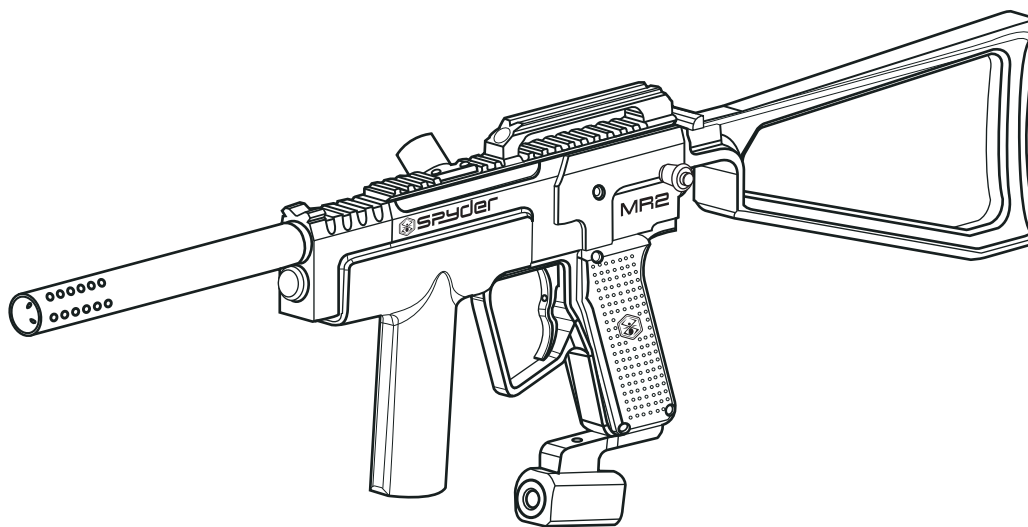


SPYDER MR2



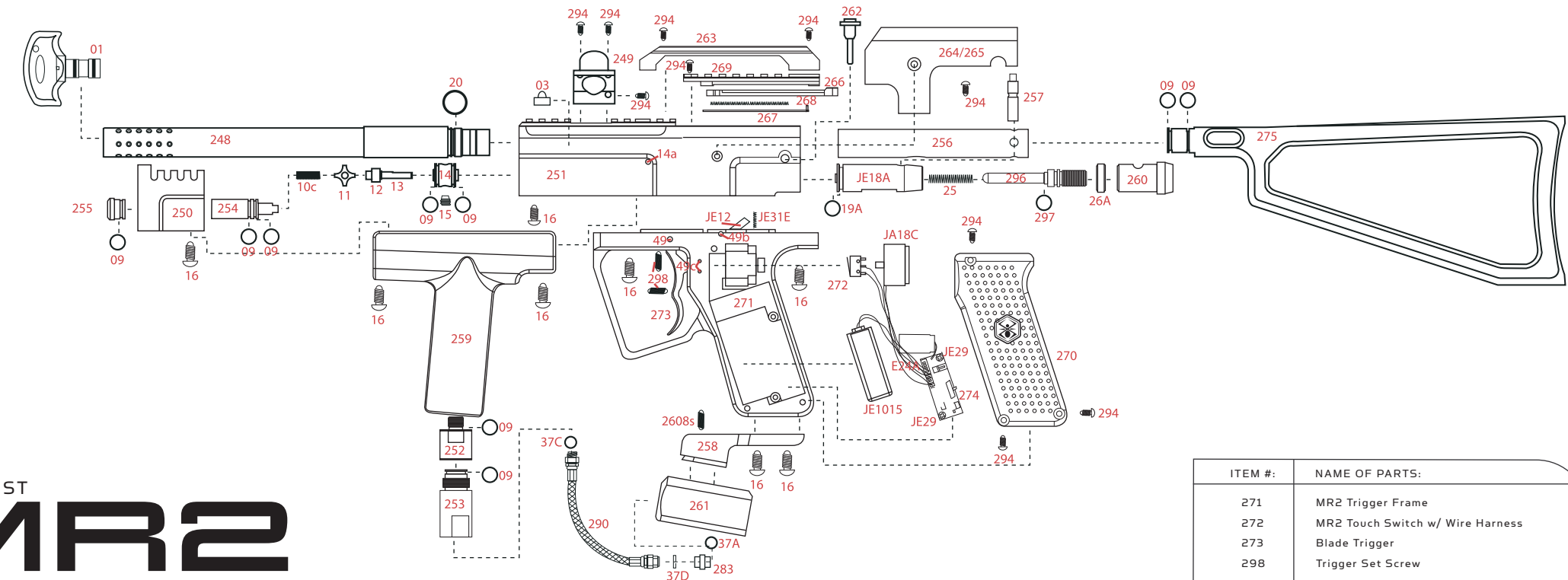
!CAUTION!

- This paintball marker is NOT a toy. It can cause serious injury or death.
- Kingman recommends that customers be at least 18 years of age to purchase this product.
- Firmly install a barrel blocking device when marker is not in use.
- All persons using this product, or within range while this product is being used, must wear eye and face protection specifically designed for paintball.
- Never shoot a person who is not wearing proper protection.
- Treat every paintball marker as if it were loaded.
- Never look down the barrel of the marker.
- Keep the paintball marker on SAFE until ready to shoot.
- Always remove gas source before disassembly.
- Fire only 0.68 caliber paintballs from this product.
- Read this manual and air system warnings before using this product.
- Any modifications or tempering of original factory parts will void all warranties and liabilities from Kingman.
- Always make certain the bolt is in the un-cocked position when marker is not in use.
- Always put marker on SAFE when marker is not in use.
- Transfer this instruction manual upon change of marker ownership.

PARTS LIST

MR2

ITEM #:	NAME OF PARTS:	ITEM #:	NAME OF PARTS:
1	Barrel Plug	14	Valve Body
248	MR1/MR2 12' Barrel	14A	Valve Body Roll Pin
3	Ball Stopper	15	Valve Body Screw
249	MR1/MR2 Feed Neck	294	MR1/MR2 M4 x 8 Screw w/ washer
250	MR2 Shroud	16	M5 x 12 Screw w/washer
251	MR2 Receiver	256	MR 2 Delrin ACS Bolt
252	MR2 Vertical / C/A Plug	JE18A	Striker Bolt
253	MR2 Vertical / C/A to Hose Adapter	19A	Striker O-Ring
254	MR2 Reservoir Adapter Plug	20	Barrel O-ring
255	MR2 Shroud Plug	257	MR2 Bolt Pin
09	O-Ring #015 80D	258	MR1/MR2 2" Dovetail Drop Forward
10C	Valve Spring	2608s	Drop Forward Lock Screw
11	Cup Seal Guide	259	MR2 Fore Grip Handle
12	Cup Seal	260	MR1/MR2 Striker Plug
13	Valve Pin	261	MR1/MR2 Dovetail Bottom-Line ASA



ITEM #:	NAME OF PARTS:
271	MR2 Trigger Frame
272	MR2 Touch Switch w/ Wire Harness
273	Blade Trigger
298	Trigger Set Screw
49*	Trigger Pin
JE12	Sear
JE31E	ESP Sear Spring
49C	Touch Switch Roll Pins
49B	Sear Roll Pin (Small)
274	MR2 Circuit Board
JE29	Circuit Board Screw
JE18C	Coil Set
JE18E*	Coil Set Screw
E24A	Battery Harness
275	MR1/MR2 Shoulder Stock
JE1015	Java 9.6v Rechargeable Battery
JE1024*	A/C Charger - 110 v
276*	MR2 Parts Kit
37B	Filter O-ring
37C	Air Filter
37D	Disconnect O-ring #011

* not pictured

OPERATION GUIDE

- 1) To turn the power ON, slide the Selector Switch located on the rear of the trigger frame UP to SEMI, BURST, or AUTO mode. CAUTION: with the power ON, the marker is now ready to shoot.
- 2) Cock the marker by pulling the Snap T-Cocking Handle (part #266) rearward until it latches. Caution: If you let go before the Handle latches, your marker may fire. Note: The Snap T-Cocking Handle will latch the bolt internally, the Handle will not remain in a cocked position after latching the bolt, nor will it move while the marker is being fired. You should hear an audible click and feel a tension release in the Handle when cocking the marker.
- 3) Tighten the Air Tank until it is snug. If a leak occurs between the Tank and the C/A Adapter, replace the Tank O-ring.
- 4) Install the Loader onto the Feed Adapter (part #54A). Tighten the Feed Adapter Screw to secure the Loader, then fill the Loader with .68 caliber paintballs only.
- 5) To change firing modes, slide the Selector Switch on the rear of the trigger frame to the desired mode.
- 6) It is recommended to use a motorized Loader that is capable of feeding paintballs into the marker at 13 balls per second or faster to avoid chopping paintballs in the markers breach when shooting at high rates of fire.
- 7) Routine lubrication of the marker does not require disassembly of the marker. Put 3-4 drops of Paintball Marker Oil into the Bottom Line ASA (part #261), screw in your air tank, point the marker in a safe direction and dry fire (no paintballs in the chamber) 5-10 shots. This procedure will circulate oil through the markers internal parts, thus extending the life of the marker.
- 8) Only use oil that is specifically designed for paintball markers.
- 9) It is a good practice to lubricate your marker before and after each use, especially when storing the marker for an extended period of time.
- 10) When you are finished shooting the marker, be sure to remove the Loader and all paintballs before storing. NOTE: there may be a paintball in the breach of the marker, take a couple of shots in a safe direction to make sure that the Barrel and breach are empty.
- 11) Place the Barrel Plug into the Barrel to avoid accidental discharge of the marker. Turn the marker OFF and slowly unscrew the air source tank. Caution: do not remove the Tank Valve from the Tank, doing so may cause serious injury or death.
- 12) Trigger Set Screws (#JE31L) have been positioned by the factory on the A and D setting. This is a factory setting that will minimize the trigger bounce. You can reposition the Trigger Screws (#JE31L) for your desired setting: A and C, A and D, B and C, or B and D. Important: You must use #242 Loc-Tite (blue color) every time the Trigger Set Screws are repositioned to prevent the loosening of Screws. Turn Trigger Screws 1 & 2 (#JE31J) clockwise or counter clockwise (depending on your current setting) until desired trigger bounce is reached.

KINGMAN

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 90 DAY LIMITED WARRANTY.

NAME: _____

ADDRESS: _____

CITY: _____ STATE: _____ ZIP: _____

COUNTRY: _____ AGE: _____ JOB: _____

E-MAIL: _____ PHONE #: () _____

PRODUCT NAME/MODEL: _____

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 ARE SOME MAGAZINES YOU LIKE TO READ?: _____

HAVE YOU MADE ANY ONLINE PURCHASES IN THE PAST 6 MONTHS?: Y / N

COMMENTS/SUGGESTIONS: _____

MAIL TO: KINGMAN GROUP 14010 LIVE OAK AVE. BALDWIN PARK, CA 91706 USA



SPYDER

KINGMAN GROUP

WARRANTY STATEMENT

Kingman warranties to the original customer/purchaser that this product is free from defects in material and workmanship under normal use and service for a period of 12 months from the original date of purchase by the initial owner/purchaser. For warranty to be effective, customer must return the enclosed warranty registration card, along with a copy of the purchase receipt, within fifteen days 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, 9.6v rechargeable battery, charger, scratches, nicks, normal wear and tear of parts, any modifications or normal fading of anodizing or damage caused by dropping or hitting of products. This warranty shall not apply if it is shown by Kingman that the consumer caused the defect or malfunction because of misuse. This warranty only covers original factory parts. Any modifications or tampering with original factory parts will not be covered by this warranty. Any damage caused by water will not be covered by this warranty. Warranty repair labor may only be conducted by Kingman technicians or by technicians authorized by Kingman to perform warranty repairs. If product needs repair, package it carefully and send together with your name, address, phone number and a brief description of the malfunction to:

KINGMAN

14010 Live Oak Avenue
Baldwin Park, CA 91706 U.S.A.
Phone no.: 626.430.2300
Fax no.: 626.851.8530
www.kingman.com

IMPORTANT

- Firing velocity may vary according to altitude and climate conditions.
- BEFORE using your marker in play, you must always first perform a SAFE VELOCITY TEST. This can only be accomplished by using a testing device called a Velocity Chronograph and can be performed by the dealership where you purchased this product or at a local paintball playing field.
- NOTE: This product is intended to be used at a velocity no greater than 300 feet per second (FPS).
- Recommended velocity is 280 FPS or less.
- This product is NOT intended to be used at any distance less than 25 feet.
- This paintball marker may have excess gas after removal of the CO2 or Compressed Air tank. Please remove all paintballs and discharge the remaining gas safely.
- Always put marker on SAFE when marker is not in use.

CO2/HP AIR TANK WARNING

- VALVES MUST BE INSTALLED OR REMOVED ONLY BY QUALIFIED PERSONNEL.
- BOTTLE MUST BE RETESTED PERIODICALLY - SEE CO2/HP TANK LABEL FOR RETEST DATE!
- Improper use, filling, storage or disposal of this cylinder may result in death, personal injury and/or property damage.
- This cylinder must be filled only by properly trained personnel in accordance with CGA Pamphlets P.1 and G-6.3 available from the Compressed Gas Association - www.CGANET.COM.
- Do not over pressurize. Do not expose pressurized cylinder to temperatures in excess of 130 degrees F.
- Do not expose cylinder to corrosive materials and do not clean with caustic cleaners.
- Do not alter this cylinder in any way.
- Cylinders heated to a temperature of 250 degrees Fahrenheit or more must be condemned or requalified in accordance with test defined in CFR-49.
- Keep cylinder out of reach of children.
- The valve should NEVER be detached from the canister. Should this occur, please seek assistance from a trained airsmith immediately.
- Any tank packaged with this marker is intended for paintball use only.

DANGER

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 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.

GENERAL MAINTENANCE

Cleaning should only be performed on the exterior of the marker. Avoid submerging the marker in liquid for any reason as this can cause damage to the electronics. Keep water or cleaning solutions from entering inside the Trigger Frame. Harsh solvents should not be used to clean any part of the Marker. Always use the appropriate tools that are supplied with the marker to remove screws and other components.

HELPFUL HINTS

Always remove 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: #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. To 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.

TROUBLESHOOTING

ONE OR MORE OF THE FOLLOWING MAY CAUSE RECOCKING RELATED PROBLEMS:

- a. The pressure in the tank is too low. In some cases, the weather can affect the liquid in the CO2 tank and cause it not to expand into gas (carbon dioxide) at a consistent rate.
- b. Marker needs lubrication. (See OPERATION GUIDE in P4)
- c. 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).
- d. Need to clean Barrel and upper chamber of the Receiver.
- e. Paintballs may be defective (i.e. expired, odd shape, etc.)
- f. 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.

ELECTRONIC GRIP TROUBLESHOOTING

- a. Check to make sure there is enough air pressure to fire the marker.
- b. Battery may need to be recharged.
- c. Specific troubleshooting questions may be answered by calling toll free at (888) KINGMAN or (626) 430-2300.

THE CHARGER FOR THIS BATTERY

This charger is specially designed for a 9.6volt Rechargeable Battery. Five types of chargers are currently available from your Kingman Dealer:

1. Spyder Rapid Standard Indoor 110v A/C Charger (#JE1026)
2. Spyder Rapid Car Charger (#JE1022)
3. Spyder Standard Indoor 110v A/C Charger (#JE1024)
4. Spyder Standard 2B Indoor Charger (#JE1023)
5. Spyder Standard Indoor 220v A/C Charger (JE1025)

Using a Standard Charger (#JE1024-JE1025) it will take approximately 6-8 hours to fully charge the 9.6volt Battery. Using the Rapid Car/Home Charger (#JE1022/1026) will take approximately 1.5 hours to achieve a full Battery charge.

CHARGING INSTRUCTION AND SPECIFICATIONS FOR RECHARGEABLE BATTERY

The battery to be used with your frame is a specially designed 9.6Volt NiMH Battery. To maximize the life of the Battery, please read the following instructions before use.

CONNECTING THE BATTERY

Remove the left Grip Cover (part #270). The Battery Terminal is located to the left of the Circuit Board. Attach the Battery to the Battery Connectors by aligning the + (positive) terminal on the Battery Connector to the + (positive) terminal on the Battery.

WARNING

Using unspecified batteries or chargers could cause damage to the Circuit Board. Such unauthorized use will void all Kingman warranties and liabilities on your marker. Kingman Recommends that you use the Spyder 9.6 volt NiMH Rechargeable Battery (#JE1015) and Spyder Charger(s) supplied with your marker.

RECHARGING THE BATTERY AFTER INITIAL USE

A fully charged Battery will provide about 5,000-10,000 shots under normal use conditions. The actual shots will depend on the markers and the type of use. Due to the characteristics of the NiMH Battery, it won't be necessary to completely drain the Battery before recharging it. You can charge the Battery any time you want and the time needed to fully charge will depend on how much energy is left in the Battery. The more energy left in the Battery, the sooner it will achieve a full charge.

NOTICE: It is recommended that the Battery be charged prior to use in order to ensure maximum performance, especially if the Batter has not been used for over a week.

LIFE OF BATTERY

With the Spyder Chargers, and under normal use conditions, the Battery can reach 700- 1000 charge-recharge cycles before expiration.

TOURNAMENT MODE SETTING

The Spyder MR2 Circuit Board (part #274) is equipped with a Tournament Lock Out Switch (#JE30B). When the Tournament Lock Out Switch is removed from the Circuit Board the marker can only fire in SEMI-AUTO mode. This short-circuit clip is located on the internal Circuit Board to the right of the Battery. Reattaching the Tournament Lock Out Switch (#JE30B) back into the Circuit Board will re-enable the multi-mode functions.

IMPORTANT! For optimal performance, Kingman recommends that an agitator Loader be used in order to shoot at high rates of fire. Kingman also recommends the use of a Spyder CO2 Air Tank or High Pressure 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.