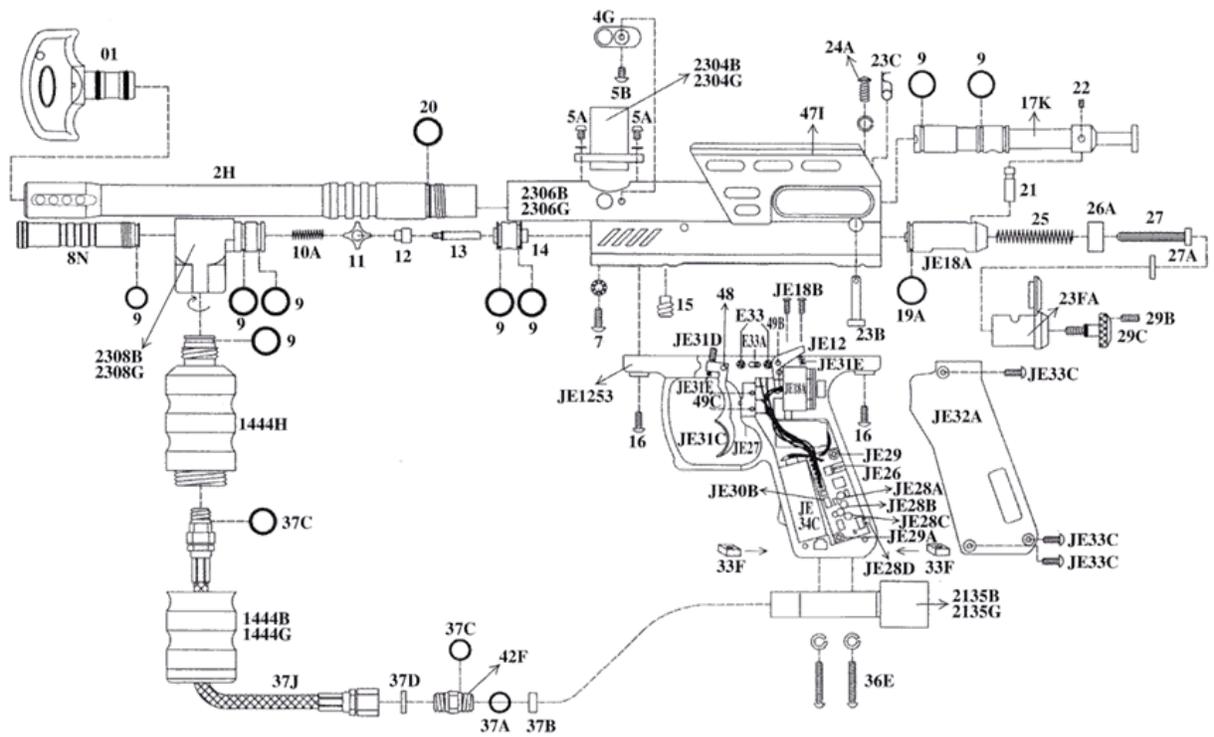


Spyder Imagine



ITEM #	NAME OF PART(S)	ITEM #	NAME OF PART(S)
01	Spyder Barrel Plug	29C	Thumb Adjuster w/ Screw (Silver)
2H	Imagine 9 1/2" Barrel (Silver)	36E	5/32" x 7/8" Screw w/Washer (Black)
04G	Detent Cover	37A	Filter O-Ring #009
05A	M4 x 6 Screw (Silver)	37B	Air Filter
05B	M4 x 8 Screw (Black)	37C	Disconnect O-Ring #011 (Black)
07	M5 x 12.5 Screw w/ Washer	37D	Plastic Washer
09	O-Ring #015 80D	37J	Disconnect Hose
10A	Valve Spring	41K	Imagine Parts Kit
11	Cup Seal Guide	47I	Imagine Sight Rail (Silver)
12	Cup Seal	48	Trigger Roll Pin (Large)
13	Valve Pin	E40	Straight Elbow -2 3/4" (Clear)
14	Valve Body	JE28	Circuit Board (L.P.I)
15	Valve Body Screw	JE28A	Low Battery Indicator
16	Trigger Frame Screw w/Washer (M5X12)	JE28B	R.O.F Indicator
17K	Imagine Venturi Cocking Bolt	JE28C	Mode Indicator
19A	Striker O-Ring	JE28D	Tack Switch
20	Barrel O-Ring (Black)	JE30B	Lock Switch
21	Bolt Pin	JE1253	Imagine Trigger Frame (Black)
2304B	Imagine Direct Feed (Black)	JE31D	Trigger Adjust Screw
2304G	Imagine Direct Feed (Green)	JE31E	Trigger Spring
2306B	Imagine Receiver (Black)	JE31C	Trigger
2306G	Imagine Receiver (Green)	E33A	ON/OFF Switch
2308B	Imagine Vertical Adapter (Black)	E33	ON/OFF Screw (M2X6)
2308G	Imagine Vertical Adapter (Green)	JE27	Touch Switch
08N	Low Pressure Chamber (Silver)	JE12	Seal
23FA	Striker Plug (Silver)	JE18B	Coil Set Screw (1/8")
22	Bolt Screw	JE31E	Sear Spring
23B	Quick Disconnect Pin	JE18A	Coil Set
2135B	C/A Adapter (Black)	JE29	Circuit Board Screw
2135G	C/A Adapter (Green)	JE26	Charge Pin
1444B	Nini Fore Grip (Black)	JE34C	Rechargeable Battery (Not Included)
1444G	Nini Fore Grip (Green)	JE32A	Grip Cover
1444H	Model S Expansion Chamber	JE33C	Grip Cover Screw
23C	Disconnect Pin Lock	49B	Secondary Roll Pin
24A	Sight Rail Screw w/ Washer (M4X12)	49C	Touch Switch Roll Pin
25	Striker Spring	JE18A	Striker Bolt
26A	Striker Buffer	19A	Striker Bolt O-Ring
27	Striker Spring Guide	33F	Nut Screw Insert
27A	Flat Disc		
29B	Lock Screw		

TROUBLESHOOTING

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

- a. The pressure in the tank is too low or too high.
- b. Need lubrication. (See step 6 in OPERATION GUIDE)
- c. #19A (striker o-ring) 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. Paintball may be defective. (i.e. expired, change shape)
- f. #9 (bolt o-ring) is damaged or the o-ring has expanded or swelled. Replace with a new o-ring.
- g. After ball breaks, remove all parts from UPPER chamber of receiver, wipe parts clean, and reassemble parts into receiver. Also make sure to clean barrel with squeegee.

HELPFUL HINTS

Always remove air tank before any disassembly of your marker. DO NOT remove #14 (valve body) 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 are usually cause by a damaged valve body or damaged cup seal (#12). Replace with new valve body and/or cup seal if necessary.

To assure marker is assembled properly, follow the schematic drawing or place parts in order during disassembly. Parts assembled backwards or placed in the wrong order will cause marker to malfunction.

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.

SPYDER IMAGINE OPERATION GUIDE:

- 1) Put the marker on 'SAFE' by pushing the on/off switch to the right. The marker is now off. To power on the marker, push the on/off switch to the left. CAUTION: with the power on, the electronic circuit board is now powered and ready to shoot (single shot mode).
- 2) Cock the marker by pulling the IMAGINE venturi cocking bolt (#17K) rearward until it latches. Caution: if you let go before it latches, your marker may fire.
- 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 a 7/8th vertical elbow with loader onto the direct feed. Fill the loader with .68 caliber paintballs only.
- 5) Please refer to the IPI settings guide to set the fire mode.
- 6) With the safety off, fire the marker by pulling the trigger.
- 7) Only use lubrication specifically designed for paintball markers. To lubricate your marker, you will need to disassemble your marker (please note how parts are removed from marker as this will ease re-assembly). Remove the Disconnect Lock Pin (#23C) and the Quick Disconnect Pin (#23B). Hold down the Striker Plug (23FA) and Thumb Adjuster (#29C), as internal parts may be spring-loaded. As you pull the cocking knob out of the receiver, the Venturi-Cocking Bolt (#17K) and striker (JE18A) will also be

removed.

8) Lubricate o-rings (#9) and (#19A) with a few drops of paintball oil only.

9) Re-assemble parts back into the marker. Note: when putting the Venturi-Cocking Bolt and striker back into the marker, you will need to apply pressure behind the bolt while Pushing the movable disc of the coil set (#JB18C) forward to the limit at the same time (right now the battery side grip must be opened). This will allow the bolt and striker to be properly installed back into the receiver.

10) When you are finished shooting the marker, first, unload the marker of all paintballs. NOTE: there may be a ball in the receiver; take a couple of shots in a safe direction to make sure that the barrel and receiver are empty. Second, put the barrel plug into the barrel. Put the safety on and slowly unscrew the air source tank. Caution: do not unscrew the tank valve from the tank. Doing so may cause serious injury or death.

11) Empty the hopper or remove the hopper off the marker to stop the flow of paintballs in the marker.

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 IMAGINE frame grip cover (part#JE32A). The battery terminal is located to the left of the circuit board. Attach the battery to the battery connectors by aligning the + (positive) on the battery connector to the + (positive) on the battery.

The Charger For This Battery

This charger is specially designed for a 9.6Volt rechargeable battery. Three types of chargers will be available from your Kingman Dealer:

1. Java indoor rapid charger.
2. Java standard indoor charger.
3. Java rapid car charger.

Using a Rapid Charger it will take approximately one and a half hours to fully charge the 9.6Volt battery. It will take approximately 14 hours for the standard charger.

WARNING

Using other unqualified chargers may cause damage or reduce battery life.

Recharging The Battery After Initial Use

A fully charged battery will provide about 8,000-12,000 shots in normal use. 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. So you can charge the battery anytime you want and the times 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.

RAPID CAR CHARGER USERS INSTRUCTION

1. PUT THE BIG PLUG INTO THE LIGHTER SOKET OF THE VEHICLE AND THE SMALL PLUG INTO THE CHARGE PIN OF THE E-MARKER FRAME.
2. LED INDICATOR LIGHTS RED MEANS LOW BATTERY.
3. LED INDICATOR LIGHTS GREEN MEANS FULL CHARGE.

(IT TAKES AROUND 1.5 HOURS FOR A FULL CHARGE DEPENDING ON HOW MUCH ENERGY IS LEFT IN THE BATTERY)

NOTICE:

It is recommended that the battery be charged prior to use to ensure the maximum capacity if you leave the battery unused for

over a week.

Life Of Battery

With the qualified Charger, and in normal use conditions, about 700-1000 charge-recharge cycles can be expected. This can be varied depending on the type of use.

GENERAL MAINTENANCE

- (1) Use the compressed air to clean the coil set (part No. #JE18C) to keep it's best performance after every use.
- (2) Beside (1) cleaning should only be performed on the exterior of the IMAGINE trigger frame. Never submerge the IMAGINE trigger frame in any type of liquid for any reason. The electronics may become damaged or destroyed. Keep water or cleaning solution from entering the inside of the IMAGINE trigger frame. Solvents should not be used to clean any part of the IMAGINE trigger frame.
- (3) Always use the appropriate tool to remove screws and other components of the IMAGINE trigger frame.
- (4) **Do not dry fire.**
- (5) **There is a self-monitoring device that helps to prevent the electronics from becoming damaged during periods of abnormal use. This device will act as a regulated shut-off switch and will disengage after a slight resting period.**

TOURNAMENT MODE SETTING

The I.P.I is also equipped with a "LOCK" function. A short-circuit plug (#JE30B) located on the internal serves this function. When this plug had been pulled off, the MODE will be locked to SEMI, (single shot mode) and cannot be adjusted. Putting the lock switch (#JE30B) back into the circuit board will enable the multi-mode functions. **IMPORTANT!** For optimal performance, Kingman Group recommends that an agitator loader or hopper be used in order to shoot at a high rate of fire. Kingman Group also recommends the use of tournament grade paint.

I.P.I (Intelligent Push key Indicator) Specifications

1. The I.P.I. has one push key for adjustment and 2 dual-color LED's for indicator. The one near push key stands for "MODE", and the other one stands for "R.O.F". There is also one single red color LED for "Battery Low" indicator.
2. For "MODE" indicator, there will be 3 colors that can be displayed, "Green ", "Orange" and "Red". The meaning of the colors are as follows:
 - (a) Green - SEMI
 - (b) Orange - Burst-3
 - (c) Red - FULL
3. For "R.O.F." Indicator, there are only 2 colors that can be displayed, "Green" for low rate, and "Red" for high rate. For "Burst-3" and "FULL" mode, the "R.O.F." can be toggled on "High" and "Low". But for "SEMI" mode, the "R.O.F." indicator will be fixed on "High" for reactive trigger response up to 13 shots per second.
4. When Power turns ON, the defaults will be Mode ="SEMI" and "R.O.F." = "High". All settings can be adjusted while power stays ON. Any adjustments will be lost when Power turns OFF.
5. The "Battery Low" Indicator will stay OFF during normal operations. When the capacity of battery drops to about 1/3 of the full battery capacity, this indicator will turn ON.
6. The I.P.I. is also equipped with a "LOCK" function. A short-circuit plug located on the internal serves this function. When this plug had been pulled off, the MODE will be locked to SEMI, and cannot be adjusted.

Operation Methods:

Press, Push and hold the button on the back of the trigger frame for over 2 seconds, then release the button. Click, push and then release the button. The duration should be less than 1 second.

Notes:

During the interval of R.O.F. Adjustment, the SAFETY will be turned ON automatically, that is, the trigger will be disabled on this interval. The SAFETY will be turned OFF automatically at the end of R.O.F. Adjustment, then the trigger will be functioning normally.