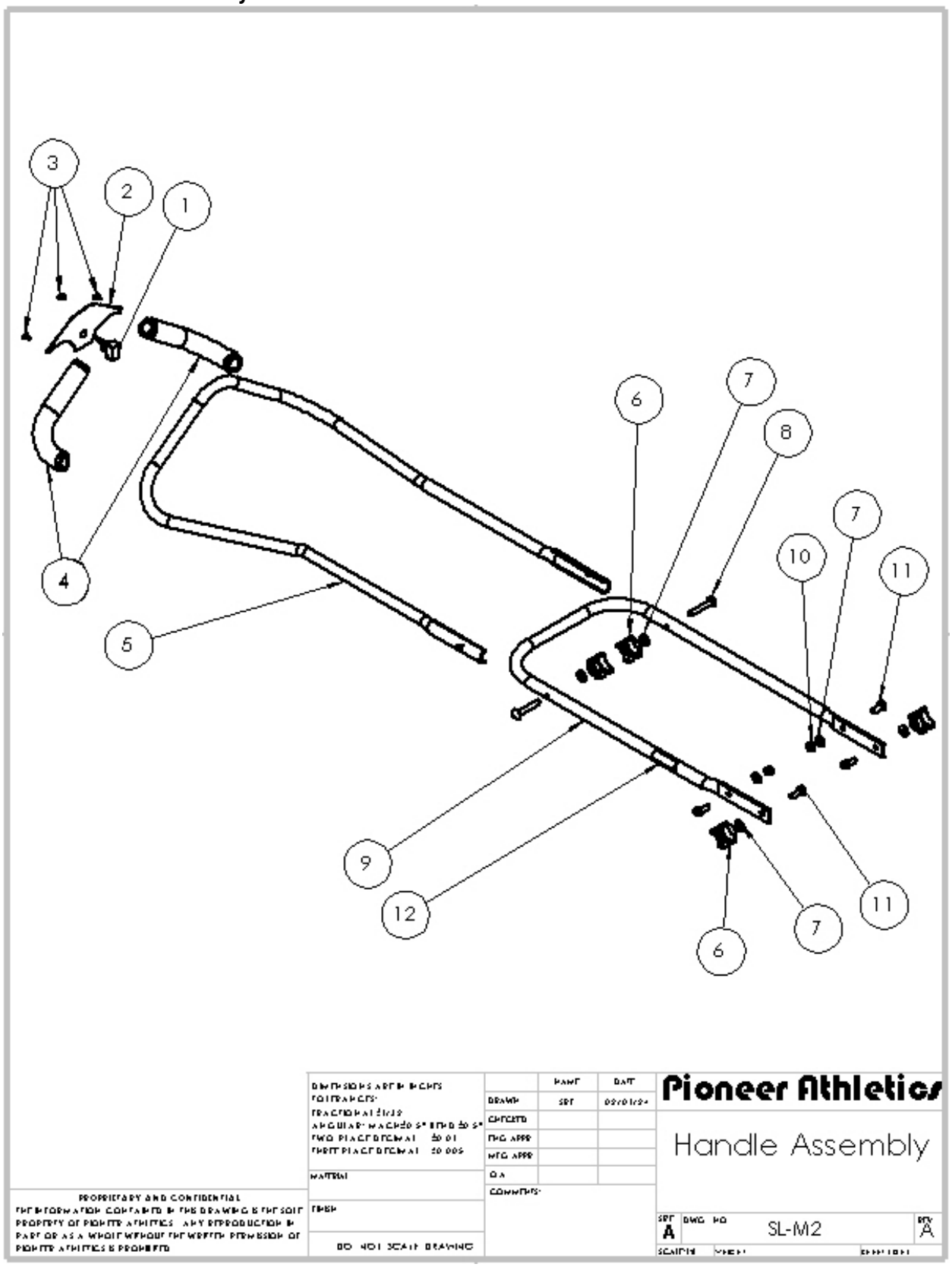
SL-M1 General Machine



SL-M1 General Machine Parts List

Item	Description	Sheet
1	StarLiner Complete Unit	SL-M1
2	Handle Assembly	SL-M2
3	Battery Cover Assembly	SL-M3
4	Battery Area Assembly	SL-M4
5	Paint Box Assembly	SL-M5
6	Main Body Assembly	SL-M6
7	Pump Cover Assembly	SL-M7
8	Spray Box Assembly	SL-M8
SL-M1 STARLINER V7 ASSEMBLY		

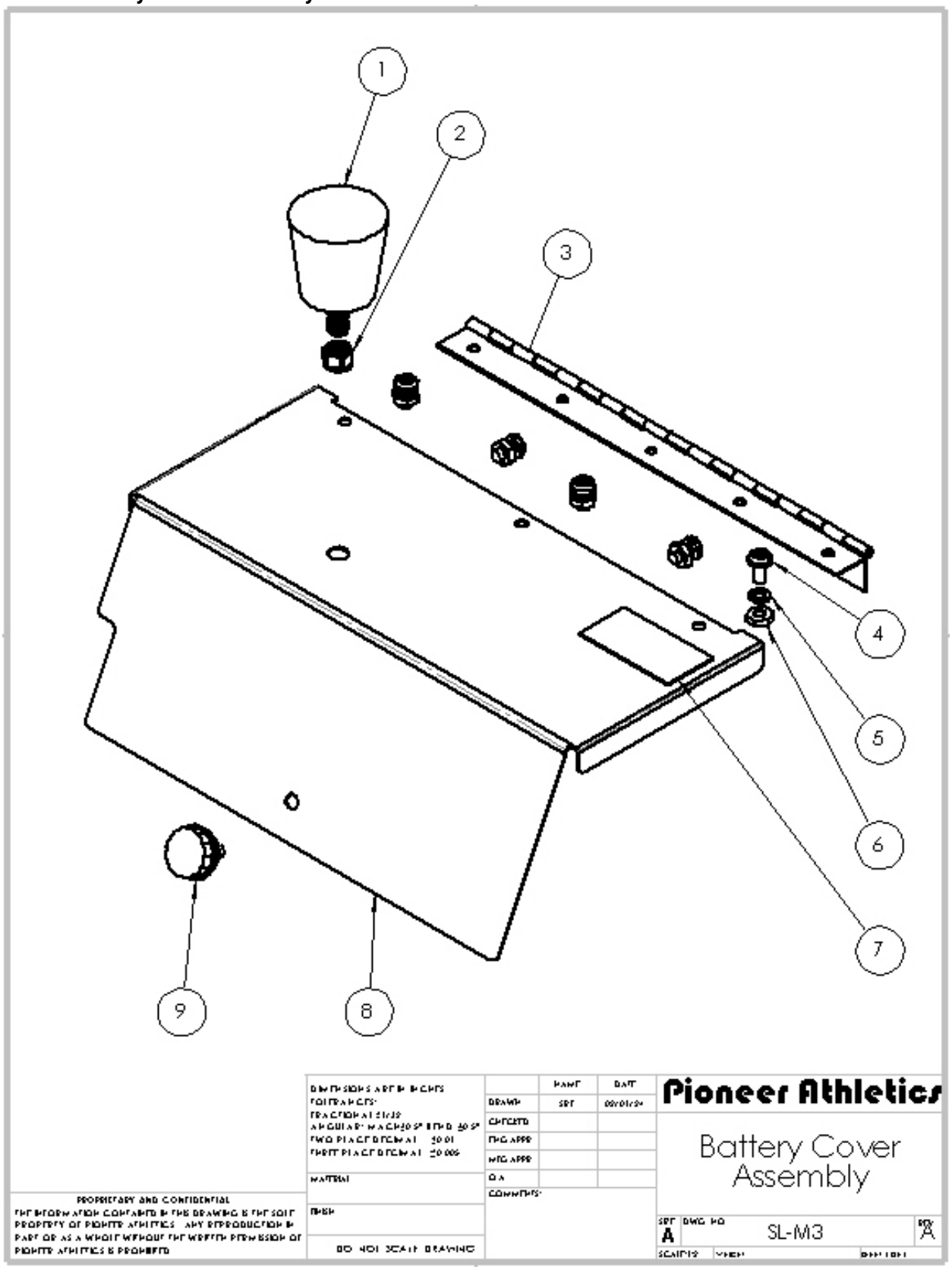
SL-M2 Handle Assembly



SL-M2 Handle Assembly Part List

ITEM NO.	Part Number	DESCRIPTION	QTY.
1	1000	Toggle Switch (Handle)	1
2	SL7170	Switch Plate	1
3	CS009	#6 Self Tapping TEK Screw	3
4	1023	Handle Grips	2
5	SL3370-A	Upper Handle	1
6	1017	Handle Wing Nut	4
7	W080	1/4 Flat Washer	6
8	CS235	5/16-18 x 2 Carriage Bolt	2
9	SL3370-B	Lower Handle	1
10	N070	5/16-18 Nylock Nut	2
11	CS195	5/16-18 x 3/4 Hex Head Cap Screw	4
12	SSC	Cable Caution Sticker	1
SL-M2 HANDLE ASSEMBLY			

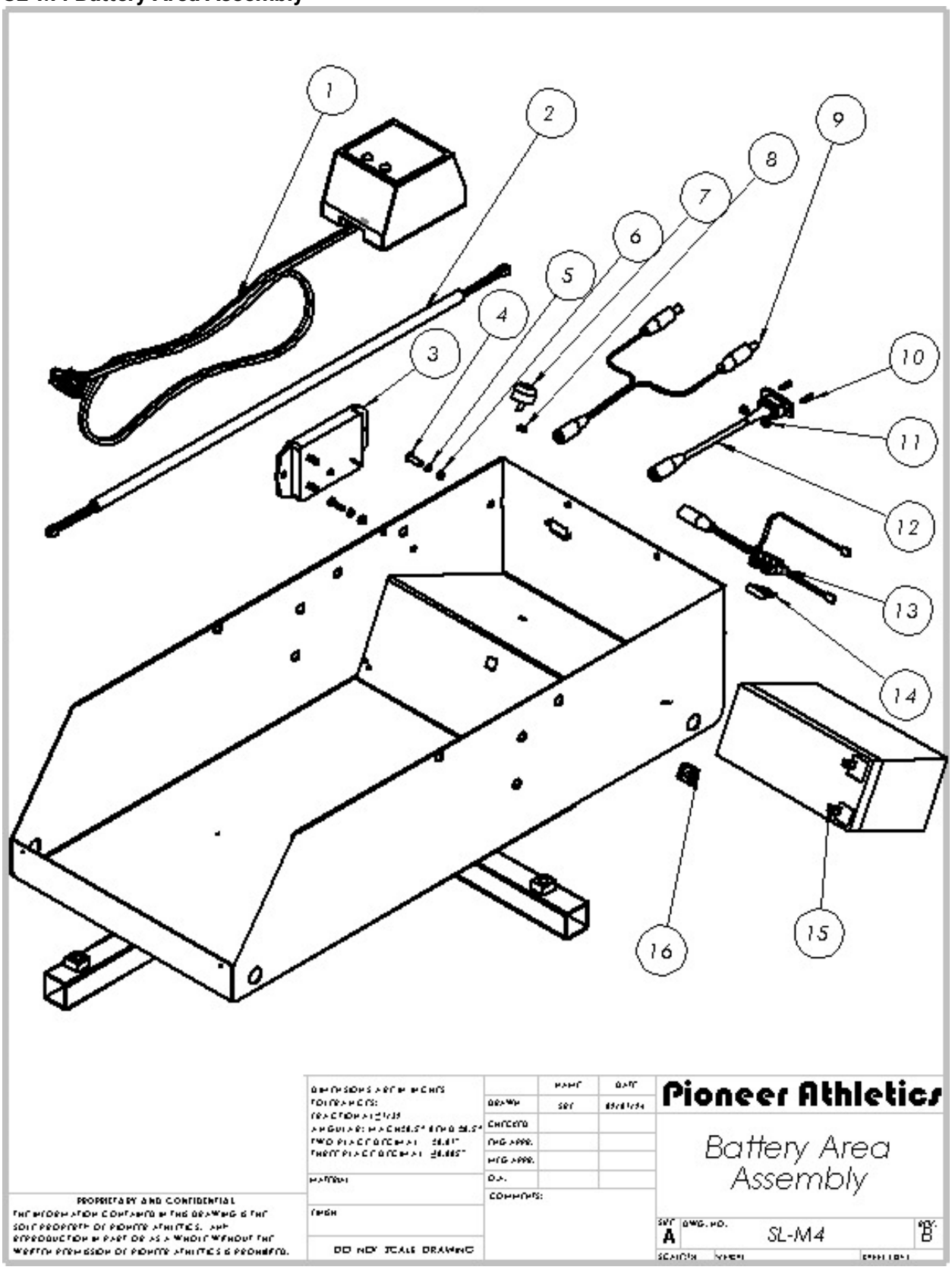
SL-M3 Battery Cover Assembly



SL-M3 Battery Cover Assembly Part List

ITEM NO.	Part Number	DESCRIPTION	QTY.
1	**1015**	**Rubber Bumper**	**1**
2	N070	5/16-18 Nylock Nut	1
3	SL3893	Hinge	2
4	CS060	10-32 x 3/8 Round Head Machine Screw	5
5	W050	Split Lock Washer	5
6	N020	10-32 Hex Nut	5
7	SSB	Battery Disconnect Warning Sticker	1
8	SL7120	Battery Cover	1
9	CS055	Battery Cover Thumb Screw	1
SL-M3 BATTERY COVER ASSEMBLY			

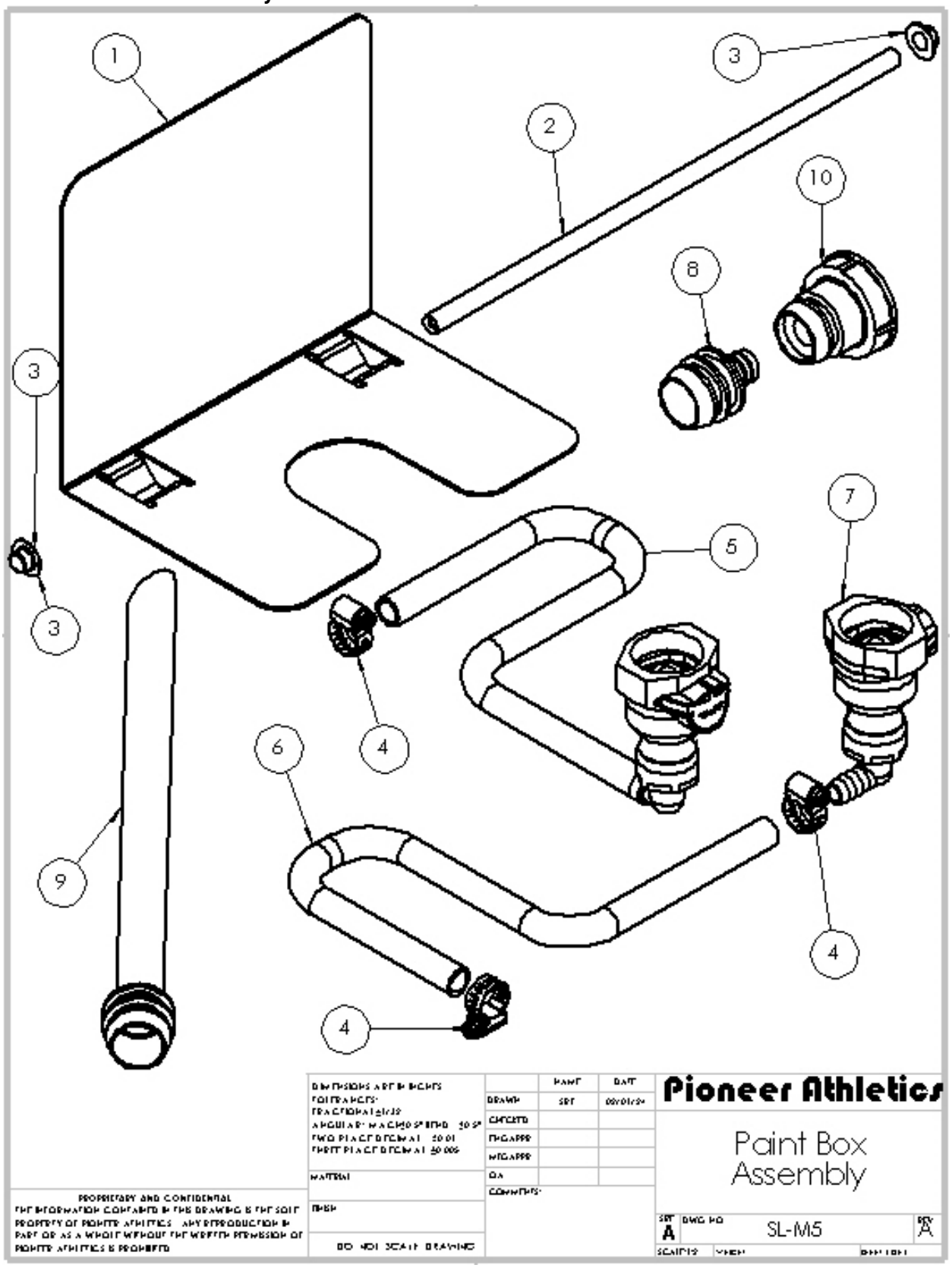
SL-M4 Battery Area Assembly



SL-M4 Battery Area Assembly Part List

ITEM NO.	Part Number	DESCRIPTION	QTY.
1	1051	Automatic Battery Charger	1
2	WCB2P	Wire – Circuit Board to Pump	1
3	SCB	Circuit Board	1
4	CS010	6-32 Round Head Machine Screw	2
5	W030	#6 Split Lock Washer	2
6	N010	6-32 Hex Nut	2
7	RBSS	Rubber Battery Bumper	1
8	N015	8-32 Hex Nut	1
9	1037	Y-Splitter	1
10	CS555	4-48 x 3/8 Flat Head Screw	2
11	N080	4-48 Hex Nut	2
12	1047-A	Rear Charging Port Cable	1
13	1021	Battery Cable w/Fuse Holder	1
14	1024	3A Fuse	1
15	1005	Battery – 12V 7A	1
16	N025	10-32 Panel Cage Snap-in Nut	1
SL-M4 BATTERY AREA ASSEMBLY			

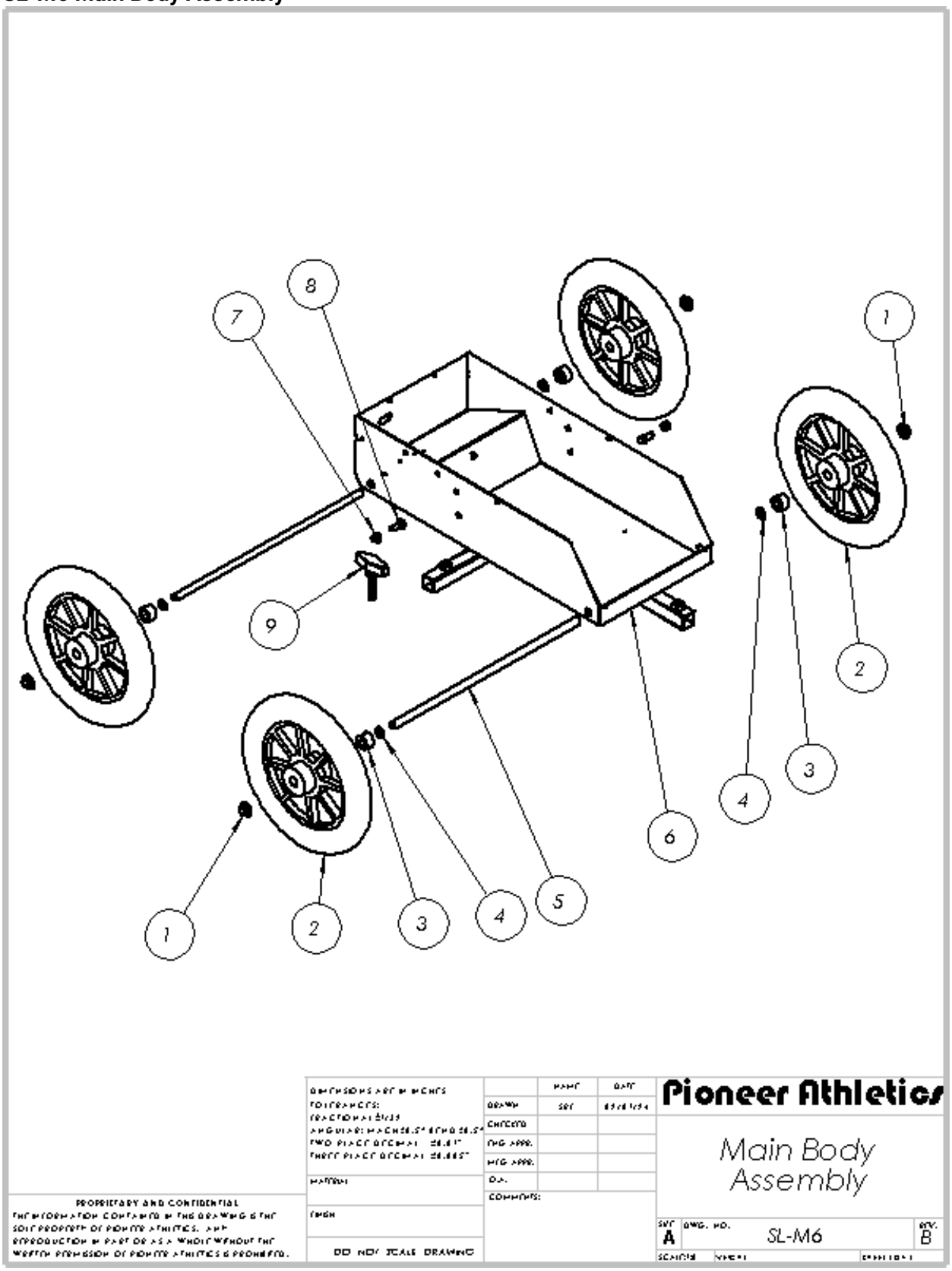
SL-M5 Paint Box Assembly



SL-M5 Paint Box Assembly Part List

ITEM NO.	Part Number	DESCRIPTION	QTY.
1	SL7160	Paint Tray	**1**
2	SL3375	Paint Tray Rod	1
3	N068	Push Nut – Paint Tray Rod	2
4	1014	3/4” Hose Clamp	3
5	1018	Hose Assembly (includes Quick Connect & 14” Hose)	1
6	HO3/8F	Hose (only) – Pump to Paint Box 14”	1
7	1010	Paint Box Quick Connect	1
8	1012	Clean Out Plug (only)	2
9	1013	Clean Out Hose 12” Assembly	1
10	1009	Container Paint Plug	1
SL-M5 PAINT BOX ASSEMBLY			

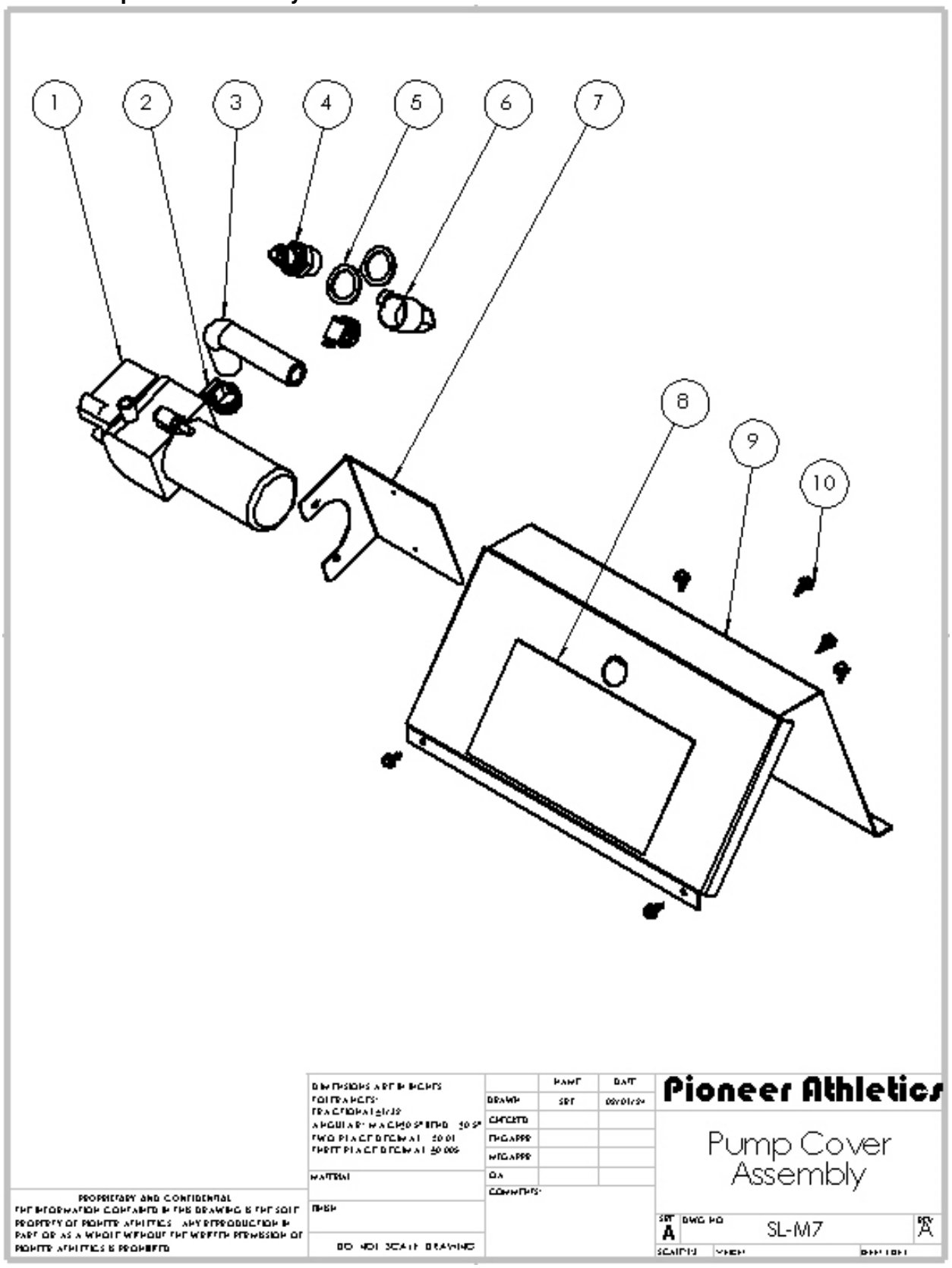
SL-M6 Main Body Assembly



SL-M6 Main Body Assembly Part List

ITEM NO.	Part Number	DESCRIPTION	QTY.
1	N095	Push Nut for Axle	**4**
2	1035	StarLiner Wheel	4
3	S050	V7-B Wheel Spacer	4
4	W135	Flat Fiber Washer	4
5	SL3374	Axle	2
6	SL7100	Frame	1
7	N070	5/16-18 Nylock Nut	2
8	CS195	5/16-18 x 3/4” Hex Head Cap Screw	2
9	1675A	T-Knob Bolt	1
SL-M6 MAIN BODY ASSEMBLY			

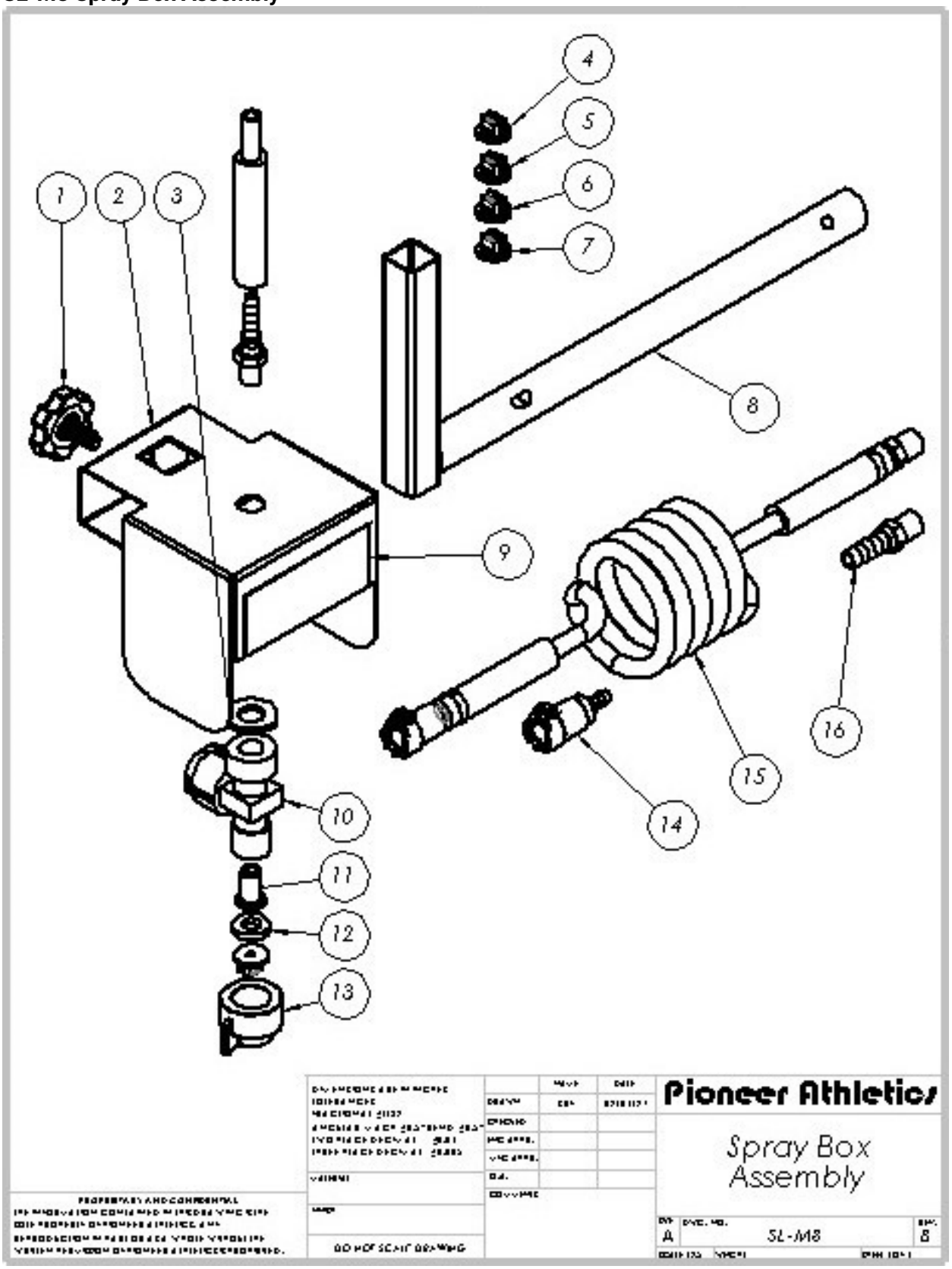
SL-M7 Pump Cover Assembly



SL-M7 Pump Cover Assembly Part List

ITEM NO.	Part Number	DESCRIPTION	QTY.
1	1001	Pump	**1**
2	1014	3/4" Hose Clamp	2
3	1040	Fitting to Pump Hose 5”	1
4	1026	Straight Shutoff Valve	1
5	1007	Metal Sealing Washer	2
6	1022	Elbow Hose Barb	1
7	SL7150	Pump Mounting Bracket	1
8	SSL	SSL Sticker Large	1
9	SL7110	Pump Cover	1
10	CS009	#6 Self Tapping TEK Screw	6
SL-M7 PUMP COVER ASSEMBLY			

SL-M8 Spray Box Assembly



SL-M8 Spray Box Assembly Part List

ITEM NO.	Part Number	DESCRIPTION	QTY.
1	CS255	Thumb Screw	**1**
2	SL7190	Spray Shield	1
3	W170	Nozzle Spacer	1
4	0134	Nozzle Spray Tip #5003	1
5	1574	Nozzle Spray Tip #6503	1
6	1577	Nozzle Spray Tip #6504	1
7	1576	Nozzle Spray Tip #8003	1
8	SL7180	Height Adjusting Tube	1
9	SSS	Spray Box Sticker	1
10	1019	Nozzle Check Valve Body	1
11	0115P	Nozzle Screen	1
12	1020-B	Gasket	1
13	1020-A	Cap	1
14	1025	Spray Shutoff – Hose Barb	1
15	1004	Coiled Hose Assembly	1
16	SL3903	Hose Barb Male Fitting	1
SL-M8 SPRAY BOX ASSEMBLY			

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Limited Warranty

For a period of six months from date of purchase, PIONEER MANUFACTURING COMPANY will replace for the original PURCHASERS, any part or parts* of the StarLiner, 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 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 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 STARLINER 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 STARLINER. 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 STARLINER have been paid in full.

* The battery, battery charger and pump are covered exclusively by the manufacturer's warranty–for 3 months.