OWNER'S MANUAL

FUNDAR DLX MMVIII

LUXEPAINTBALL.COM + 866.573.LUXE

WARNING

* TREAT EVERY PAINTBALL MARKER AS IF IT WERE LOADED. *

* NEVER LOOK DOWN THE BARREL OF A PAINTBALL MARKER. *

* KEEP THE LUXE® MARKER ON SAFE (POWER OFF) UNTIL READY TO SHOOT. *

* KEEP YOUR FINGER OFF THE TRIGGER UNTIL READY TO SHOOT. *

* NEVER POINT THE LUXE® MARKER AT ANYTHING YOU DON'T WISH TO SHOOT. *

* DO NOT SHOOT FRAGILE OBJECTS SUCH AS WINDOWS. *

* KEEP THE BARREL BLOCKING DEVICE ON THE LUXE® MARKER'S MUZZLE WHEN NOT SHOOTING. *

* ALWAYS REMOVE PAINTBALLS AND DEGAS THE LUXE® MARKER BEFORE DISASSEMBLY. *

* STORE AND TRANSPORT THE LUXE® MARKER UNLOADED AND DEGASSED IN A SECURE PLACE. *

* FOLLOW ALL MANUFACTURER'S WARNINGS AND INSTRUCTIONS FOR PROPELLANT * SOURCE HANDLING, STORAGE, AND FILLING.

LUXE

PREMIUM ELECTROPNEUMATIC MARKER

THE PRECAUTION LIST AND OPERATOR'S MANUAL MUST ALWAYS ACCOMPANY THE PRODUCT IN THE EVENT OF RESALE OR NEW OWNERSHIP.

* FIRST EDITION *

*WHILE EVERY EFFORT HAS BEEN MADE TO ENSURE THAT THE INFORMATION CONTAINED IN THIS GUIDE IS ACCURATE AND COMPLETE, NO LIABILITY CAN BE ACCEPTED FOR ERRORS OR OMISSIONS. DLX TECHNOLOGY GROUP RESERVES THE RIGHT TO CHANGE THE SPECIFICATIONS OF THE LUXE® MARKER AT ANY TIME WITHOUT PRIOR NOTICE. THE LATEST VERSION OF THIS MANUAL MAY BE DOWNLOADED FREE OF CHARGE AT **LUXEPAINTBALL.COM**.*

DLX

CONTENTS

THIS IS NOT A TOY. LUXE® ELECTROPNEUMATIC .68 CALIBER PAINTBALL MARKER. Misuse/careless use may cause serious injury or death. Eye protection designed specifically for paintball use must be worn by the user and anyone within 200 yards (183 meters). Must be at least 18 years old to purchase, 14 years old to use or operate with adult supervision, 10 years or older to operate on insured paintball fields meeting ASTM-standard F1777-97. Please read entire operating manual before using. **DLX TECHNOLOGY GROUP. P.O. BOX 1802 GREENSBURG, PA 15601.**

WARNING

· PLEASE SEE SECTION 6.9 FOR ADDITIONAL IMPORTANT LUXE® SAFETY INFORMATION ·

ORIENTATION

GET TO KNOW YOUR NEW LUXE® MARKER

1

ORIENTATION 1.1 QUICK START

STEP ONE CHARGE THE BATTERY (INCLUDED)

MAKE SURE THE LUXE®'S INTERNAL LITHIUM-POLYMER battery is fully charged. Remove the rubber grip from your Luxe® and connect the charger to the charging port on the front of the grip frame before plugging the charger in to a domestic electrical outlet. The included charger will operate on either 110 or 240 volt standard AC power (plug adapters may be needed outside of US, Canada or Mexico.) The LED on the charger will glow solid red while charging, and solid green when the battery is fully charged. Reinstall the rubber grip.

2

STEP TWO AFFIX THE BARREL BLOCKER (INCLUDED)

ASSEMBLE THE LUXE® BARREL (*see* HARDWARE 3.4) and screw it into your Luxe®. Slide the included barrel blocker over the barrel and secure its cord as far back on the Luxe® body as possible, cinching it tight. The barrel blocker is a critical piece of paintball safety equipment – nearly as important as paintball goggles. The barrel blocker must be fully seated on the marker's muzzle and secured in place with its strap any time the marker is stored or handled in an area where people are not properly protected by paintball goggles or paintball field netting.

3

STEP THREE FILL & INSTALL YOUR AIR TANK (SOLD SEPARATELY)

YOUR LUXE® IS DESIGNED TO OPERATE PROPERLY WITH high pressure compressed air (HPA – also commonly referred to in paintball as nitrogen or nitro) as its power source. Mount your air system and have it filled, following its manufacturer's directions. If using a screw-in style compressed air system, first turn the Luxe® bottom-line control knob counterclockwise to its limit, then screw in the air system into the back of the ASA.

4

STEP FOUR INSTALL YOUR LOADER (SOLD SEPARATELY)

THE ANTI-CHOP VISION SYSTEM IN YOUR LUXE® will allow it to work with any loader. Best performance and highest rate of fire however, will only be possible with a high performance force-feed loader system. Open the marker's locking feedneck by pulling the lock lever away from the feedneck, then insert the loader and secure it in place by folding the lever back to its locked position.

5

STEP FIVE TURN ON AIR

GENTLY GAS UP YOUR LUXE® BY SLOWLY TURNING on the air system or by turning the Luxe® bottom-line control knob clockwise.

WARNING

A GENTLE RISE IN PRESSURE IS IMPORTANT, AS A SUDDEN BLAST MAY REDUCE THE SERVICE LIFE OF PRESSURE SEALS WITHIN YOUR LUXE®.

The Luxe® bottom-line control knob must be turned off (counterclockwise) before removing screw-in compressed air systems.

6

STEP SIX POWER ON YOUR LUXE® MARKER

TURN THE MARKER ON BY PRESSING THE power button. Turn it off by pressing and holding the power button for 2 seconds. When the Luxe® is on, the right side LED will glow blue, and the left side LED will glow blue to indicate that the breech is empty, or blink blue to indicate that the Luxe® is loaded.

WARNING

ALTHOUGH THE POWER BUTTON SERVES AS THE LUXE®'S SAFETY SWITCH TO PREVENT ACCIDENTAL FIRING, IT SHOULD NEVER BE RELIED UPON IN PLACE OF A BARREL BLOCKER AND PROPER PAINTBALL EYE PROTECTION.

7

STEP SEVEN ADJUST LUXE® VELOCITY

FILL THE HOPPER WITH PAINTBALLS and turn it on. While wearing ASTM compliant paintball goggles, in an area where all bystanders are protected, remove the barrel blocker and fire over a chronograph to measure the velocity. Using a 5/32-inch allen wrench on the adjuster in the bottom of the vertical regulator, turn clockwise to increase velocity/pressure, and counterclockwise to decrease. Take three or four shots after every adjustment to allow the gas pressure inside your Luxe® to stabilize. Adjust until the marker is firing consistently within the limits for the field where you are playing. For safety reasons, never adjust your Luxe® to fire at greater than 300 feet per second.

ORIENTATION

GET TO KNOW YOUR NEW LUXE® MARKER

ORIENTATION 1.2 OVERVIEW

* 1 POWER/LED CLUSTER
* 2 TRIGGER
* 3 GRIP
* 4 LUXE® INTEGRATED AIR MICRO
* 5 LUXE® INTEGRATED AIR VERTICAL REGULATOR
* 6 LUXE® QUICK STRIP PLUG
* 7 CLAMPING FEEDNECK
* 8 VISION EYE COVER (2)
* 9 LUXE® 3-PIECE BARREL SYSTEM

WEIGHT 27.3 *oz*	OPERATING PRESSURE 190 *psi*	POWER SOURCE LiPo Battery	OPERATING METHOD Electropneumatic	ANTI-CHOP SYSTEM Vision Break Beam	LUBRICANT SL33K
DIMENSIONS 8.25 x 7 *in*	PAINT SIZE .68 *caliber*	PROPELLANT Compressed Air	RATE OF FIRE 27.3 *oz*	FIRING MODES 15	BARREL THREADS Smart Parts

FIG. 1

ORIENTATION 1.3 INSTALLING THE BARREL BLOCKER

THE BARREL BLOCKING DEVICE IS A CRITICAL PIECE of paintball safety equipment—nearly as important as paintball goggles. The Barrel Blocker serves to protect against accidental discharge of a paintball by catching it before it can cause harm. A Barrel Blocker is included with the Luxe® and must be used every time it is handled in an area where people or property are not properly protected by paintball goggles or paintball field netting. To use the Barrel Blocker simply slip it over the end of the barrel and stretch its cord back over the rear of the Luxe® [FIG. 1.] Use the strap's adjuster to cinch the strap tight, so that the Barrel Blocker can provide protection against accidental discharge of a paintball.

WARNING

THE BARREL BLOCKER SHOULD ONLY BE REMOVED WHEN THE LUXE® IS ON A "LIVE" PAINTBALL FIELD AND ALL PERSONS INVOLVED ARE WEARING PROPER PAINTBALL PROTECTION.

ORIENTATION 1.4 SELECTING AND INSTALLING A LOADER

YOUR LUXE® IS A HIGH PERFORMANCE PROFESSIONAL GRADE paintball marker. Although its Vision anti-chop system will allow it to operate properly with any paintball loader without fear of chopping paint, a high-end forced-feed loader must be used to achieve high rates of fire.

FIG. 2

The Luxe® is equipped with a locking feedneck, which allows it to adapt to variance in hopper neck sizes, and to release hoppers quickly when desired, but hold them securely on the field [FIG. 2.] Pulling the lock lever away from the feedneck moves it to the open, or unlocked position. While it is open, the locking mechanism may be adjusted with a 1/8-inch allen wrench opposite the latch pivot. Turning the wrench clockwise will cause the feedneck to grip tighter, while turning it counterclockwise will result in a better fit for larger hopper necks. Place the hopper in the feedneck, and secure it by closing the lever. If the latch is difficult to close, do not force it. Instead, open it fully, then turn the adjuster counter-clockwise and try again until you have adjusted for a perfect fit.

WARNING

OVERTIGHTENING THE FEED NECK CAN DAMAGE SOME LOADERS. DO NOT OVERTIGHTEN THE FEED NECK.

AIR

WHAT YOUR LUXE[1] NEEDS TO BREATHE

BASIC GUIDE TO THE
LUXE[2] INTEGRATED AIR SYSTEM

INTEGRATED AIR DESIGN

The Luxe® Integrated Air design means that there are no hoses on the outside or inside of the marker. Hoses and hose fittings are the most common places for leaks to occur in paintball markers. Air passages machined into the Luxe® grip frame and body eliminate these possible failure points, making the Luxe® more reliable.

VERTICAL REGULATOR

The Integrated Air vertical regulator is the culmination of more than a decade's worth of design, testing and field experience. It delivers the high flow rates and consistent output pressure that the Luxe® needs to compete at the professional level. Its unique bi-directional ASA connection allows it to work with the Luxe® Integrated Air system.

—fin.

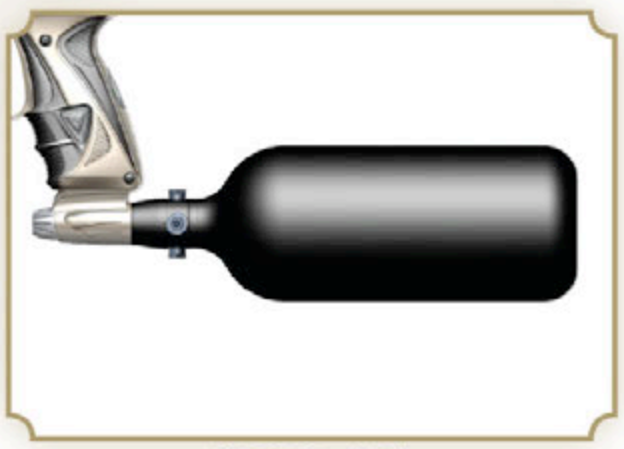


FIG. 1

FIG. 2

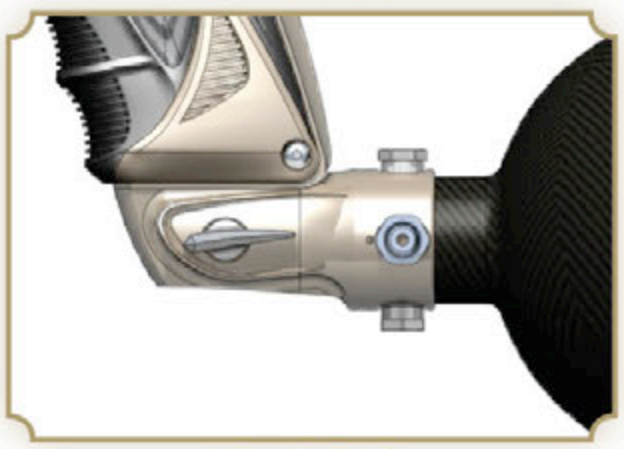


FIG. 3

AIR 2.1 ABOUT COMPRESSED AIR

YOUR LUXE® IS DESIGNED TO OPERATE ON HIGH-PRESSURE AIR (HPA) which is stored in cylinders (tanks) at pressures of up to 3,000 [FIG. 1] or 4,500 psi [FIG. 2.] The storage cylinder, along with the regulator mounted in its neck forms an HPA system. There are two main types of HPA systems, those on which the regulator's output pressure is adjustable, and those for which their regulator is pre-set to deliver a fixed output pressure. HPA systems designed to screw into an ASA are usually pre-set to provide 400 psi (low pressure output) or 800 psi (high pressure output.)

WARNING

DO NOT USE CO_2 WITH YOUR LUXE®. USE THE LUXE® ONLY WITH COMPRESSED AIR SYSTEMS FEATURING TWO BURST DISKS, ONE FOR THE HIGH PRESSURE SIDE OF THE REGULATOR, AND AN 1800 PSI RATED BURST DISK FOR THE DOWNSTREAM SIDE OF THE REGULATOR. THE 1800 PSI (ALSO SOMETIMES MARKED 1.8K) PROVIDES CRITICAL PROTECTION IN CASE OF A REGULATOR LEAK, AND ITS ABSENCE MAY CAUSE DAMAGE TO THE LUXE® AND OR SERIOUS INJURY.

Ideal performance and style can be achieved with the Integrated Air Micro System [FIG 3.] This compressed air system is pre-configured to meet the pressure level and flow rate demands of the Luxe®, and utilize the Luxe® air-through grip for hoseless operation. Screw-in style HPA systems may be used with Luxe® Markers through the Luxe® Integrated Air bottom-line ASA.

If you are using your Luxe® with an adjustable output compressed air system, it should be set to deliver about 650 psi. The Luxe® vertical regulator can accommodate a wide range of input pressures, and lower them to the marker's operating pressure, so exact adjustment of the air system is not critical, and either low output, or high output pre-set HPA systems may be used. If using a screw-in style air system, the Luxe® on/off bottom-line or similar is recommended, as the on/off control is important for proper set-up and degassing.

WARNING

NEVER USE OIL OR ANY PETROLEUM BASED CLEANER OR LUBRICANT IN A COMPRESSED AIR REGULATOR OR CYLINDER. EXPOSURE TO PRESSURIZED AIR INCREASES OIL'S FLAMMABILITY AND CAN CAUSE A SERIOUS SAFETY HAZARD. ONLY USE MANUFACTURER RECOMMENDED LUBRICANTS WITH COMPRESSED AIR SYSTEMS, AND FOLLOW THE MANUFACTURER'S MAINTENANCE AND OPERATION INSTRUCTIONS EXPLICITLY.

Regardless of the type of air system used, be sure to turn it on by slowly opening its control valve (either on the HPA system, or on/off bottom-line, depending on the configuration) so that the gas pressure in the Luxe® rises gently, rather than jumping to full pressure. Slower pressurization will maximize the service life of the seals and low pressure components in the Luxe®. The Luxe® offers multiple options for mounting compressed air systems. Located on the bottom of the grip frame are a pair of industry standard 10-32 screw holes for air system mounting. Located forward and to the side of these holes is the Luxe® grip integrated gas port. A small o-ring sitting in a recess at the gas port provides an airtight seal.

WARNING

DEGAS AND UNLOAD THE LUXE® BEFORE MAKING ANY AIR SYSTEM CHANGES.

AIR

WHAT YOUR LUXE NEEDS TO BREATHE

FIG. 1

FIG. 2

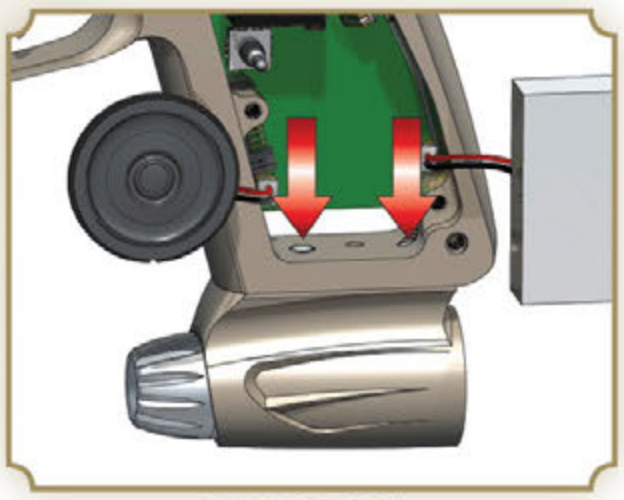


FIG. 3

FIG. 4

AIR 2.1 ABOUT COMPRESSED AIR

YOUR LUXE® IS DESIGNED TO OPERATE ON HIGH-PRESSURE AIR (HPA) which is stored in cylinders (tanks) at pressures of up to 3,000 or 4,500 psi. The storage cylinder, along with the regulator mounted in its neck forms an HPA system [FIG. 1.] There are two main types of HPA systems, those on which the regulator's output pressure is adjustable, and those for which their regulator is pre-set to deliver a fixed output pressure. HPA systems designed to screw into an ASA are usually pre-set to provide 400 psi (low pressure output) or 800 psi (high pressure output.)

WARNING

DO NOT USE CO_2 WITH YOUR LUXE®. USE THE LUXE® ONLY WITH COMPRESSED AIR SYSTEMS FEATURING TWO BURST DISKS, ONE FOR THE HIGH PRESSURE SIDE OF THE REGULATOR, AND AN 1800 PSI RATED BURST DISK FOR THE DOWNSTREAM SIDE OF THE REGULATOR. THE 1800 PSI (ALSO SOMETIMES MARKED 1.8K) PROVIDES CRITICAL PROTECTION IN CASE OF A REGULATOR LEAK, AND ITS ABSENCE MAY CAUSE DAMAGE TO THE LUXE® AND OR SERIOUS INJURY.

Ideal performance and style can be achieved with the Integrated Air Micro System. This compressed air system is pre-configured to meet the pressure level and flow rate demands of the Luxe®, and utilize the Luxe® air-through grip for hoseless installation. Screw-in style HPA systems may be used with Luxe® Markers through the Luxe® Integrated Air bottom-line ASA.

If you are using your Luxe® with an adjustable output compressed air system, it should be set to deliver about 650 psi. The Luxe® vertical regulator can accommodate a wide range of input pressures, and lower them to the marker's operating pressure, so exact adjustment of the air system is not critical, and either low output, or high output pre-set HPA systems may be used. If using a screw-in style air system, the Luxe® on/off bottom-line or similar is recommended, as the on-off control is important for proper set-up and degassing.

WARNING

NEVER USE OIL OR ANY PETROLEUM BASED CLEANER OR LUBRICANT IN A COMPRESSED AIR REGULATOR OR CYLINDER. EXPOSURE TO PRESSURIZED AIR INCREASES OIL'S FLAMMABILITY AND CAN CAUSE A SERIOUS SAFETY HAZARD. ONLY USE MANUFACTURER RECOMMENDED LUBRICANTS WITH COMPRESSED AIR SYSTEMS, AND FOLLOW THE MANUFACTURER'S MAINTENANCE AND OPERATION INSTRUCTIONS EXPLICITLY.

Regardless of the type of air system used, be sure to turn it on by slowly opening its control valve (either on the HPA system, or on/off bottom-line, depending on the configuration) so that the gas pressure in the Luxe® rises gently, rather than jumping to full pressure. Slower pressurization will maximize the service life of the seals and low pressure components in the Luxe®.The Luxe® offers multiple options for mounting compressed air systems. Located on the bottom of the grip frame are a pair of industry standard 10-32 screw holes for air system mounting. Located forward and to the side of these holes is the Luxe® grip integrated gas port. A small o-ring sitting in a recess at the gas port provides an airtight seal.

WARNING

DEGAS AND UNLOAD THE LUXE® BEFORE MAKING ANY AIR SYSTEM CHANGES.

AIR 2.2 INSTALLING AN AIR SYSTEM

INCLUDED WITH YOUR LUXE® IS A BOTTOM-LINE STYLE integrated air on/off ASA for use with screw-in style compressed air systems. The grip integrated ASA can be mounted directly to the Luxe® grip frame, or mounted with forward or reverse grip integrated air rails.

When mounting the ASA directly to the grip frame, each of the short 10-32 socket head cap screws are inserted in the center of a slot in the top of the ASA [FIG. 2,] then slid to the front or back. A 5/32-inch allen wrench is guided up through holes in the bottom line of the ASA to tighten the screws.

When installing a new air system, accessory or mount, the grip must be opened and the battery removed from the Luxe® (*see* HARDWARE 3.6.) Only use mounting screws which will reach through the air system, accessory or mount, and fully engage the screw threads in the grip frame, but not extend into the open space of the grip frame far enough that they interfere with the placement of the battery. Installing mount screws while the battery is removed will ensure that a screw which is too long does not accidentally damage the lithium-polymer battery [FIG. 3.]

In addition to grip integrated air systems, the Luxe® may also use standard hose based air systems and accessories, bypassing the grip integrated air system. Such accessories are mounted the same way, but will require the use of a vertical regulator (*see* ADVANCED MAINTENANCE 6.3 *for removal instructions*) which accepts input via macroline or steel braided hose and provides output in the range of 170-220 psi [FIG. 4.]

HARDWARE

HOW TO ADJUST ALL MECHANICAL SETTINGS

FIG. 1

HARDWARE 3.1 ADJUSTING VELOCITY

THE VELOCITY, OR SPEED AT WHICH YOUR LUXE® fires a paintball, must be measured and adjusted to below the paintball field's velocity limit immediately before each day of play (for player safety.) Fill the hopper with paintballs and turn it on.

While wearing ASTM compliant paintball goggles, in an area where all bystanders are protected, remove the barrel blocker and fire over a chronograph to measure the velocity. Using a 5/32-inch allen wrench on the adjuster in the bottom of the Luxe® Vertical Regulator, turn clockwise to increase velocity/pressure [FIG. 1.] and counterclockwise to decrease.

WARNING

DO NOT ATTEMPT TO ADJUST THE LUXE® VERTICAL REGULATOR WITH LARGER SIZED ALLEN WRENCHES. THESE ARE USED TO REMOVE AND DISASSEMBLE THE REGULATOR, WHICH MUST NOT BE DONE WHILE IT IS PRESSURIZED.

Take three or four shots after every adjustment to allow the gas pressure inside the Luxe® to stabilize. Adjust and retest until the marker is firing consistently within the limits for the field where you are playing.

WARNING

FOR SAFETY REASONS, NEVER ADJUST YOUR LUXE® TO FIRE AT GREATER THAN 300 FEET PER SECOND.

FIG. 2

HARDWARE 3.2 DEGASSING THE SYSTEM

BEFORE STORAGE, TRANSPORT OR MAINTENANCE, your marker will need to be unloaded and degassed. In an area where it is safe to shoot and while wearing paintball goggles, loosen the Luxe®'s clamping feedneck and remove the loader. By turning the marker upside down, you can empty any extra paintballs from the feedneck into your hand.

WARNING

EVEN WITH ITS GAS SUPPLY TURNED OFF, REGULATOR AND GAS PASSAGES IN THE LUXE® WILL CONTAIN ENOUGH PRESSURE TO FIRE MULTIPLE SHOTS UNTIL THE MARKER IS DEGASSED.

Turn off your HPA system either with its on/off valve, or the on/off valve of a connected bottom-line adapter. Lift the quick-strip latch upward, to vent pressure from the Power Core [Fig 2.] As the Power Core is depressurized, it will make a sound similar to a soda can being opened. If you hear the sound of escaping gas for more than a second, your HPA system has not been turned off. Turn off your HPA system.

Once the Luxe® has completely degassed, there will be no more hissing sound. If performing maintenance on Luxe®, leave the quick-strip latch open to protect against accidental pressurization—otherwise, re-close the latch. If using a screw-in style HPA system, unscrew the system from the marker's bottom-line ASA. Pay careful attention to make sure the HPA system regulator is unscrewing from the Luxe®'s ASA, rather than the tank unscrewing from its regulator.

FIG. 3

WARNING

DO NOT LIFT THE QUICK-STRIP LATCH UNTIL THE GAS SUPPLY HAS BEEN TURNED OFF. IF THIS IS DONE ACCIDENTALLY, TURN OFF THE GAS SUPPLY IMMEDIATELY. ATTEMPTING TO CLOSE THE LATCH WHILE THE GAS SUPPLY IS ON MAY RESULT IN O-RING DAMAGE.

HARDWARE 3.3 ADJUSTING THE TRIGGER

YOUR LUXE® IS EQUIPPED WITH A 4-POINT adjustable trigger, providing complete versatility to both the feel and length of the trigger pull. The Luxe® can be adjusted to a super-sensitive hair trigger, though many players find that a slightly longer, and heavier trigger pull is easier to walk to higher rates of fire. Perform trigger adjustments while the Luxe® is unloaded and degassed. Luxe® Training Mode (see SOFTWARE 4.5) can be used to determine the effectiveness of changes in trigger adjustment.

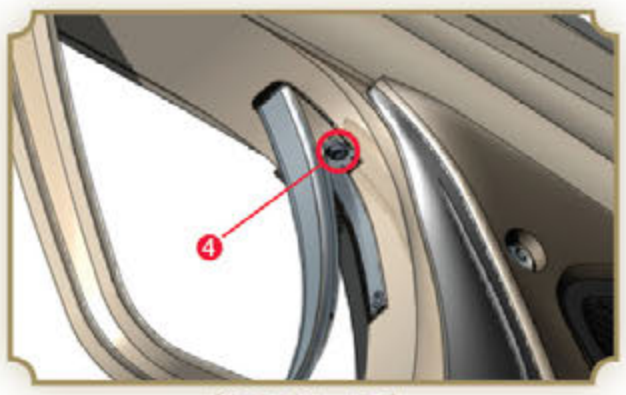


FIG. 4

1 POST-TRAVEL
2 PRE-TRAVEL
3 ACTIVATION POINT
4 RESISTANCE

POST-TRAVEL The post-travel adjustment sets how far back the trigger can travel, affecting the area of the trigger pull that occurs after the Luxe® fires. Turning the adjustment screw clockwise with an 0.050-inch allen wrench will reduce post-travel, limiting how far back the trigger can swing, while turning counterclockwise will increase it. The post-travel limit must be set to stop the trigger before it is brought to a stop by the trigger switch.

PRE-TRAVEL The pre-travel adjustment determines how far forward the trigger can swing, affecting the area of the trigger pull that occurs before the Luxe® fires. Pre-travel is adjusted with an 0.050-inch allen wrench in the pre-travel adjustment screw. Turn clockwise to reduce pre-travel, and counterclockwise to increase.

ACTIVATION POINT The activation point setting determines the point in the trigger pull at which the Luxe® trigger switch is activated, signaling the marker to fire. As the screw is turned clockwise with a 0.050-inch allen wrench, it will extend out the back of the trigger, closer to the trigger switch, causing the trigger to be activated earlier in the trigger pull. Due to the limited space to access this adjustment, use of a ball-end allen wrench is advised.

WARNING

USE CAUTION WHEN ADJUSTING THE ACTIVATION POINT AND POST-TRAVEL ADJUSTMENT. WHEN PROPERLY ADJUSTED, THE TRIGGER SHOULD COME TO A SOLID STOP AGAINST THE POST TRAVEL ADJUSTMENT SCREW. IF IT COMES TO A SOFTER STOP CAUSED BY THE ACTIVATION POINT ADJUSTMENT SCREW OR REAR OF THE TRIGGER PRESSING AGAINST THE TRIGGER SWITCH, THEN TRIGGER SWITCH AND OR CIRCUIT BOARD DAMAGE MAY RESULT FROM RAPID OR HARD PULLS ON THE TRIGGER.

TRIGGER RESISTANCE Trigger resistance, or the weight of the trigger pull may be adjusted with a 0.050-inch allen wrench in the trigger resistance adjustment screw. Turning clockwise increases pressure on the trigger return magnet, for increased resistance, while turning counterclockwise decreases pressure on the trigger.

HARDWARE

HOW TO ADJUST ALL MECHANICAL SETTINGS

BACK

ACCEPTS ALL SMART PARTS FRONTS AND FREAK INSERTS

The Luxe back accepts optional Freak bore inserts, allowing it to quickly adapt to changing paint conditions.

INSERTS

AVAILABLE IN 8 COLOR CODED SIZES, FREAK BORE INSERTS CREATE THE PERFECT FIT WITH ANY BRAND OF PAINT.

FRONT

FITS ANY SMART PARTS BACK, IN ADDITION TO THE STANDARD LUXE BACK.

Linear pressure compensating ports make every shot quiet and accurate. Smart Parts barrel compatibility lets you switch to optional fronts to keep pace with changing playing conditions.

HARDWARE 3.4 LUXE® BARREL SYSTEM

EVEN THE BEST QUALITY PAINTBALLS WILL VARY in size from one batch to the next and as weather conditions change. Although your Luxe® can work well even with a poor paint to barrel fit, optimal performance will be achieved with a proper fit. The ideal fit between the paintball and the barrel is found when the ball is inserted in the bore and does not slip or roll through to the muzzle on its own, yet can be blown out, like a blowgun, using a minimal amount of breath. The barrel can be adapted to fit a wide range of paintball sizes through the use of Smart Parts Freak® inserts. The .693-inch ID Luxe® bore insert may be removed by sliding it out the back of the barrel, and inserting an appropriate sized Freak® insert in its place. The Luxe® 3-Piece barrel is compatible with all Smart Parts multi-piece components providing access to a variety of optional fronts, including the All-American portless rain-front for foul weather conditions.

FIG. 1

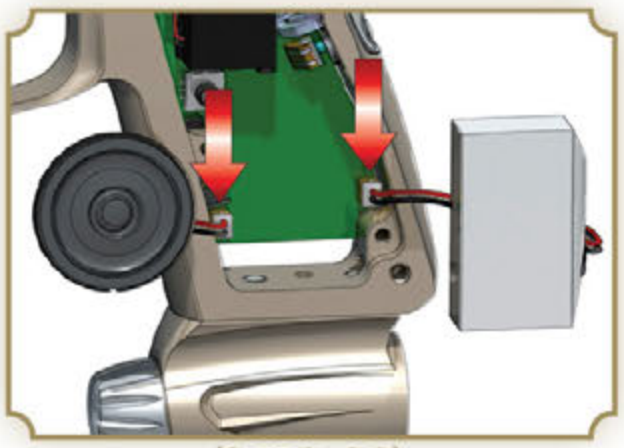


FIG. 2

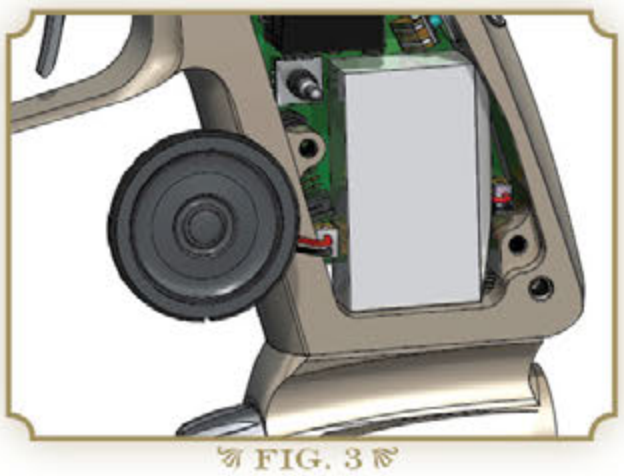


FIG. 3

HARDWARE 3.5 LiPo RECHARCHABLE BATTERY

YOUR LUXE® IS EQUIPPED WITH A LITHIUM-POLYMER (LiPo) battery. Lithium-Polymer batteries provide consistent power output in a minimal size and weight, without suffering from charge memory effects.

To charge the Luxe®, use a 5/64-inch allen wrench to open the left side grip, and fold it back to expose the charging port on the front of the grip frame, below the trigger guard. Simply plug the included charger into the marker's charging port, and plug the adapter into a domestic power outlet. The Luxe® charger is designed for international use, and will operate on standard mains AC power from 110 to 240 volts. Plug adapters may be required when using the Luxe® outside of the US, Canada or Mexico.

While the Luxe® battery is charging, the charger's LED will glow red. It will glow green to indicate that the charging cycle is complete.

WARNING

DO NOT USE USE ANYTHING BUT THE LUXE® CHARGER TO RECHARGE THE LUXE® BATTERY. THE LUXE® CHARGER CONTAINS CHARGE CONTROL CIRCUITRY THAT IS MATCHED TO THE BATTERY'S MANUFACTURER SPECIFIED CHARGE RATES AND LIMITS. A CHARGER WHICH DOES NOT MEET THESE SPECIFICATIONS INTRODUCES A RISK OF BATTERY FIRE OR EXPLOSION.

When your Luxe® is turned on, it will display an estimate of the remaining battery charge. This will be displayed momentarily in the bar graph portion of the grip LEDs, followed by another color sequence indicating the marker's current firing mode (*see* SOFTWARE 4.5 *for LED firing mode sequences*) It is important to note that battery discharge rates can be affected by various factors, including temperature, and the indicated charge level is only an estimation of the expected remaining charge life.

HARDWARE 3.6 INSTALL & CHARGE THE BATTERY

UNLOAD AND DEGAS YOUR LUXE® FOLLOWING THE instructions in this manual. Make sure the Luxe® is turned off and open the left side grip panel with a 5/64-inch allen wrench. Use a 1/16-inch allen wrench to remove the two screws holding the speaker mount and lift it out of the grip frame.

Lift out the speaker. Be careful, the flexible cone of the speaker is fragile, and the speaker contains a strong magnet. Do not allow sharp tools like allen wrenches to snap onto the magnet, damaging the speaker cone. Take care not to strain the speaker wires. If necessary, unplug the speaker from the circuit board. When unplugging any component from the circuit board, pull on the connector directly, not its wires. Lift out and unplug the the Lithium-Polymer battery pack.

WARNING

DO NOT PLUG A BATTERY INTO THE SPEAKER CONNECTION [FIG.2,] **AS CIRCUIT BOARD DAMAGE MAY RESULT.**

Install a new battery, and plug it into the circuit board. Make sure the speaker is plugged in, reinstall the speaker and speaker mount, taking care not to crimp or crush any of the wires, then re-secure the grip panel. The speaker and battery connectors only fit in one direction. If a connector does not slide smoothly onto its pins, try rotating it to determine if it has been reversed. Do not force the connectors.

SOFTWARE

ALL ELECTRONIC SETTINGS AND FEATURES

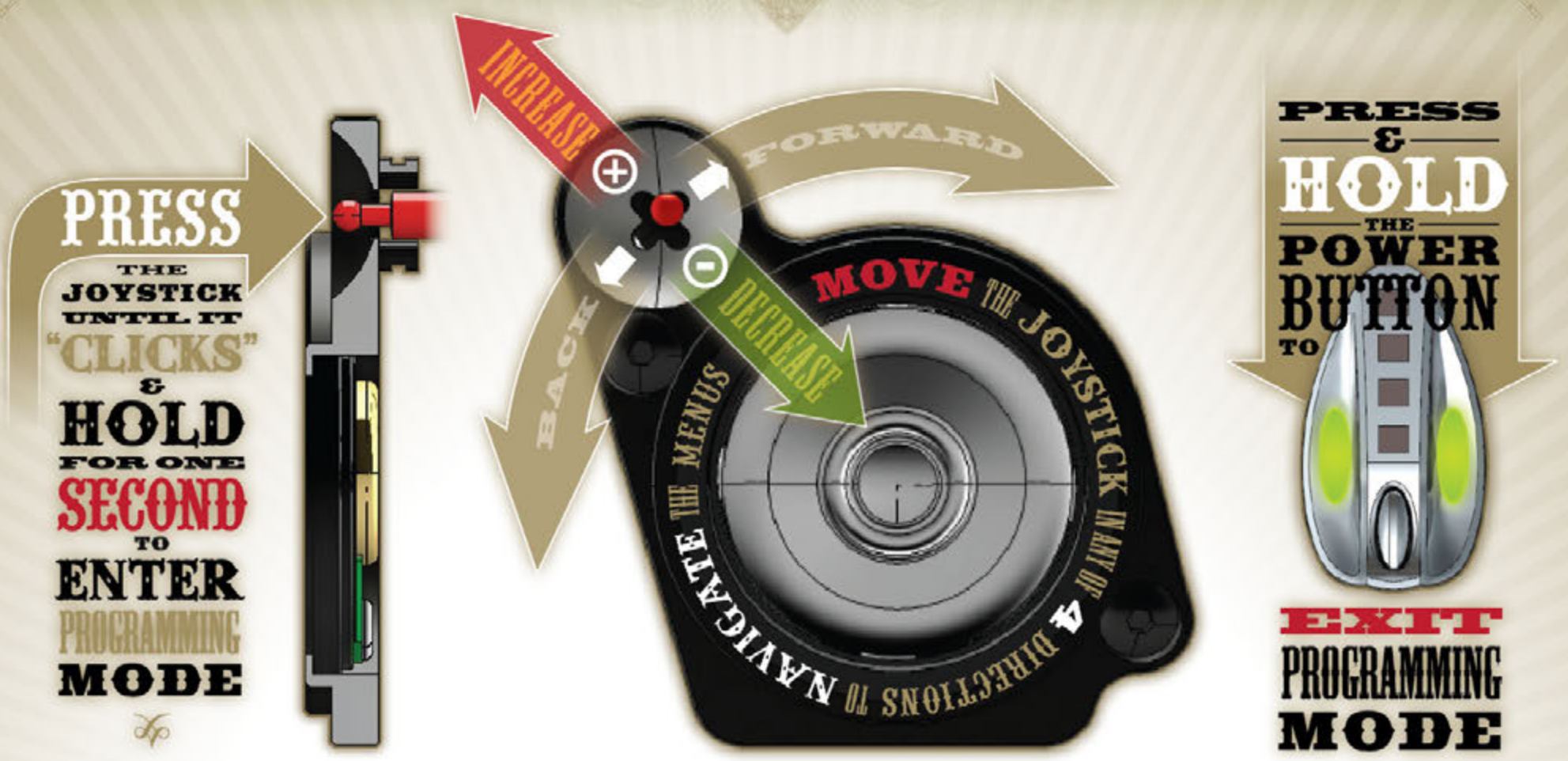


FIG. 1: BASIC GUIDE TO PROGRAMMING LUXE® WITH THE 5-WAY JOYSTICK CONTROLLER

ELECTRONIC OPERATION

* * *

VISION When the Luxe® is turned on it will use the Vision setting selected in its menu to determine how its anti-chop system functions. The internal optical sensor will be used to detect whether or not a paintball is in the breech. This feature practically eliminates the possibility of a chopped ball. The left side LED will glow solid blue if the breech is empty, and blink blue when a paintball is in place and ready to fire. Luxe® Vision may be deactivated during a game by pressing the power button for approximately one second. The Luxe® will announce that vision has been turned off, the left LED will glow red, and the Luxe® will limit its rate of fire to reduce the possibility of out-pacing its loader and chopping a paintball. Pressing the power button again for one second will reactivate Luxe® Vision.

FIRING MODE In order to meet tournament rules, the Luxe®'s firing mode cannot be changed on field without tools. However, it is easy for a player or referee to check the mode in which the Luxe® is operating. Simply tap the power button once, while the marker is on. The Luxe® will display the code for the selected mode on the LED (*see* SOFTWARE 4.5.)

RATE OF FIRE The Luxe® is also capable of providing feedback on how fast it has been shooting. To determine the fastest rate of fire recently achieved, double-tap the Luxe® power button. The Luxe® will display and announce the rate of fire in balls per second. See SOFTWARE 4.2 to the right for an explanation of how to interpret Luxe® bar graph displays.

LOW BATTERY WARNING When the Luxe® battery is critically low (approximately 10% or less charge remaining) the bottom two LEDs of the Luxe® grip display will flash red, indicating that an immediate recharge or battery swap is necessary.

SOFTWARE 4.1 5-WAY JOYSTICK CONTROLLER

YOUR LUXE® COMBINES VOICE FEEDBACK WITH ITS LED array to make electronic adjustment simple. All adjustments are performed with the Luxe® turned on, but unloaded and degassed (*see* HARDWARE 3.2.) Adjustments are made with a five-way joystick controller located inside the grip frame. To access it, use a 5/64-inch allen wrench to remove the two left side grip screws and fold open the flexible grip. The 5-way controller is located next to the Luxe® speaker. It is marked with arrows to indicate the directions it must be moved to scroll through menu items, and with + and – symbols to indicate the directions used for increasing and decreasing setting values.

SOFTWARE 4.2 ENTERING PROGRAMMING MODE

LUXE® PROGRAMMING MODE IS ENTERED BY simply pressing the 5-way controller down in its center position (enter) and holding it for one second. This will place the marker in its main menu, which is indicated by the left side LED glowing red and the right side LED glowing orange, and the Luxe® verbally announcing that it is in the main menu.

Within the main menu, you may choose which setting you want to check or change. Push the 5-way controller in the directions of its arrows to scroll through the available settings, each of which is identified by a verbal response and a unique identifier pattern on the LED array. To make a change, find the desired setting, and move the controller to its + or – position. The Luxe® will display the currently selected value for that sub-menu on the LED array as well as speak the value via the speaker. Changes may be made to the setting by using the + or – directions on the 5-way controller to increase or decrease the setting. Once a new setting has been chosen (changed dwell setting, new firing mode, etc.) or left after simply checking, scrolling with the arrows will allow other settings to be checked or changed. The Main Menu is exited by pressing the controller in its center position or by pressing the power button.

Some menus are set with numeric values. In addition to simply speaking the value, the Luxe® uses a simple to understand bar-chart method for displaying numeric data on its LED array. Both the left and right LEDs will glow blue to indicate that a sub-menu's numeric value is being displayed, while center bar graph LEDs illuminate in red to show the value. For numbers 1 through 9, the bottom bar-graph LED will blink a number of times corresponding to the value. For the number 10, the bottom LED will glow solid. For 11 through 19, the bottom LED will glow solid to indicate the tens digit while the second LED blinks out the ones. Similarly, for the number 20, the lower two LEDs of the bar graph glow solid, and the third LED will blink out from one to nine times with them to indicate values from 21 to 29.

When programming is complete, re-secure the grip. Because all electronic programming is controlled from within the grip, which is not accessible without tools, the Luxe® can be locked into any tournament or field legal mode required.

SOFTWARE 4.3 RESET TO FACTORY DEFAULTS

PRESSING AND HOLDING THE TRIGGER FOR approximately 3 seconds while in programming mode will result in the Luxe® resetting all menu items to their factory default values. Factory Reset is confirmed by 3 chirps from the speaker.

SOFTWARE

ALL ELECTRONIC SETTINGS AND FEATURES

SOFTWARE 4.5 FIRING MODES

EACH OF THE LUXE®'S FIRING MODES IS IDENTIFIED by name, and with a unique pattern on the LED array. The LED identification can also be used when the marker is live by quickly tapping the power button.

WARNING

WHILE REFERENCES TO PAINTBALL TOURNAMENT LEAGUE RULES ARE ACCURATE AT THE TIME OF THIS WRITING, IT IS NOT UNCOMMON FOR PAINTBALL LEAGUES TO MAKE CHANGES TO THEIR RULES. IN ADDITION TO THE MODE CHOICE, SOME SERIES WILL REQUIRE THE USE OF THE LUXE®'S BPS LIMIT TO LIMIT MAXIMUM RATE OF FIRE. BE SURE TO MAKE YOURSELF FAMILIAR WITH THE RULES OF ANY TOURNAMENT, SCENARIO OR GAME WHERE YOU WILL BE PLAYING, TO BE CERTAIN YOUR LUXE® SETTINGS ARE IN COMPLIANCE.

SEMI-AUTO UNCAPPED

This is a traditional semi-automatic firing mode, delivering one shot per complete trigger pull, and it is the factory default setting for the Luxe®. Semi-Automatic mode is uncapped, and the maximum rate of fire that can be achieved in this mode will depend on loader feed rates and Luxe® Dwell settings. Semi-Automatic mode is appropriate for use at most paintball fields and events, including tournaments using NPPL rules.

SEMI-AUTO CAPPED

While this mode functions like Semi-Automatic, with one shot per trigger pull, it also takes into account the value set in the BPS (Balls Per Second) Limit. By activating this cap, the Luxe®'s maximum rate of fire can be restricted to meet the demands of special game rules, or to handicap experienced players against those who are new to the sport.

NXL

NXL mode complies with the rules of the National X-Ball League. Initially this mode acts like semi-automatic. After three trigger pulls in quick succession, it begins operating as a full-automatic, firing repeatedly while the trigger is held down. To prevent accidental multiple-shot firing, NXL mode reverts to semi-automatic style operation after a moment of no trigger activity, ready to begin the cycle again. Maximum rate of fire is capped by the Luxe®'s BPS Limit sub-menu setting. For use in the NXL, the BPS Limit must be set to 13.25 or lower.

PSP

For use under the X-Ball rules used in the Paintball Sports Promotions tournament series. Initially, it acts like semi-automatic until three trigger pulls are made in quick succession. At this point PSP mode begins as soon as possible, as long as the user continues to pull the trigger at least once per second. Once the trigger is allowed to rest for more than a second, the cycle begins again with one shot per trigger pull. Maximum rate of fire is capped by the Luxe®'s BPS Limit sub-menu setting. For use at PSP tournaments, the BPS Limit must be set to 13.25 or lower.

MILLENNIUM

Similar to other series specific modes, the Millennium mode operates as semi-automatic until the user pulls the trigger at a rate of 8 times per second or faster. At this point, the Luxe® will begin firing more than one shot per trigger pull, to maximize firepower, until the user slows below the rate of 8 trigger pulls per second, at which point only one shot is fired per trigger pull. For use in Millennium events, the BPS Limit must be set to 11.9 or lower.

CFOA

This mode is meant for use in tournaments of the Carolina Field Owner's Association. CFOA mode fires one shot per trigger pull until three trigger pulls are made at a rate of 5.5 times per second or faster. At this point the Luxe® will fire more than one shot per trigger pull, for increased firepower, until the rate of trigger pulls drops below 5.5 per second, at which point only one shot is fired per trigger pull. For use in CFOA tournaments, the BPS Limit must be set to 13.25 or lower.

AUTO RESPONSE

Auto Response is a specialty mode which doubles firepower by firing both when the trigger is pulled and when it is released. Auto Response is affected by the BPS Limit setting.

TRAINING MODE

Training Mode will help you learn to walk or pull the Luxe®'s trigger faster. Training mode operates the same as semi-automatic, but it ignores input from the Vision eye, and activates the Luxe® solenoid valve only long enough to make a noise—but not close the bolt or fire a shot. Although training mode is designed not to fire, paintball goggles and a barrel blocker are required in case paint, grease or debris is dislodged by escaping gas.

BURST MODE

This mode fires a burst of shots when the trigger is pulled and held down. The number of shots in each burst is determined by the burst setting.

FULL-AUTO

In Full-Automatic mode, the Luxe® fires repeatedly, while the trigger is pulled and held. The rate of fire delivered will depend on the value of the BPS Limit setting.

CUSTOM REBOUND MODES

REBOUND 1–5

REBOUND 1

REBOUND 2

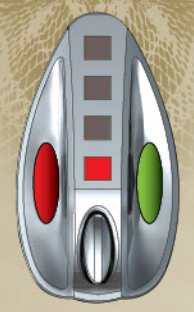
REBOUND 3

REBOUND 4

REBOUND 5

Five user-definable rebound modes allow the Luxe® to operate with ramping built to meet nearly any imaginable rule set. Rebound modes fire as semi-automatic until the set number of activation shots are fired at the minimum sustain rate or faster, at which point the Rebound mode kicks in and fires additional shots, maximizing firepower. Once the rate of trigger pulls drops below the shots to sustain setting, one shot is fired per trigger pull. To configure a Custom Rebound mode, first select that firing mode, then move the joystick to the right arrow enough times to select the sustain rate or activation shots menus, and program their values by scrolling in the + or – directions, and exit the programming menu to save the changes. When changing to a different Custom Rebound mode, that mode's settings for sustain and activation will automatically be loaded into their appropriate menu areas.

FIRING MODE

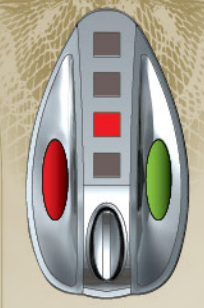


As the name implies, this menu selects one of the Luxe's 15 available firing modes, each of which is identified by the Luxe speaking the mode name and displaying its LED pattern.

◆

SETTINGS
☆ SEMI-AUTO ☆
CAPPED SEMI
NXL
PSP
MILLENNIUM
CFOA
AUTO RESPONSE
TRAINING MODE
BURST MODE
FULL AUTOMATIC
REBOUND 1
REBOUND 2
REBOUND 3
REBOUND 4
REBOUND 5

DWELL

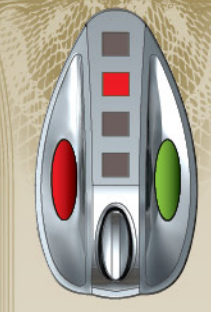


The dwell setting determines how long the Luxe sends power to its solenoid valve, which in turn affects how long the bolt remains forward and how much gas is released from the fire chamber to propel each paintball. Dwell is adjustable from 4 to 25 milliseconds in one millisecond increments. The default dwell value is 12 milliseconds, which provides an excellent balance between gas efficiency, speed and reliable operation.

◆

SETTINGS
4 *ms*
5 *ms*
6 *ms*
7 *ms*
8 *ms*
9 *ms*
10 *ms*
11 *ms*
☆ 12 *ms* ☆
13 *ms*
14 *ms*
15 *ms*
16 *ms*
17 *ms*
18 *ms*
up to +25 *ms*

TRAINING DWELL

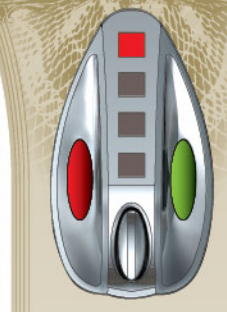


This secondary dwell setting determines how long the Luxe sends power to its solenoid valve when the firing mode is set to Training. This reduced dwell time should be set high enough that a burst of gas can be heard from the solenoid valve, but low enough that the Luxe will not cycle. Training Dwell is adjustable between 1 and 8 milliseconds.

◆

SETTINGS
1 *ms*
2 *ms*
3 *ms*
☆ 4 *ms* ☆
5 *ms*
6 *ms*
7 *ms*
8 *ms*

SOFTWARE VERSION

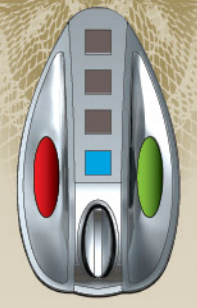


In this menu, selecting + or – on the five-way controller will not make an adjustment. Instead, the Luxe will respond by announcing the version number of its operating software.

◆

RESPONSE
☆ VER. NO. ☆

VISION MODE

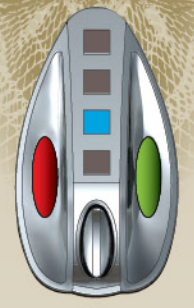


The Vision menu selects the type of anti-chop eye logic to be used. When set to Vision, the Luxe will not fire unless a paintball is in the breech, blocking the Vision beam. When set to Delay, the Luxe will still fire if the Vision beam does not detect a paintball, but it will do so at a maximum rate of 2 balls per second. If broken paint from your hopper causes a Vision system malfunction, the reduced rate of fire will compensate for loader problems. The final setting, Force Delay will only fire if there is a ball in place, or the trigger is held for more than one second, allowing the player to over-ride the Vision system in case of malfunction.

◆

SETTINGS
☆ 1·VISION ☆
2·DELAY
3·FORCED SHOT

LOADER DELAY

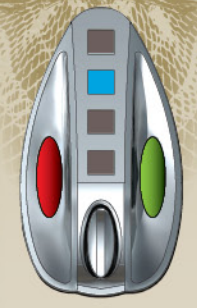


The Vision beam used by the Luxe to detect a paintball is located slightly above the bottom of the marker's breech. The loader delay determines how long the Luxe will wait after it detects a paintball, until it fires, allowing the paintball time to complete its journey into the breech. For forced feed loaders less time is necessary than with gravity fed agitating loaders. The loader delay is adjustable between 0 and 15 milliseconds.

◆

SETTINGS
0 *ms*
1 *ms*
2 *ms*
☆ 3 *ms* ☆
4 *ms*
5 *ms*
6 *ms*
7 *ms*
8 *ms*
9 *ms*
10 *ms*
11 *ms*
12 *ms*
up to 15 *ms*

B.P.S. LIMIT



This sets the limit of how fast the Luxe can fire when it is in a capped firing mode. It is set in plain, whole numbers of Balls Per Second. No calculations, charts or conversions are required. The cap value may be set from 11 to 25 bps. Due to variance in electronic components and their performance under varying temperatures, BPS cap settings may vary and should be confirmed with a shot timer.

◆

SETTINGS
11 *bps*
12 *bps*
☆ 13 *bps* ☆
14 *bps*
15 *bps*
16 *bps*
17 *bps*
18 *bps*
19 *bps*
20 *bps*
21 *bps*
22 *bps*
23 *bps*
24 *bps*
up to +25 *bps*

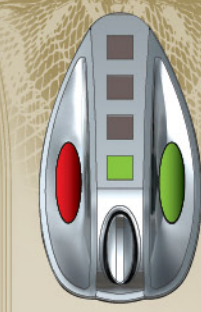
B.P.S. FINE ADJUST

The rate of fire cap may be fine tuned through adjustment of the BPS Fine Adjust menu, which is added to the BPS Limit value. For example, a BPS Limit of 13 combined with a BPS Fine Adjust of 0.25 will result in a 13.25 bps cap to maximize firepower under a 13.3 bps tournament limit. An LED value of 1 represents 0 bps, while 2=0.25 bps, 3=0.5 bps and 4=0.75 bps. Due to variance in electronic components and performance shifts with temperature, rate of fire caps should be confirmed with an external shot timer.

◆

SETTINGS
☆ 0 *bps* ☆
0.25 *bps*
0.5 *bps*
0.75 *bps*

BYPASS B.P.S.



Bypass BPS is an additional rate of fire limit that is imposed when the Vision system detects a fault, such as paint or debris that prevents it from working properly. The bypass BPS setting can be adjusted to ensure that the Luxe fires slower than its loader's slowest response rate. Bypass BPS is adjustable between 8 and 11 bps.

◆

SETTINGS
8 *bps*
9 *bps*
☆ 10 *bps* ☆
11 *bps*

BURST COUNT

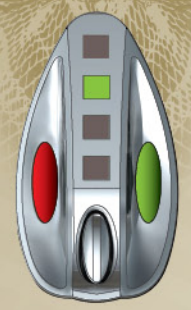
This setting selects the number of shots per trigger pull that the Luxe fires in burst mode. By default the Luxe will fire a 3-shot burst, though it may be adjusted to 2, 3 or 4 shots.

◆

SETTINGS
2 *shots*
☆ 3 *shots* ☆
4 *shots*

PROGRAMMING
PART 1 OF 2

SHOTS TO ENTER REBOUND

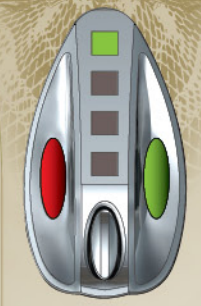


The number of trigger pulls needed to activate the currently selected rebound mode may be adjusted from 1 to 5. The default value is 3.

SETTINGS

- 1 *shot*
- 2 *shots*
- ★ 3 *shots* ★
- 4 *shots*
- 5 *shots*

SHOTS TO SUSTAIN REBOUND



This setting adjusts the rate at which the trigger must be pulled to sustain the currently selected rebound mode. It is adjustable between 2 and 10 bps.

SETTINGS

- 2 *bps*
- 3 *bps*
- 4 *bps*
- ★ 5 *bps* ★
- 6 *bps*
- 7 *bps*
- 8 *bps*
- 9 *bps*
- 10 *bps*

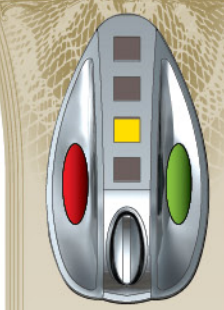
TRIGGER DEBOUNCE

When the Luxe trigger switch is activated, it will create a series of very fast electrical pulses before a complete connection is made. The Luxe control software uses the trigger debounce setting to determine the difference between this switch noise, and the solid signal from a completed trigger pull. Trigger signals which last longer than the trigger debounce value are considered to be valid trigger pulls. The debounce value is adjustable between 1 and 25 milliseconds in 1 millisecond increments. The default trigger debounce value is 7 milliseconds.

SETTINGS

- 1 *ms*
- 2 *ms*
- 3 *ms*
- 4 *ms*
- 5 *ms*
- 6 *ms*
- ★ 7 *ms* ★
- 8 *ms*
- 9 *ms*
- 10 *ms*
- 11 *ms*
- 12 *ms*
- 13 *ms*
- 14 *ms*
- 15 *ms*
- *up to* 25 *ms*

MECHANICAL DEBOUNCE

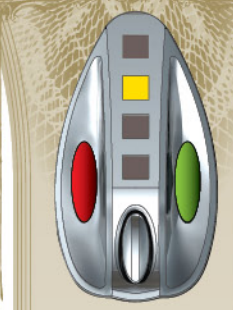


When a paintball marker's trigger is adjusted to an extremely short pull, it is sometimes possible for the vibration of firing to activate the trigger, causing a runaway condition. The mechanical debounce filtering function of the Luxe control software can be set to discriminate against these mechanical bounces, allowing for extremely sensitive trigger adjustment while meeting tournament trigger requirements. Mechanical debounce is turned off (0) by default.

SETTINGS

- ★ 0 *(off)* ★
- 1 *(low)*
- 2 *(med)*
- 3 *(high)*

FSD COMPENSATION

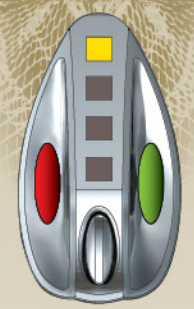


The o-rings in the Luxe power core, may "set" in position when resting between shots, causing slightly more friction than is seen during rapid firing. In order to overcome this friction, the anti-bolt stick function of the Luxe control software will slightly increase the dwell time of the first shot in a group. The increased dwell will compensate for the change in friction, keeping velocity more consistent. The standard value for bolt stick adjustment is 7 milliseconds, and it may be adjusted between 0 and 25 milleseconds in one millisecond increments. A setting of 0 turns off first shot drop compensation.

SETTINGS

- 0 *ms (off)*
- 1 *ms*
- 2 *ms*
- 3 *ms*
- 4 *ms*
- 5 *ms*
- 6 *ms*
- ★ 7 *ms* ★
- 8 *ms*
- 9 *ms*
- 10 *ms*
- 11 *ms*
- 12 *ms*
- *up to* 25 *ms*

FIRST SHOT DROP TIMER

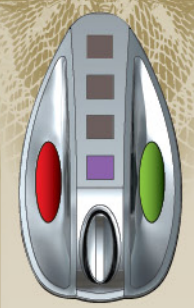


This setting adjusts the amount of time between shots that will activate the anti bolt-stick dwell increase. Time is adjustable between 20 seconds (1) and 100 seconds (5.) The factory setting is 60 seconds (3.)

SETTINGS

- 1 *(20 s)*
- 2 *(40 s)*
- ★ 3 *(60 s)* ★
- 4 *(80 s)*
- 5 *(100 s)*

AUTO SHUTDOWN

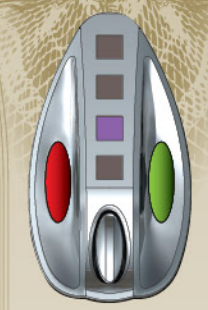


In order to conserve its battery charge, the Luxe will turn itself off automatically if it is not used for 20 minutes. The length of the auto-off timing may be adjusted from 5 to 30 minutes.

SETTINGS

- 5—10 *min*
- 11 *min*
- 12 *min*
- 13 *min*
- 14 *min*
- 15 *min*
- 16 *min*
- 17 *min*
- 18 *min*
- 19 *min*
- ★ 20 *min* ★
- 21 *min*
- 22 *min*
- 23 *min*
- 24 *min*
- *up to* 30 *min*

SPEAKER VOLUME

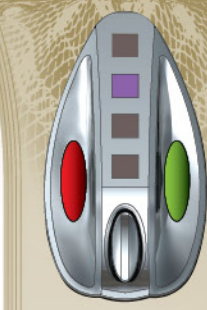


The volume for the Luxe speaker may be adjusted from 0 (silent) to 7 (loudest.).

SETTINGS

- 0 *(silent)*
- 1
- 2
- 3
- ★ 4 ★
- 5
- 6
- 7

DISPLAY TIME

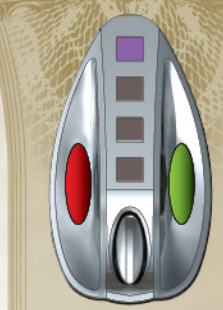


The amount of time which the Luxe LEDs display information such as currently selected firing mode can be adjusted from 1 to 10 seconds.

SETTINGS

- 1 *s*
- ★ 2 *s* ★
- 3 *s*
- 4 *s*
- 5 *s*
- 6 *s*
- 7 *s*
- 8 *s*
- 9 *s*
- 10 *s*

LANGUAGE



Although the Luxe speaks English by default, it may also be set to speak several of its key phrases in German, French, Spanish or Russian.

SETTINGS

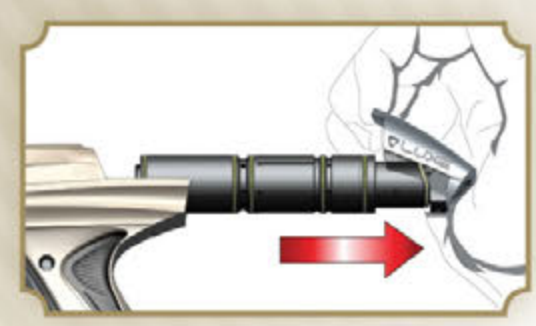
- ★ 1 · ENGLISH ★
- 2 · GERMAN
- 3 · FRENCH
- 4 · SPANISH
- 5 · RUSSIAN

PROGRAMMING
PART 2 OF 2

MAINTENANCE

ESSENTIAL STEPS FOR PEAK LUXE PERFORMANCE

1



MAINTENANCE 5.1 LUXE® POWER CORE

THE HEART OF YOUR LUXE® IS THE Luxe® Power Core. This single module comprises both the marker's bolt and exhaust valve system. Its compact, tool-free design makes the Luxe® incredibly fast and simple to maintain. The Luxe® should be disassembled and cleaned any time it shows erratic performance, becomes contaminated with paint, dirt or other debris, or for preventative maintenance after 3 or 4 days of use.

STEP ONE UNLOAD AND DEGAS YOUR LUXE®

UNLOAD AND DEGAS YOUR LUXE® (*see* HARDWARE 3.2.) Turn off and or remove the gas supply. Remove the barrel then lift the quick-strip latch at the rear of the marker and pull out the Power Core. If the Power Core has not been removed recently it may need to be wiggled slightly to break o-ring friction.

2

STEP TWO REMOVE THE FIRE CHAMBER

BEGIN DISASSEMBLING THE Luxe® Power Core by unscrewing the fire chamber from the quick strip plug, then slide the bolt and fire chamber off of the bolt guide.

3

STEP THREE REMOVE THE BOLT

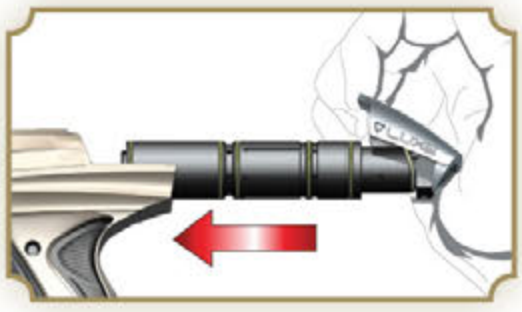
SLIDE THE BOLT OUT of the fire chamber.

4

STEP FOUR CLEAN THE POWER CORE

USING A CLEAN, SOFT CLOTH, wipe dirt, paint debris and old grease from all of the Power Core surfaces. Inspect all o-rings and replace any which show significant signs of wear, or have rips, tears or other damage.

5



STEP FIVE LUBRICATE & REINSERT THE POWER CORE

LUBRICATE ALL O-RINGS WITH A LIGHT coating of SL33K marker grease. Take care to ensure that grease is applied to inner o-rings at the front and middle of the fire chamber. Slide the bolt and fire chamber onto the bolt guide, and screw the fire chamber to the quick-strip plug. Insert the Power Core into the rear of the Luxe® body, with the quick strip latch lifted up. Once the Power Core is in position, close the quick strip latch.

MAINTENANCE

ESSENTIAL STEPS FOR PEAK LUXE¹ PERFORMANCE

BASIC GUIDE TO REMOVING THE
LUXE¹ QUICK-SNAP DETENT ASSEMBLIES

THE LUXE® BALL DETENT ASSEMBLIES PROVIDE INSTANT TOOL-FREE ACCESS FOR CLEANING THE BALL DETENTS AND VISION SYSTEM IN THE FIELD.

—fin.

1

MAINTENANCE 5.2 BALL DETENTS & VISION EYES

THE LUXE® QUICK-SNAP BALL DETENT ASSEMBLIES serve both to prevent double-feeding of paint, and to protect the Vision anti-chop eye system. Their unique magnetic latch system keeps them secure, while allowing for easy tool-free maintenance. There is a ball detent assembly on each side of the marker, and both should be cleaned and inspected in the same manner.

STEP ONE PRESS DETENT ASSEMBLY

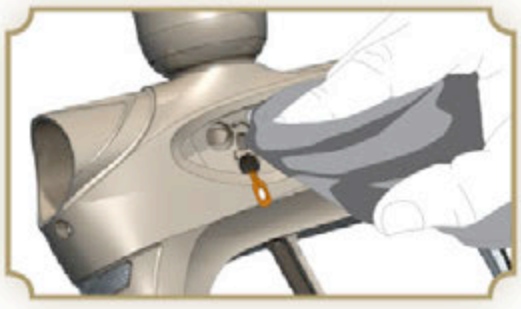
PRESS ON THE FORWARD POINT OF THE BALL DETENT ASSEMBLY. This will separate the magnets at the rear, pushing the assembly's back edge out from the Luxe® body.

2

STEP TWO REMOVE DETENT ASSEMBLY

GRASP THE BALL DETENT ASSEMBLY from the rear, and lift outward, away from the Luxe® body.

3



STEP THREE CLEAN VISION EYE POCKET

LIFT OUT THE VISION EYE from its pocket in the Luxe® body. Using a soft cloth or cotton swab, clean any paint, debris or grease from the passage between the eye pocket and the breech, or from the eye itself. If debris buildup is severe, use a cotton swab dampened with rubbing alcohol for cleaning the Vision eye and its pocket and allow them to dry completely before proceeding. Take care not to scratch the Vision eye or strain its flex-strip circuit. Gently re-seat the Vision eye in its pocket, with its emitter or sensor facing inward.

4

STEP FOUR INSPECT BALL DETENT PLUNGER

CLEAN AND INSPECT THE BALL DETENT PLUNGER in the ball detent assembly. It should move freely when pressed in and released. If the plunger shows significant signs of wear or binding, replace it following the instructions in **ADVANCED MAINTENANCE 6.3**.

5

STEP FIVE REINSTALL DETENT

REINSERT THE BALL DETENT ASSEMBLY by hooking its pointed edge into the front side of its pocket in the Luxe® body. Then angle the rear into place, allowing the rare-earth magnets to grip and secure it in place.

ADVANCED MAINTENANCE

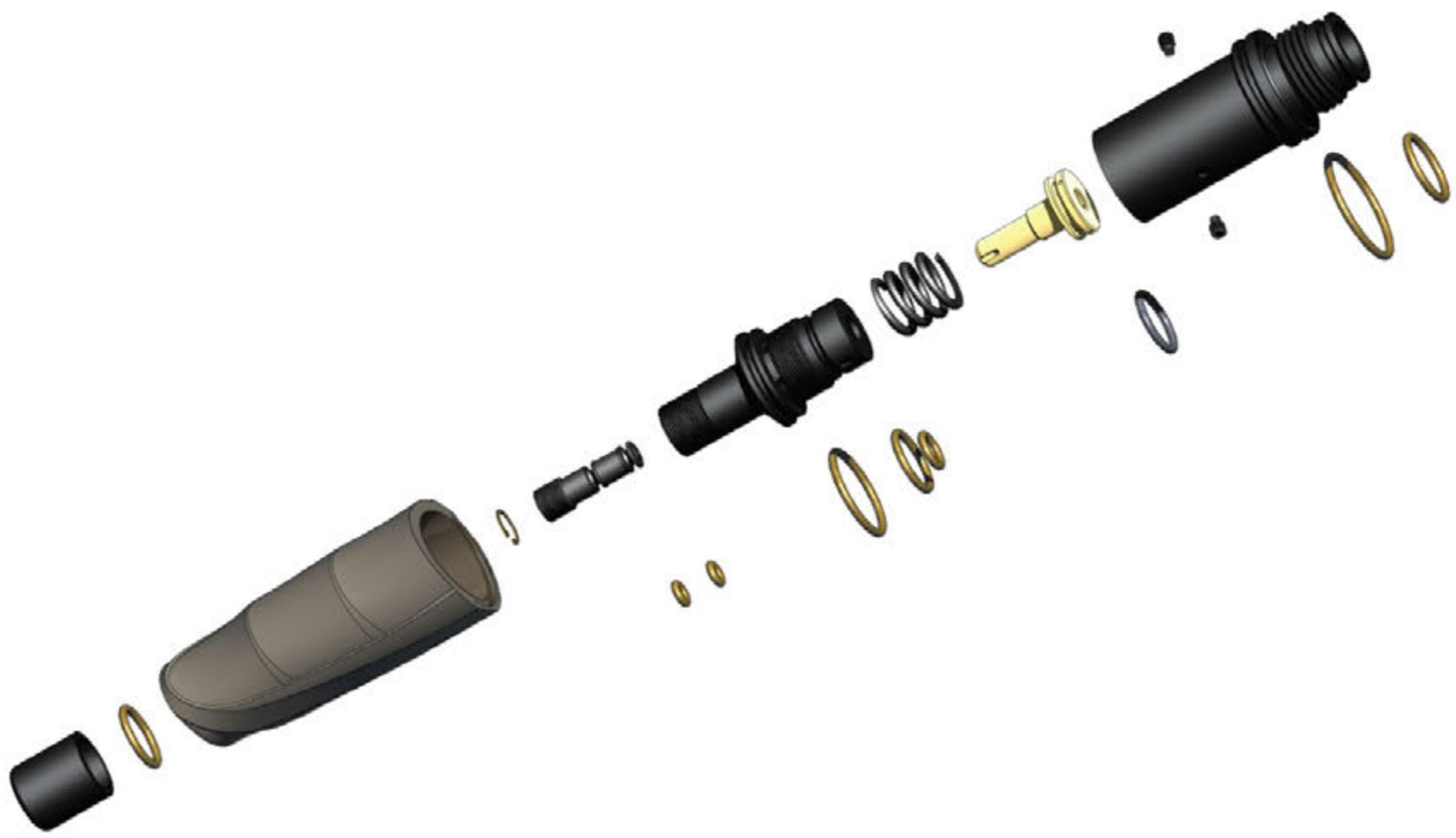
REPAIR PROCEDURES TO GET YOUR LUXE BACK IN THE GAME

ADVANCED MAINTENANCE 6.1 INTRODUCTION

UNDER NORMAL CONDITIONS, YOUR LUXE® should only need the basic maintenance procedures performed. This advanced maintenance section is provided to give you additional familiarity with the Luxe®. If you do not feel comfortable with going beyond regular maintenance, see your Authorized Luxe® dealer for support.

ADVANCED MAINTENANCE 6.2 INTEGRATED AIR VERTICAL REGULATOR

THE LUXE® INTEGRATED AIR VERTICAL REGULATOR USES a unique bi-directional ASA that allows it to both receive its supply gas, and release its regulated output through the top, eliminating the need for hoses. The bi-directional ASA is backwards compatible, also allowing the use of traditional hosed vertical regulators.



ADVANCED MAINTENANCE

REPAIR PROCEDURES TO GET YOUR LUXE BACK IN THE GAME

1

ADVANCED MAINTENANCE 6.3 SERVICING THE VERTICAL REGULATOR

WARNING

PARTS OF THE LUXE® INTEGRATED AIR VERTICAL REGULATOR USE LEFT-HANDED THREADS. THESE PARTS MUST BE TURNED COUNTER-CLOCKWISE TO SCREW THEM IN AND CLOCKWISE TO UNSCREW THEM—THE OPPOSITE DIRECTION OF NORMAL SCREWS.

STEP ONE REMOVE REGULATOR FROM ASA

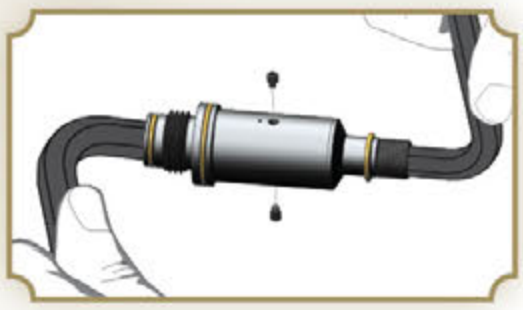
With the Luxe® unloaded and degassed, use a 5/16-inch hex wrench to unscrew the Luxe® vertical regulator from the bi-directional ASA. Inspect, clean and if necessary replace the white ASA o-ring at the top of the regulator. Lubricate the o-ring lightly with SL33K.

2

STEP TWO REMOVE REGULATOR COVER

INSERT A 3/8-INCH ALLEN WRENCH into the top of the Luxe® regulator, and a 3/8-inch allen wrench into cover lock ring at the bottom. Turn the allen wrenches counter-clockwise relative to one another to unscrew the cover lock, and slide the Luxe® regulator out of its cover. Clean and inspect both o-rings on the bi-directional ASA fitting at the top of the regulator, and replace if damaged. Lubricate both o-rings with SL33K.

3



STEP THREE DISASSEMBLE REGULATOR HOUSING

USE A 5/64-INCH ALLEN WRENCH to remove the two lock-screws from the sides of the Luxe® regulator. Using a 3/8-inch allen wrench in the top regulator housing, insert a 5/16 into the lower regulator housing and turn the two counter-clockwise relative to one another. Remove the lower regulator housing from the upper.

4

STEP FOUR PRESSURE CONTROL PISTON

THE BRASS PRESSURE CONTROL PISTON and regulator spring may come out with the lower regulator housing. If they do, the pressure control piston may be pulled out of the lower regulator housing by hand. If the pressure control piston remains in the regulator housing, the regulator spring can be dropped out by tilting the upper regulator housing, and a 5/16-inch allen wrench may be used to push the pressure control piston out from the top.

5

STEP FIVE INSPECT SEALS AND REGULATOR HOUSING

AT THIS LEVEL OF DISASSEMBLY, the pressure control piston seal and regulator housings may be inspected, and cleaned with a soft cloth or cotton swab. If the piston seal shows signs of excessive wear or damage, it must be replaced. Lightly lubricate all o-rings with SL33K for reassembly. For normal maintenance this is all that must be done.

6

STEP SIX VELOCITY ADJUSTER

THE VELOCITY ADJUSTER SHOULD only be removed if leaking. Using a narrow pair of snap-ring pliers, remove its lock ring, then unscrew it clockwise (the velocity adjuster is left-hand threaded) out the bottom of the lower regulator housing. Clean, inspect, lubricate and if necessary replace the adjuster's o-rings, then reinstall it with the reverse procedure.

7

STEP SEVEN REASSEMBLE REGULATOR

REASSEMBLY IS PERFORMED IN THE reverse order of disassembly. Insert the pressure control piston into the upper regulator housing, followed by the regulator spring. Screw the lower regulator housing into the upper housing and snug them together with allen wrenches. Make sure the two housing halves are properly aligned, then reinstall two lock screws (if misaligned, the lock screws will stick out of the body.) Using a 5/16-inch allen wrench from the bottom, screw the regulator into the bi-directional ASA then slide the regulator cover in place and secure it with the cover nut.

WARNING

SERVICE AND ADJUSTMENTS TO THE REGULATOR WILL CAUSE CHANGES IN ITS OUTPUT PRESSURE. RE-ADJUST THE REGULATOR FOR THE CORRECT VELOCITY USING A CHRONOGRAPH AS DESCRIBED IN THE MARKER'S MANUAL.

ADVANCED MAINTENANCE

REPAIR PROCEDURES TO GET YOUR LUXE BACK IN THE GAME

FIG. 1

FIG. 2

FIG. 3

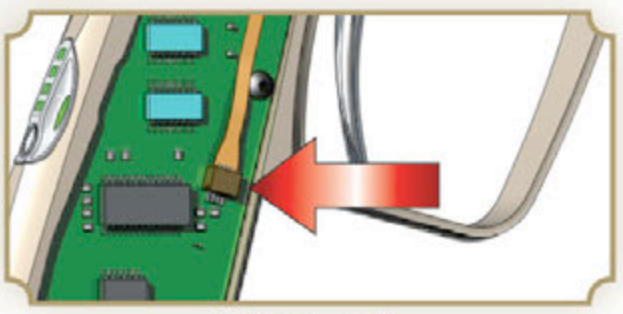


FIG. 4

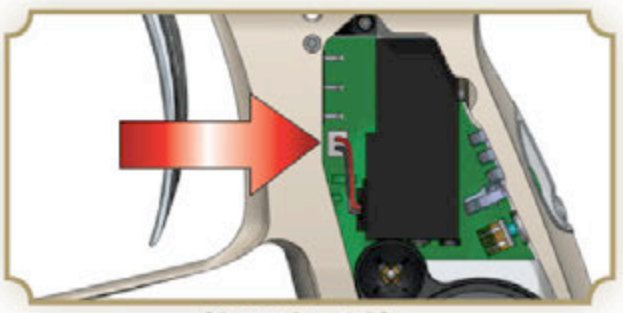


FIG. 5

FIG. 6

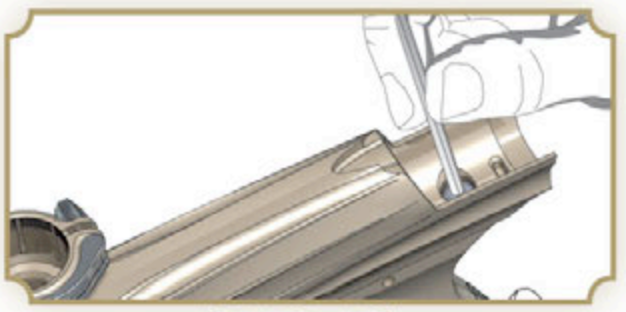


FIG. 7

ADVANCED MAINTENANCE 6.3 BALL DETENT ASSEMBLIES

IF THE BALL DETENT PLUNGER OR ITS SPRING are worn and need replacing, this is a relatively simple task. Remove the ball detent assemblies from the Luxe®, and press their plungers in and out. You should see one of the plunger's fingers moving back and forth across the detent release hole.

Take your 1/16-inch allen wrench, and reach it into the release hole [FIG. 1.] Use the allen wrench to pry outward on the backside of the ball detent plunger. Once the plunger is popped loose, you may pull it out of the ball detent cover with your fingers or a pair of needle-nosed pliers. You will probably damage the ball detent spring in the process, and for this reason it is normal to replace both the plunger and spring at the same time. If you are careful to not put the wrench in any further than is needed to pry against the closest edge of the plunger, you can avoid damage to the ball detent spring.

Carefully clean the ball detent cover with rubbing alcohol and a cotton swab. Install the new ball detent plunger, with its spring beneath it, into the ball detent cover [FIG 2.] You will need to pinch the plunger's fingers inward and wiggle it until it presses inside the cover and latches into place [FIG. 3.] Be careful, and make sure you are doing this in a clean work area—if you slip, the spring can jump away from you, and it is much easier to find on a clean work table.

WARNING

THE BALL DETENT PLUNGERS ARE MADE OF SELF-LUBRICATING MATERIAL. DO NOT USE GREASE, OIL OR OTHER LUBRICANTS ON THEM.

MAIN GRIP FRAME COMPONENTS

1 GRIP FRAME SCREWS
2 VISION EYE STRIP
3 SOLENOID MANIFOLD
4 SOLENOID VALVE
5 TRIGGER
6 GRIP FRAME

ADVANCED MAINTENANCE 6.4 GRIP FRAME REMOVAL

REMOVING THE LUXE® GRIP FRAME IS NOT a part of regular maintenance. It should only need to be performed if replacing the anti-chop Vision eyes or solenoid valve. It is recommended that this procedure be performed by a Certified Luxe® Technician, as re-assembly errors may cause leaks in the Integrated Air system or damage to the Luxe® body.

To remove the grip frame first unload and degas the Luxe®. Next use a 5/64-inch allen wrench to remove all four grip screws and the flexible rubber grip. Unplug both the flexible Vision eye ribbon [FIG. 4] and the solenoid valve [FIG. 5.]

Use a 1/8-inch allen wrench to loosen the forward grip frame screw [FIG. 6.] Use the same allen wrench to loosen the rear grip frame screw from the top [FIG. 7.]

While carefully supporting both the Luxe® body and grip frame, completely remove the front and rear grip frame screws. Next, carefully lift the receiver apart from the grip frame. Take care not to snag the solenoid valve connector, and notice how the Vision eye cable is routed through slots in the bottom of the receiver.

With the receiver and grip frame apart, the solenoid valve and solenoid manifold may be removed from the Luxe® receiver by removing their respective screws. Once the solenoid manifold is separated from the receiver, the Vision eye strip is free to be lifted out of its channel in the Luxe® body. With the Ball Detent Assemblies removed (see MAINTENANCE 5.2) the eyes may be lifted out of their pockets and passed down through their openings in the receiver.

Reassembly is performed in the reverse order of disassembly. It is critical to ensure that the solenoid valve wires and Vision eye flex strip are routed properly, and do not become bent or pinched. The sensor and emitter ends of the Vision eye flex strip are keyed with a notched corner to ensure that they are placed on the correct side of the marker. When plugging the Vision flex strip into the Luxe® circuit board, be certain the side with the shiny metal contact surfaces faces outward, away from the circuit board. The forward and rear grip frame screws must be snug, but not overtightened. Over-tightening the solenoid valve or solenoid manifold screws may cause permanent damage.

ADVANCED MAINTENANCE

REPAIR PROCEDURES TO GET YOUR LUXE BACK IN THE GAME

MAIN LUXE® QUICK-STRIP PLUG COMPONENTS

1 QUICK-STRIP LATCH COVER
2 LATCH COVER SCREW
3 LATCH RETURN O-RING
4 QUICK-STRIP LATCH
5 PIVOT PIN
6 DEGASSING VALVE CORE PIN
7 QUICK-STRIP PLUG
8 FIRING CHAMBER
9 BOLT
10 BOLT GUIDE

FIG. 1

FIG. 2

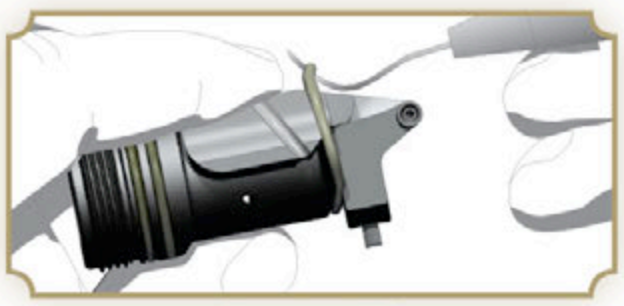


FIG. 3

FIG. 4

FIG. 5

ADVANCED MAINTENANCE 6.5 QUICK-STRIP PLUG DISASSEMBLY

IT MAY OCCASIONALLY BECOME NECESSARY to disassemble the Luxe® Power Core's quick strip plug. First, remove and disassemble the Power Core, following the instructions in **MAINTENANCE 5.1**.

Unscrew the bolt guide from the quick strip plug and remove it [FIG. 1.] Lift the quick-strip latch and use a 3-32-inch allen wrench to remove the screw that secures its cover [FIG. 2.] The quick-strip latch cover will then lift off of the latch. You will now be able to see the latch return o-ring. This o-ring does not create a seal, instead it acts as a spring to keep the quick-strip latch closed. It may be removed with an o-ring pick [FIG. 3.] Using a 0.050-inch allen-wrench, unscrew and remove the quick-strip latch pivot pin from the rear of the quick-strip plug [FIG. 4.]

With the pin removed, the latch can be lifted upward, exposing the degassing valve core and its black o-rings [FIG. 5.] If the quick-strip latch was closed while your Luxe® was still connected to a gas supply, and has developed a leak, these are the o-rings likely to have been damaged. To replace, simply remove them with an o-ring pick and slide new o-rings into place, lubricating them lightly with SL33K™.

The degassing valve core pin also serves as the locking pin which secures the Power Core in the Luxe® body. Inspect the lower end of the degassing valve core pin for signs of wear or bending, its edges should be square and undamaged.

Reassembly of the Power Core is performed in reverse of disassembly. Lower the cleaned and SL33K™ lubricated degassing valve core down into the quick-strip plug, and align the rear of the quick-strip latch. Slide the quick-strip latch pivot pin into place, and screw it in, taking care not to over-tighten. Use a small amount of Blue Loctite® 242 or equivalent threadlocker (if unavailable, clear nail polish may substitute) on the threads of the latch cover screw and pivot pin. Lift up the latch, set the latch cover in place, and secure it with its screw. Next screw the bolt guide back into the quick-strip plug, and re-assemble the Power Core.

ADVANCED MAINTENANCE

REPAIR PROCEDURES TO GET YOUR LUXE BACK IN THE GAME

FIG. 1

FIG. 2

FIG. 3

ADVANCED MAINTENANCE 6.7 TROUBLESHOOTING

PROBLEM	SOLUTION
AFTER ACCIDENTALLY CLOSING THE QUICK-STRIP LATCH, WHILE THE MARKER'S HPA SYSTEM WAS TURNED ON, THE LUXE® HAS A SLOW, CONTINUOUS LEAK.	✶ Disassemble the Quick Strip Plug [FIG. 1,] following the instructions in this manual, and replace the damaged degassing core o-ring (*see* **ADVANCED MAINTENANCE 6.2**.)
LUXE® POWER CORE WILL DEGAS, BUT CATCHES ON SOMETHING AND WILL NOT SLIDE OUT.	✶ If the rear grip frame screw has become loose it may catch on the Power Core. With the Luxe® unloaded and degassed, loosen the front grip frame screw [FIG. 2,] two or three turns, then pull the grip frame away from the body, creating a slight gap between them. This will pull the rear grip frame screw down and out of the way, allowing for removal of the Power Core. Re-tighten both grip frame screws. ✶ ✶ If this is a recurring problem, you may wish to secure the rear grip frame screw with a small amount of Loctite 242 (blue) or equivalent thread-locking compound.
LUXE® WILL NOT TURN ON WHEN POWER BUTTON IS PRESSED.	✶ Recharge the Luxe® battery [FIG. 3] following the instructions in this manual (*see* **HARDWARE 3.6**.) ✶ ✶ Following the battery replacement instructions (*see* **HARDWARE 3.6**,) ensure that the battery is installed and connected securely to the Luxe® circuit board.
FIRST SHOT FIRED HAS LOW VELOCITY BUT STABILIZES WITH FOLLOWING SHOTS (FIRST SHOT DROP-OFF.)	✶ Clean, inspect and lubricate the Luxe® Power Core (*see* **MAINTENANCE 5.1**.) ✶ ✶ Increase FSD Compensation setting (*see* **SOFTWARE 4.5**)
LUXE® WILL TURN ON AND MAKES PUFFING SOUND WHEN TRIGGER PULLED BUT WILL NOT FIRE.	✶ Make sure that the Luxe® is not set into the Training firing mode (*see* **SOFTWARE 4.2** & **4.5**.) ✶ ✶ Make sure that the Dwell setting is set to the default value or higher (*see* **SOFTWARE 4.5**.) ✶ ✶ ✶ Clean the Power Core, and replace and lubricate the fire chamber's inner o-rings. (*see* **MAINTENANCE 5.1**.)
VELOCITY DROPS OFF DURING RAPID FIRE.	✶ Clean, inspect and lubricate the Luxe® Power Core (*see* **MAINTENANCE 5.1**.) ✶ ✶ Clean, inspect and lubricate the Luxe® Integrated Air Vertical Regulator (*see* **ADVANCED MAINTENANCE 6.2**, *or consult your Certified Luxe® Dealer.*)

ADVANCED MAINTENANCE 6.8 LIMITED WARRANTY

WARRANTY SUPPORT AND SERVICE FOR DLX TECHNOLOGY GROUP PRODUCTS IS PROVIDED BY FACTORY TRAINED SERVICE TECHNICIANS AT LUXE® AUTHORIZED DEALERS.

DLX TECHNOLOGY GROUP WARRANTS FOR ONE (1) YEAR TO INITIAL RETAIL PURCHASER THAT THE PAINTBALL MARKER AND REGULATOR COMPONENTS ARE FREE FROM DEFECTS IN MATERIALS AND WORKMANSHIP. THE VALVE ASSEMBLY AND SOLENOID ARE WARRANTED FOR SIX (6) MONTHS. DISPOSABLE PARTS (BATTERIES, O-RINGS, SEALS, ETC.) ARE NOT WARRANTED. ELECTRONIC COMPONENTS ARE WARRANTED FOR AN ADDITIONAL SIX MONTHS WITHOUT THE INCLUSION OF INSTALLATION AND LABOR CHARGES.

THIS WARRANTY DOES NOT COVER SURFACE DAMAGES (SCRATCHES AND NICKS), MISUSE, IMPROPER DISASSEMBLY AND RE-ASSEMBLY, ATTEMPTS MADE TO DRILL HOLES OR REMOVE METAL FROM THE EXTERNAL SURFACES WHICH COULD DEGRADE PERFORMANCE AND REDUCE PRESSURE SAFETY FACTORS OF THE MARKER. DO NOT MAKE CHANGES TO THE BASIC MARKER PARTS WITHOUT WRITTEN APPROVAL. THE ONLY AUTHORIZED LUBRICANT FOR THE MARKER IS SL33K LUBRICANT. USE OF ANY OTHER LUBRICANT COULD RESULT IN VOIDING YOUR WARRANTY. PAINTBALL MARKERS ARE NON-REFUNDABLE.

THIS WARRANTY IS LIMITED TO REPAIR OR REPLACEMENT OF DEFECTIVE PARTS WITH THE CUSTOMER RESPONSIBLE FOR TRANSPORTING THE PRODUCT TO AND FROM THE LUXE® AUTHORIZED DEALER. THIS WARRANTY IS EFFECTIVE ONLY IF THE CUSTOMER RETURNS THE WARRANTY REGISTRATION CARD ENCLOSED WITH THE MARKER. THE WARRANTY IS NON-TRANSFERABLE. DO NOT ATTEMPT TO ALTER THE TRIGGER ASSEMBLY IN ANY WAY, AS THIS WILL VOID YOUR DLX TECHNOLOGY GROUP WARRANTY. TRIGGER ALTERATION OF ANY KIND MAY RESULT IN SERIOUS INJURY.

ADVANCED MAINTENANCE

REPAIR PROCEDURES TO GET YOUR LUXE BACK IN THE GAME

ADVANCED MAINTENANCE 6.9 WARNINGS & SAFETY GUIDELINES

LUXE® MARKER & LUXE® INTEGRATED AIR MICRO

- The Luxe® and Luxe® Integrated Air Micro are not toys.
- Misuse of the Luxe® and Luxe® Integrated Air Micro may result in serious injury or death.
- Eye protection specifically designed for paintball use must be in compliance with ASTM specification F1776 and must be used by the user and anyone within 200 yards (183 meters) of the Luxe® and Luxe® Integrated Air Micro.
- DLX Technology Group recommends that the Luxe® and Luxe® Integrated Air Micro only be sold to persons 18 and older.
- Persons under 18 years of age must have adult supervision when using or handling the Luxe® and Luxe® Integrated Air Micro.
- Thoroughly read the Luxe® and Luxe® Integrated Air Micro manual before operating.
- Treat every paintball marker as if it were loaded.
- Never look down the barrel of a paintball marker.
- Keep your finger off the trigger until ready to shoot.
- Never point the Luxe® at anything you don't wish to shoot.
- Keep the Luxe® on safe (power off) until ready to shoot.
- Keep the barrel blocking device on the Luxe®'s muzzle when not shooting.
- Always remove paintballs and degas the Luxe® before disassembly.
- Store and transport the Luxe® unloaded and degassed in a secure place.
- Follow all manufacturer's warnings and instructions for propellant source handling, storage, and filling.
- Do not shoot fragile objects such as windows.
- Always measure the velocity of paintballs fired by the Luxe® before use, and never adjust to fire above 300fps (91.44 M/s.)
- Observe all local laws, regulations, and guidelines concerning use.
- Use only on professional paintball fields where codes of safety are strictly enforced.
- Use compressed AIR or NITROGEN only. DO NOT USE CO_2.
- Never use oil or hydrocarbon compounds on or in the Luxe® Integrated Air Micro or its pressure cylinder. The only suitable lubricant is DOW 33 grease (Smart Parts SL33K). The use of inappropriate lubricants may result in spontaneous ignition, explosion or oxidization.
- Do not expose cylinder or Luxe® Integrated Air Micro to ambient temperatures above 110 degrees (F) or 43 degrees (C).
- Never purge or fill the Luxe® Integrated Air Micro system in confined spaces or near open flames. Air under pressure will aid in combustion. Nitrogen in high concentrations can cause asphyxiation; therefore, adequate ventilation is required.

LUXE® LITHIUM-POLYMER BATTERY

- Do not immerse the battery in liquid.
- Store the battery in a cool, dry environment when not in use.
- Do not use or leave the battery near fire or other sources of heat.
- Do not expose the battery to high temperatures (for example, do not leave the battery in strong direct sunlight or in a vehicle in extremely hot weather). Exposure to excessive heat can cause the battery's performance to degenerate and its service life to be shortened, and can further cause the battery to overheat or catch fire.
- When recharging, use only the battery charger specifically designed for use with the battery.
- Do not reverse the positive (+) and negative (-) terminals.
- Do not connect the battery to an electrical outlet.
- Do not dispose of the battery in fire or heat.
- Do not short-circuit the battery terminals (e.g., by directly connecting the positive (+) and negative (-) terminals to each other with a metal object).
- Do not transport or store the battery together with metal objects such as necklaces, hairpins, nails, wires, etc.
- Do not strike or throw the battery against a hard surface.
- Do not directly solder the battery terminals to an electronic device.
- Do not pierce the battery with a nail or other sharp object.
- Do not use the battery in a location rich in static electricity, otherwise, the safety features of the battery may be damaged, causing a potentially harmful situation.
- If the battery leaks, do not let the battery fluids (electrolytes) contact the eyes. In case of eye contact, do not rub the eyes! Rinse the eyes with clean running water and seek medical attention immediately, otherwise, eye injury or loss of sight may result.
- If the battery gives off an odor, generates heat, becomes discolored or deformed, or appears abnormal in any way during use, recharging, or storage, immediately remove it from any connected device and place it in a contained vessel such as a metal box for disposal.
- If the battery terminals become contaminated, clean the terminals with a dry cloth before use.
- Contaminated terminals may result in power failure or charge failure due to a poor connection between the battery and the electronic circuitry of a connected device.
- Be aware that discarded batteries may cause fire, therefore, tape the battery terminals before disposal to insulate them.

- Vented gases at high pressure can emit high sound levels, which may cause hearing damage. Use appropriate hearing protection for all persons exposed to sound.
- Never use damaged hoses or fittings. Split, torn, crushed hoses may fail in a violent manner. Inspect all hoses and fittings at regular intervals.
- Never over-tighten any threads or fittings as excessive torque can cause damage which may lead to violent failure.
- Never direct pressurized gas toward your skin or any part of your body, as serious injury may result. In the case of hose, seal or burst disk failure, immediately get away from the venting gas to avoid direct exposure.
- Do not use the Luxe® Integrated Air Micro to blow debris around or for any purpose other than powering a .68 caliber paintball marker as serious injury to yourself and others may result.
- Never pressurize the cylinder/system beyond its safe working pressure.
- Never use incorrect safety rupture devices. In the event of rupture of the captive burst disc, the burst disc should only be replaced by a trained, certified technician. The Luxe® Integrated Air Micro has a 7500psi high pressure burst disc. Use of an incorrect burst disk assembly could contribute to the cylinder exploding, which may result in injury or death.
- Only use the Luxe® Integrated Air Micro with a gas cylinder that has been tested and certified as compliant to DOT (US Department of Transportation,) HSE, PI (Europe) standards for use at pressures of 4,500 psi (310 bar) or greater. Do not use the Luxe® Integrated Air Micro with a gas cylinder for which the certification has expired—most DOT exemptions must be renewed by certified hydrotesting and inspection every 3 or 5 years.
- Only use suitable fill stations that are fitted with industry standard connectors. Inspect all connectors prior to filling for signs of wear, abuse, suitability, dirt or debris. Filling is only to be carried out by competent, trained personnel. All persons in the immediate fill area must wear suitable eye protection and remain clear of vented gases. Do not fill the Luxe® Integrated Air Micro system beyond the operational pressure rating of the cylinder to which it is attached. Never fill the Luxe® Integrated Air Micro system to pressure above 4,500 psi (310 bar.)
- Fast filling of cylinders results in heating of the gas and cylinder. If filled too fast, this heat can become excessive which may cause damage to the cylinder. Such damage can lead to failure of the cylinder, causing potential property damage and personal injury. Care must be taken so that the cylinder temperature does not exceed 130 degrees F (55 degrees C).
- Prior to each filling, the cylinder must be examined for signs of damage, including heat/flame exposure. If any damage is observed, do not fill the cylinder. Take the suspect cylinder to a DOT or HSE authorized hydrostatic tester for inspection and pressure testing.
- The cylinder can fly off with enough force to injure or kill if the cylinder is unscrewed while pressurized. Improper use, filing, storage or disposal may result in property damage, serious injury, or death. The cylinder must only be filled by properly trained personnel. Do not expose to temperatures exceeding 130 degrees F (55 degrees C), when pressurized. Do not modify the cylinder in any way, or place any stickers on the cylinder.
- In accordance with the United States Transportation Security Agency, the Luxe® Integrated Air Micro regulator must be removed from the cylinder prior to transport in checked luggage on commercial passenger aircraft.
- This precaution list and operator's manual must always accompany the product in the event of resale or new ownership. The latest version of this manual is available for free download at **LUXEPAINTBALL.COM**.
- Do not pressurize the Luxe® Integrated Air Micro system when it is not attached to a Luxe® paintball marker.
- **SHOULD YOU BE UNSURE AT ANY STAGE, YOU MUST SEEK EXPERT ADVICE.**