

PERATION GUIDE AND START UP

Functions for additional assistants.

Adjustment for additional assistants.

- . The battery must be charged before operation. Remove left side grip panel (#237) connect Spyder Battery (# JE1015) to the battery harness (#E24A). Once the battery is fastened, the Spyder Charger (#JE1024) must be placed in the charging port which is located on the back side of the trigger frame. NOTE: Marker must be in the off position to charge battery. See charging instructions for additional assistants.
- Always attach a barrel plug or barrel sock over the tip of the barrel for safety precautions. 3. Before installing a CO2/Compressed Air bottle make sure it's filled before use. The bottle must be snug tightly in the C/A adapter (#238). If a leak occurs between bottle and C/A adapter replace bottle o-ring. NOTE: Bottle o-rings are not
- supplied in the spare parts kit. 4. Attach an electronic loader onto the marker Direct Feed Neck Clamp (#234) twist clockwise to fasten and counter clockwise to release the loader. Only use .68 caliber paint through the marker and loader. NOTE: Kingman recommends that
- you use a force feed / high speed electronic loader to reach optimum performance. Powering ON/OFF. Press the (upper button) located on the back side of the trigger frame for (1 second) to power ON. Press and hold down the (upper button) (4-5) seconds to power OFF. Once the power has been turned ON the circuit board will automatically set in Safe Mode. To remove the marker out of Safety, press the (lower button) for (1 second). NOTE: If the Eye Mode is ON the marker WILL NOT FIRE until it detects a paintball in the breech. See Circuit Board Settings and
- i. Before operating the marker with paintballs we recommended that you do a Velocity check using a Velocity Chronograph to properly adjust the speed of the marker. This can be done at your local paintball field or at a qualified paintball store. The recommended Velocity speed should be no greater then 300fps. Not doing so can cause serious injury if the velocity is dangerously high. Paintball markers are not attended to shoot any person less then 25 feet. See Regulator and Velocity
- This paintball marker may have excess gas after the removal of a CO2/Compressed Air tank. Release the remaining gas from the Regulator (#240) by dry firing in a safe direction so the marker is completely empty of air. See Regulator and Velocity
- . After operating the marker, be sure to turn the marker OFF and remove all paintballs from the loader, barrel & markers breech before storing. Put the marker on SAFE and slowly unscrew the air tank from the marker's C/A adapter. CAUTION: Do not unscrew the tank valve from the tank doing so may cause serious injury or death. Never store a paintball marker with the CO2/Compressed air tank attached. It's recommend that the marker be placed in the uncocked position when the marker is not in use. See Circuit Board Settings and Functions for additional assistants.
- ELECTRONIC GRIP TROUBLESHOOTING
- Check to make sure there is enough air pressure to fire the marker.
- If the Rocking Trigger is not functioning, turn the Trigger Screw (#JE31L) clockwise to shorten the gap between the Dual Touch Switch (#JE27A) using an allen wrench. IMPORTANT: Do not over extend the Trigger Screw (#JE31L) for this can cause the Dual Touch Switch to stick.
- Trigger set screws (#JE31L) have been positioned by the factory on the A & D settings. You can reposition the trigger set screws (#JE31L) for your desired settings. Everytime the trigger set screws are repositioned use thread locker oc-Tite" 242 (Blue color) to prevent from loosening.

OURNAMENT MODE SETTING

- The Spyder Electra w/ Eye Circuit Board (part #242) is equipped with a Tournament Lock Out Switch (#JE30B). When the Tournament Lock Switch is removed from the Circuit Board the marker can only fire in SEMI-AUTO. The Tournamen Lock Switch is located on the internal Circuit Board to the right of the Battery. Reattaching the Tournament Lock Swit (#JE30B) back into the Circuit Board will re-enable the multi-mode functions. IMPORTANT! Kingman recommends that you use a force feed / high speed electronic loader to reach optimum performance. increase the velocity (fps).
- Kingman also recommends the use of a Spyder CO2/Compressed Air Tank to operate this marker. Lastly, the use of tournament grade paint will help reduce the likelihood of paintball breaks when firing the marker.
- CIRCUIT BOARD SETTINGS AND FUNCTIONS

This C.A.M.D. 4.0 circuit board is equipped with Eyes, Semi & Full-Auto and has the ability to achieve 30bps in

- POWER ON/OFF: Press the (upper button) for (1 second) to power ON. Once the circuit board is ON, it will automatically be set in Safe Mode with the Eyes ON. Turning the power OFF press and hold the (upper button) for (4-5 second this will shut down the circuit board.
- SAFETY LIGHT OFF/ON: While the circuit board is ON press the (lower button) for (1 second) to turn OFF the Safety light. Press the (lower button) for (1 second) will activate Safe Mode ON.
- EYE MODE OFF/ON: Press the (upper button) for (1 second) will turn OFF the Eyes and the symbol on the circuit boar will disappear. Press the (upper button) for (1 second) will turn ON the Eyes. NOTE: the Eye mode will not turn ON whe the marker is in Full-Auto. NOTE: When the Eyes are turned ON this will not allow the marker to fire until there is a
- MODES SEMI/FULL-AUTO: Press and hold the (lower button) for about (4-5 seconds) will change modes from Semi to Full-Auto. Press and hold the (lower button) for about (4-5 seconds) will change back the modes from Full-Auto to Sen

The Spyder Electronic Markers are not water resistant.

paintball in the breech.

- Extreme moisture can cause serious damage to any Spyder Electronic Markers.
- Always clean any dirt or paint inside the Markers Electronics. Never attempt to modify the Electronics circuitry. Doing so, it will VOID all electronic warranties.
- NOTE: If the Markers Electronics have any dirt or paint, Kingman recommends using an aerosol can of air. Apply the can of air directly at the components that need cleaning.

REGULATOR AND VELOCITY ADJUSTMENT

There are 2 ways to adjust the Velocity (feet per second) on the Electra w/Eye. The Regulator (#240). Regulator Adjust Screw (#241) is located underneath the regulator. Turning counter clockwise will increase the pressure. Turning the Regulator Adjust Screw (#241) clockwise will decrease the pressure. IOTE: If the pressure is less then 500psi can cause cocking issues. By having the pressure above 550psi or greater will

HELPFUL TIP: When adjusting the pressure always view the Gauge (#35d) to get the proper pressure setting. CAUTION: Never attempt to over pressurize the regulator or this will cause the gauge (#35d) to fail and leak.

he Velocity Adjuster/Spring Guide (#246). Turning the part (#246) clockwise will increase the pressure (fps). Counte lockwise will decrease the pressure (fps). NOTE: Never attempt to back out the Velocity Adjuster/Spring Guide (#246) rom the front of the Striker Plug (#236). This will cause both parts to seize together and can be damaged.

MPORTANT: Never attempt to disassemble the regulator without professional assistance. Doing so will VOID regulator varranties. If you experience any leaks or malfunctions with the regulator contact Kingman tech support.

- The recommended Velocity speed should be no greater then 300fps. Not doing so can cause serious injury if the velocity is dangerously high.
- Paintball markers are not attended to shoot any person less then 25feet. Never point a loaded marker at any person who is not wearing the proper face protection.
- Never at any time should you look down the barrel when the marker is loaded or not. Using a paintball marker outside a non designated paintball field can be Illegal, and is subject to law enforcement
- penalties if property damage is caused by the user.

TROUBLESHOOTING

ONE OR MORE OF THE FOLLOWING MAY CAUSE RECOCKING RELATED PROBLEMS: The pressure in the tank is too low. In some cases, the weather can affect the liquid in the tank and not cause it

- not to expand into carbon dioxide gas. Marker needs lubrication. (See DISASSEMBLE BACK INTERNALS)
- The Striker O-ring (#19A) is damaged. Replace with new Kingman or Kingman-approved O-ring. (NOTE: The #19A O-ring cannot be substituted by a tank O-ring or a #9 O-ring).
- Need to clean Barrel and upper chamber of the Receiver.
- Paintballs may be defective (i.e. expired, odd shape, etc.)
- After ball breaks in Barrel or chamber, remove all parts from UPPER chamber of Receiver, wipe parts clean, and reassemble parts into Receiver. Also make sure to clean the Barrel with a squeegee.

roperly maintain the markers performance, it's recommended that you clean the marker before and after operation. lsing a rag, paper towels are very helpful when cleaning the markers internals. Using an aerosol canned of air is also helpful when cleaning the Electronics and Electronic Eyes. To ease disassembling the markers back internals, its best that you have the Venturi Bolt (#305) in the uncocked position before removal.

- Never submerge a Spyder Electronic Marker in water. Never use any harmful cleaners such as (Easy Off™, WD-40™) or any other products that can damage the
- Receiver anodizing or Markers Electronics. Never use any home cooking oils for substation of paintball or Air tool oil.
- IELPFUL TIP: Please note how the parts are removed as this will ease for reassembly.

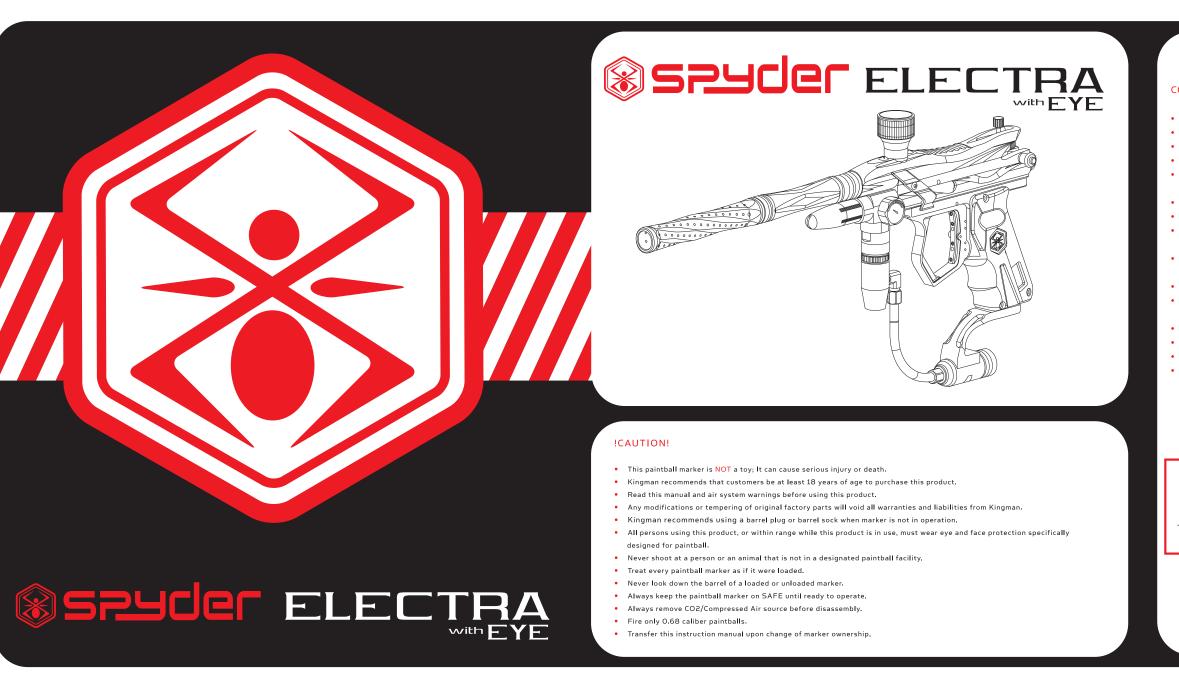
ISASSEMBLE BACK INTERNALS

LPFUL TIP: Hold down the Striker Plug (#236) so the internals are not lost. At the same time push in and pull the Release Pin (#2723) so the Striker Plug (#236) to be released. The Striker Spring (#25), Striker Buffer (#26A) semble. If the Top Cocking Knob (#173) becomes hard to remove simply twist left then right & at the same time pull wab (not provided) will help clean the Receivers (#235) upper chamber from any dirt or paint. At this time you should lean any dirt or paint from the Delrin Venturi Bolt (#305) with a rag or paper towel. Never apply any type of oil on the Delrin Bolt, or it swell and cause the marker to malfunction. Having the Striker Bolt (#JE18A) removed out of the Receiver (#235) will ease for proper oiling the Striker O-ring (#19A). Apply a small amount of paintball or Air Tool oil on

the Striker O-ring (#19A) only.

PFUL TIP: When reassembling the Delrin Venturi Bolt (#305) and Striker Bolt (#JE18A) the circuit board must be wered ON with the Safe Mode OFF and the Eyes OFF. Join the Delrin Venturi Bolt (#305) and Striker Bolt (#JE18A) ogether entering the back end of the Receiver (#235). At the same time pull the Trigger (#JE31H) and apply pressure hind the Venturi Bolt (#305) to allow reentry of both parts. Reinstall the Striker Buffer (#26A), Striker Spring (#25) Striker Plug (#236) and press in the Quick Release Pin (#2723) to lock down all back internals.

Never attempt to remove the markers internals while the CO2/Compressed Air bottle is attached. Remove all paintballs and loader before disassembling the marker.



- All valves must only be installed or removed by a qualified airsmith. See CO2/Compressed Air tank labels for retest dates. Cylinder tanks must be retested periodically.
- Improper use, filling, storage or disposal of all air cylinders may result in death, personal injury and/or property damage.
- Always keep cylinders out of reach from children or any inexperienced person(s). Only properly trained personnel in accordance with CGA Pamphlets P.1 and G-6.3 must fill all air cylinders. Pamphlets
- are available from the Compressed Gas Association or www.CGANET.com. Never alter the cylinder in any way.
- DO NOT expose pressurized cylinders to temperatures in excess of 130 °F (54 °C). Cylinders heated to an excess of 250°F (121°C) must be condemned or requalified in accordance with test defined
- The valve should NEVER be detached from the canister. Please seek immediate assistance from a trained airsmith
- should this occur. Any tank packed with the product is intended for paintball use only.
- Confirm that there is an attached urethane O-ring on the CO2/Compressed Air tank valve before attaching the tank to the marker. The tank will leak air as soon as it is secured to the marker, if the O-ring is missing from the valve. A urethane O-ring is highly recommended before attaching any air supply to the marker.
- NEVER over pressurize a CO2/Compressed Air cylinder.
- Avoid any direct skin exposure to the escaping gas, when installing or removing any air supply.
- Never expose cylinders to corrosive materials or clean with any caustic cleaners.

The CO2 or Compressed Air Tank can fly off with enough force to cause serious injury or death if the Valve unscrews from the cylinder head. LOOK at the Valve when removing the cylinder from the marker. Be sure that the valve is turning with the cylinder rather than remaining stationary DANGER with the marker. STOP if the Valve starts to unscrew from the cylinder. If in doubt, screw the

cylinder back onto the marker and contact a trained person for repair.

HARGING INSTRUCTIONS

o charge a Spyder 9.6 NiMH Battery the circuit board must be in the OFF Position. Spyder Batteries (#JE1015) are not fully charged when purchased. Using the supplied Spyder Charger (#JE1024) place the charger in the charging port which is located at the rear of the trigger frame. Kingman recommends a charging time of 6-8 hours for a complete charge. NOTE: You should never charge the battery over 24 hours or you can run the risk of damaging the battery or electronics. The battery charger will continue to power until removed from charging port. NOTE: It is recommended that the battery be chagred prior to use in order to ensure maximum performance, especially if the battery has not been used in over a week.

LOW BATTERY INDICATOR

This circuit board is equipped with a (shaped of a battery) low light indictor which is located on the left side of the trigger frame. If the battery light appears ON and in RED ever time the marker is fired it's time to charge the battery.

SPYDER 9.6 NIMH BATTERY LIFE

Always use the supplied Spyder 9.6volt NiMH Battery and Spyder Charger to operate this marker. A fully charged Spyder Battery will last about 3000 to 5000 shots. Number of shots depends on the settings of your firing methods. Under normal use and charging conditions the expected life of the Spyder 9.6 NiMH Battery to last approximately 700-1000

This marker is not attended to use any normal 9volt battery or chargers that are NON Spyder Products. Doing so will VOID all electronic warranties.

Always remove the Air Tank before any disassembly of your marker. Do not remove the Valve Body (#14) unless specific Valve Body repairs are needed. If needed, remove Valve Body with a long, soft-tipped object such as the eraser end of a pencil. Do not remove the Valve Body with a screwdriver as it will damage the Valve Body and cause air leaks. NOTE: Valve Body (#15) screw must be removed prior to taking out the Valve Body

Air leaks down the barrel are usually cause by a damaged or worn Cup Seal (#12). Replace with a new Cup Seal. o assure marker is assembled properly, follow the schematic drawing or carefully arrange parts in order during disassembly. Parts assembled backwards or placed in the wrong order will cause marker to malfunction.

The Anti Chop Eyes help prevent chopping paint by not allowing the marker to fire until a paintball is in front of the Venturi Bolt. The Eyes transmit a beam across the inside the breech. The Circuit Board is preset from the factory and does not need to adjust or alter the settings for Eye delay. If the Eyes are ON and do not see each other when firing your marker you will have to clean the Eyes properly.

CLEANING THE ANTI CHOP EYES

and Eye Panel Screws (#233).

- Using a squeegee or tail swab thru the breech should clean the Eyes enough for the beams to detect each other. Another way is to use an aerosol can of air thru the breech to remove paint or dirt from the Eyes.
- To thoroughly clean the Eyes remove Eye Panel Screws (#233) and remove Eye Panels (#231/232) using a cross head screwdriver. Once the parts are removed, precede with a (soft pinch) remove the Eye wires (#243) from the receiver. Remove all dirt or paint that is blocking the Eyes to malfunction. Follow the steps above to reinstall Eye Panels (#231/232)
- NOTE: Never attempt to rush the cleaning process or you can pinch the wires and cause the marker to malfunction with the Eye Mode ON. Take precaution not to over tighten the Eye Panel Screw (#233) or this can lead to cracking the Eye Panels (#231/232) or stripping the head of the Eye Screws (#233).
- HELPFUL TIP: Cleaning the Eyes often will help reduce dirt, paint or oil residue from block the Eyes from seeing each other.

CHANGING THE BALL DETENTS

- Experiencing paint rolling through the barrel, can be related to small diameter of paintballs or the lost of a ball detent(s). When having the Eye Panels removed (#231/232) will allow access for the Ball Detents (#03) to be cleaned or replaced. Follow the steps above to reinstall Eye Panels (#231/232) and Eye Panel Screws (#233).
- NOTE: Take precaution not to over tighten the Eye Panel Screw (#233) or this can lead to cracking the Eye Panels (#231/232) or stripping the head of the Eye Screws (#233).

WARRANTY STATEMENT

Kingman warrants the original retail purchaser that this product is free from defects in material and workmanship under normal use and service for a period of (1) year from the original date of purchase. Any Electronic Components in an Electronic Spyder marker are warranted for (6) months from the original date of purchase. Kingman agrees to repair or replace (at its discretion) any product within (a reasonable period of time). This warranty does not cover o-rings, cup seals, 9.6v rechargeable battery, charger, scratches, nicks, normal wear and tear of parts, any modifications, normal fading of anodizing and damage caused by dropping or hitting of products. This warranty shall not apply if it is shown by a Kingman Technician that the consumer caused the defect or malfunction because of misuse. This warranty only covers original factory parts. Any modifications or tampering of original factory parts will VOID warranty. Any damage caused by water will not be covered under warranty. Warranty repair can only be conducted by Kingman technician or Kingman authorized technician. For warranty to be effective, consumer must return the enclosed warranty registration card filled out, along with a copy of the purchase receipt, within (15) days of the original purchase date. This warranty is not transferable. Paintball markers are non-refundable. This warranty will not cover pick up, shipping, delivery, and/or house calls. If product needs repair, consumer will package it carefully and send together with your name, address, phone number and a brief description of the

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FOR TECHINICAL SUPPORT Our Technical Support Department is open Monday through Friday, from 8am to 5pm (PST), and can be reached at (626) 430-2300.



www.spyder.tv

WARRANTY REGISTRATION PLEASE COMPLETE AND RETURN THIS FORM, ALONG WITH A COPY OF YOUR PURCHASE RECEIPT, WITHIN 15 DAYS OF PURCHASE SO THAT WE MAY VALIDATE YOUR 12 MONTH LIMITED WARRANTY. PHONE #: () PRODUCT NAME/SERIAL #: WHAT OTHER BRAND(S) OF MARKERS DO YOU OWN?: WHY DID YOU PURCHASE THIS KINGMAN MARKER?: WHAT IS THE NEXT PAINTBALL PRODUCT YOU INTEND TO BUY?: WHAT ARE YOUR HOBBIES (OTHER THAN PAINTBALL)?: WHAT MAGAZINES DO YOU LIKE TO READ?: HAVE YOU MADE ANY ONLINE PURCHASES IN THE PAST 6 MONTHS?: Y / N OMMENTS/SUGGESTIONS: (please check box) Yes, I would like to receive more in regarding new products, promo and specials from Kingman.

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