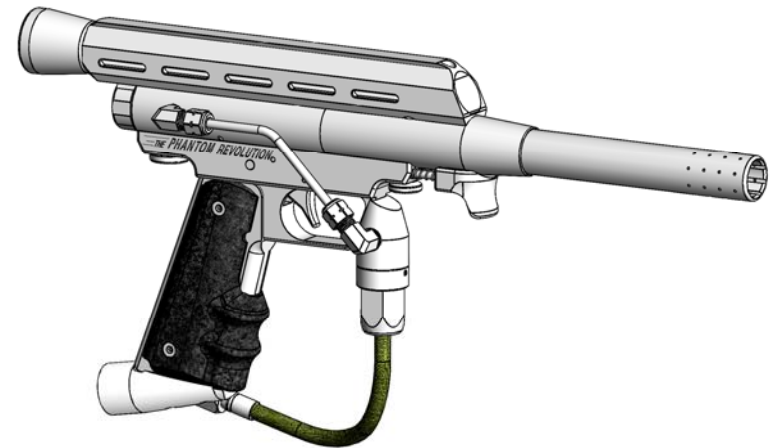


THE PHANTOM REVOLUTION[®]

Paintball Marker

User's Manual



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Newberg, OR 97132

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User's Manual

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Warranty

The limited warranty begins on the date of purchase. This warranty applies to all models of the Phantom products and accessories manufactured or sold by Component Concepts, Inc. (CCI).

CCI pledges to you, the owner, that the Phantom products are free from defects in materials and workmanship for 180 days.

During the term of this warranty, at no additional charge to the owner, excluding shipping, CCI will repair or replace any defective parts of the Phantom products with new or, at the option of CCI, refurbished parts.

The owner must prepay any shipping charges. In addition, the owner is responsible for insuring any product returned and assumes the risk of loss during shipping. All parts and products replaced under this warranty become the property of CCI.

Component Concepts, Inc.
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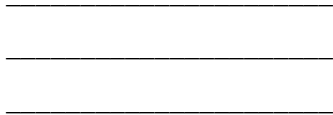
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Component Concepts, Inc.
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Precautions

Safety-Your Responsibility

The Phantom Revolution is designed and built to provide safe and dependable service if handled according to instructions. Read and understand the instructions and warnings in this manual before using the Phantom Revolution. Failure to do so could result in personal injury or property damage.

These precautions are given here for your safety and for the protection of the marker. Review them carefully before using or performing general maintenance or repairs on the marker.

WARNING

The Phantom Revolution is a dangerous weapon if mishandled. This marker is not a toy. Follow the basic rules of safe firearms handling and the laws governing the ownership and use of gas-fired markers. Careless handling of any gas powered marker may cause serious injury.

Do not handle this marker until you are thoroughly familiar with its mechanical characteristics.

Always wear approved eye protection when operating this or any paintball marker.

Pressurize only while the marker is in use.

Keep exposed flesh away from escaping compressed gas .

When not in use engage marker safety "ON".

Never point the marker in the direction of anything you do not intend to mark.

Never look directly into the barrel.

Use only .68 caliber paintballs.

Do not attempt to service the marker without first removing the compressed gas source.

Do not fire the marker at a target that is less than two feet away.

WARNING

The Phantom Revolution is a dangerous weapon if mishandled. Never clean, lubricate, disassemble, assemble, or work on the marker while it is pressurized. Observe safety precautions.

(fold)

Warranty Registration Card

Product Purchased _____ Price _____

Serial Number _____ Date Purchased _____

Owner _____

Address _____

City _____ State _____ Zip _____ Phone _____

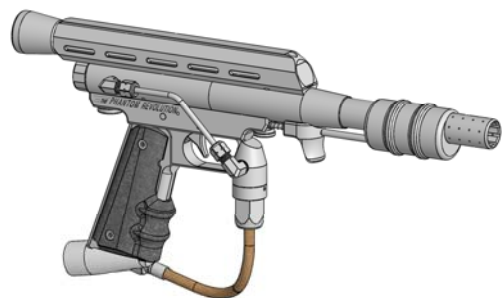
Purchased From _____

Address _____

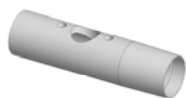
City _____ State _____ Zip _____ Phone _____

Comments _____

Options and Accessories



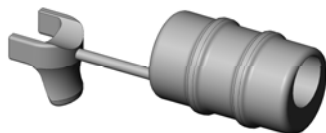
Breech, 15/16-20 Cocker Thread #1075



Sight Ring, Revolution #1120
For 12 Round Feed Tube



Pump Slide Kit #1089



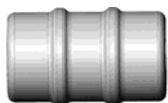
Pump Slide 10-32 #1096



Pump Rod #1093



Pump #1097

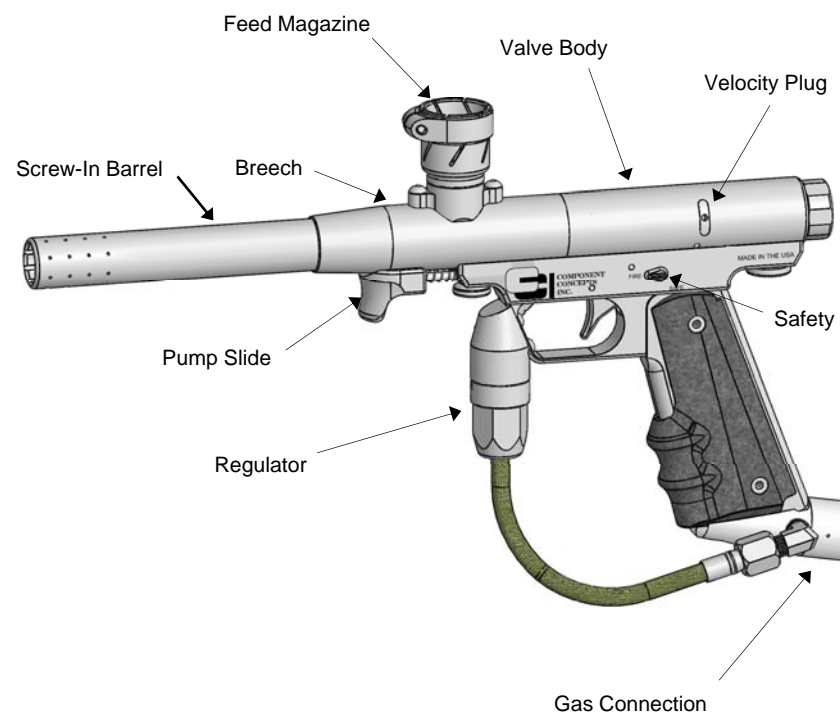


Description and Operation

Introduction

The Phantom Revolution is a .68 caliber, pump loading gas powered marker designed to fire paintballs. Squeezing the trigger releases the power piston and fires the paintball. The pump slide action of pulling back and releasing to a forward position feeds a paintball into the firing chamber.

Major Components



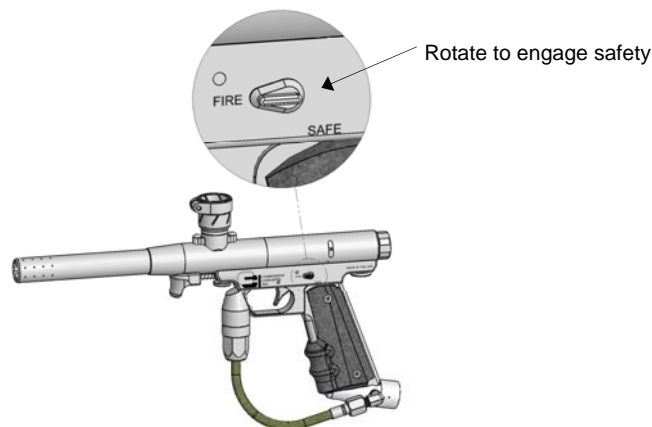
Description and Operation

Specifications

Caliber	.68
Mechanism	Pump Feed
Power	CO ₂ or Compressed Gas
Safety	Sear Disengagement
Velocity	Adjustable 200-320 FPS
Sights	Optional 3/8 Dovetail Rail
Weight	1.9 - 2.2 lbs.
Length	13 to 25 inches
Barrel	Phantom Thread 7/8-14 Optional 15/16-20 Thread (Cocker Breech)
Ball Detent Material	Paintball Sleeve 6061 T-6 Alloy

Marker Safety

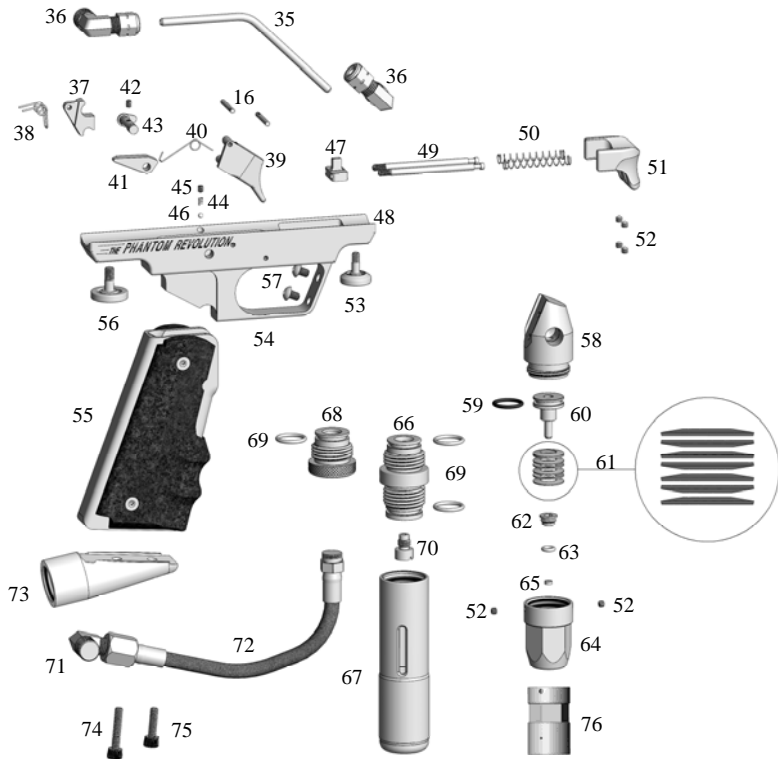
The safety is a rotation lever. The safety provides protection against accidental or unintentional discharge. To engage the safety, rotate the lever down to "safe" position. This action disengages the trigger link from the sear.



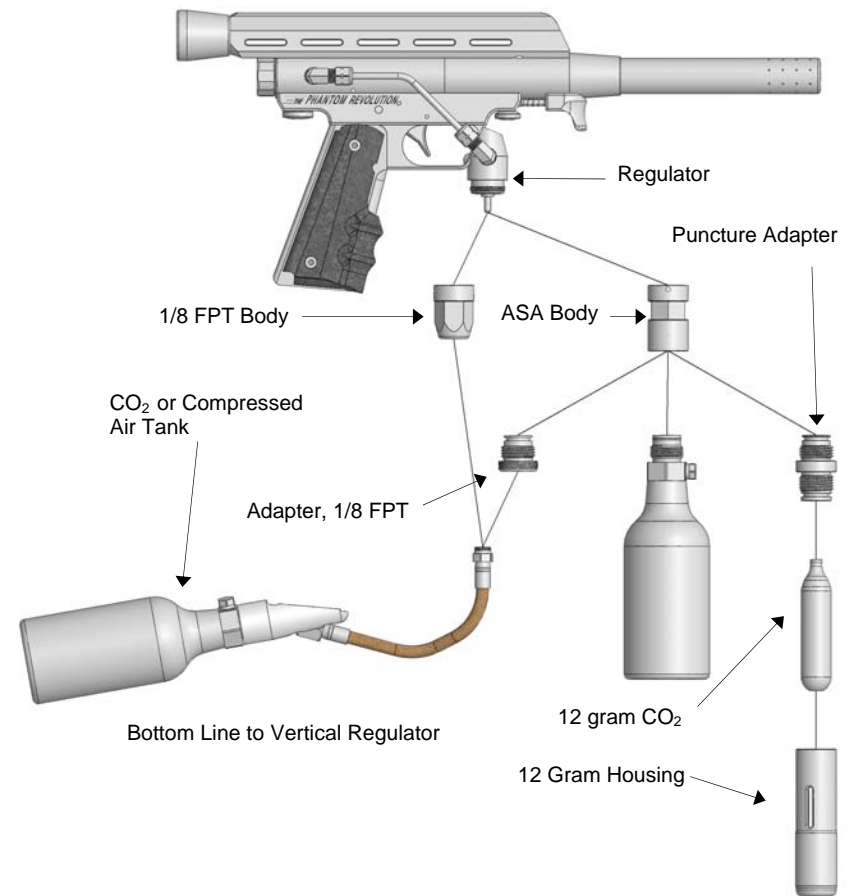
Service and Maintenance

Item #	Part#	Description
35	1013	Gas Line
36	9434	Compression Fitting
37	1015	Sear
38	1017	Sear Spring
39	1210	Trigger
40	1212	Trigger Spring
41	1211	Trigger Link
42	1203	4-40 x 1/8 SSS
43	1201	Safety
44	1204	Safety Spring
45	9523	4-48 Set Screw
46	9522	3/32 Ball
47	1099	Connector Block
48	1090	Slide Guides
49	1092	Slide Rod
50	1095	Pump Slide Spring
51	1094	Pump Slide
52	1091	6-32 x 1/8 Set Screw
53	9311	8-32 Thumb Screw
54	1200	Trigger Frame
55	3045	45 Style Grip w/ Hogue
56	9316	10-32 Thumb Screw
57	9458	8-32 x 1/4 BHS
58	1060	Upper Regulator Body
59	1066	#14 O-Ring
60	1065	Regulator Piston
61	1061	Disc Spring
62	1062	Retainer Seat
63	1063	#7 O-Ring
64	1069	Lower Regulator Body 1/8 FPT
65	1064	Base Seal (Non Removable)
66	9415	Puncture Assembly
67	9410	Housing
68	9455	Reducer 1/8 FPT
69	9416	#14 x 2 O-Ring
70	9038	Piercing Pin Assembly
71	9436	90 Degree Elbow
72	9456	Hose Assembly
73	3050	Bottom Line ASA
74	3051	10-32 x 3/4 SHCS
75	9322	10-32 x 1/2 SHCS
76	1067	Lower Regulator Body ASA

Exploded View Bottom



Gas Connections



The vertical regulator has either the valve thread connection or 1/8 pipe thread adapter. The valve thread will accept a tank or 12 gram changer directly.

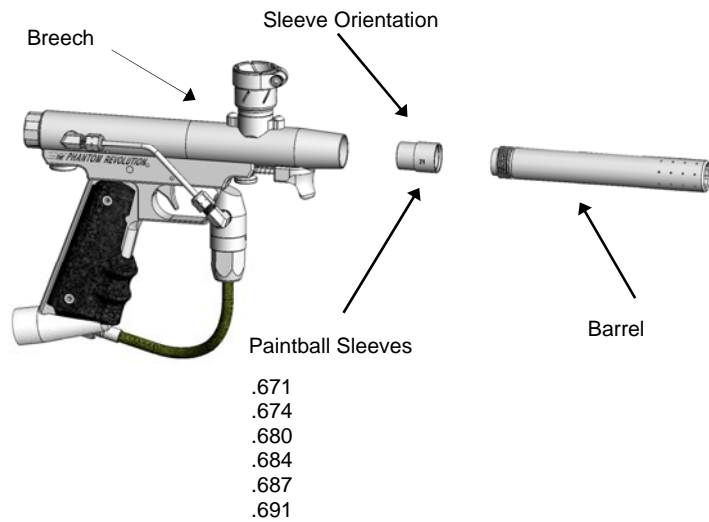
To remove the puncture adapter use a 3/8" hex key.

Description and Operation

Breech Paintball Sleeve Detent System

The paintball sleeve is the paintball detent system. With the proper paintball match to sleeve the paintball will not roll through the barrel and will help maintain constant velocities.

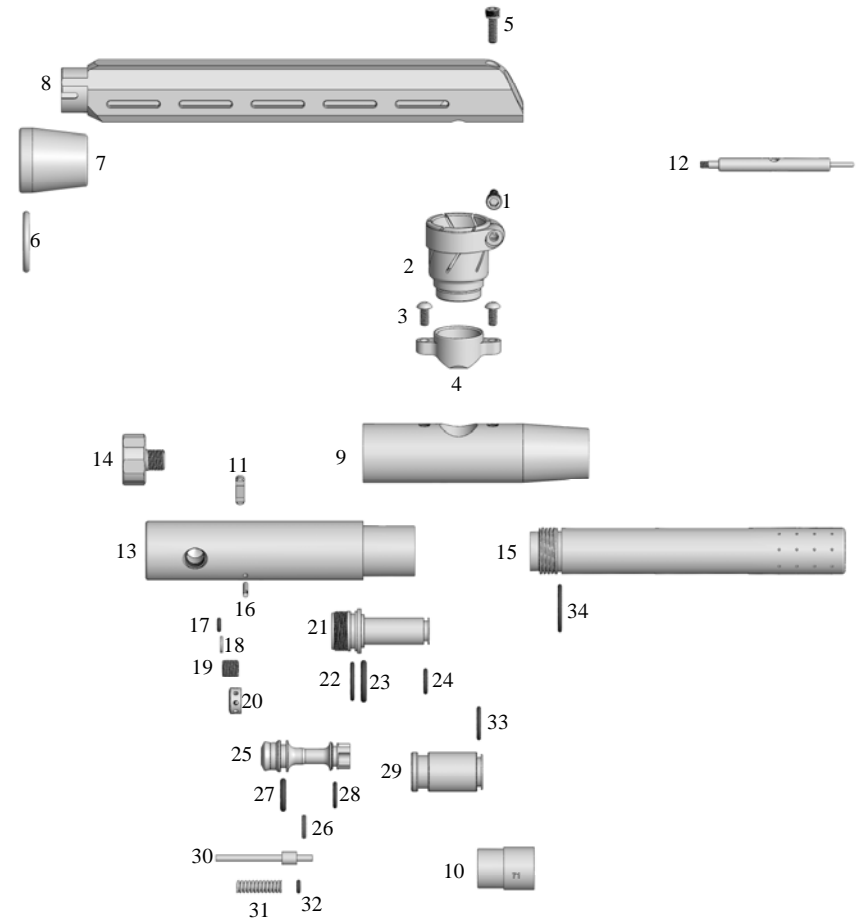
The proper fit allows the bolt cylinder spring action to move the paintball into the sleeve and not roll into the barrel. To install the selected sleeve unscrew the barrel and insert the small diameter first into the breech.



Note: 15/16-20 breech AKA Cocker type doesn't use paintball sleeves.

Service and Maintenance

Exploded View Top



Service and Maintenance

Item #	Part#	Description
1	9324	10-32 x 3/8 SHCS
2	9023	Clamping Feed Neck
3	9215	8-32 x 3/8 BHS
4	1100	Feed Magazine
5	1117	8-32 x 1/2 SHCS
6	9024	Ball Retainer
7	9413	Feed Cap
8	1115	12 Round Feed Tube
9	1080	Breech, Phantom
	1075	Breech, Cocker
10	1082	Paintball Sleeve .671
	1083	Paintball Sleeve .674
	1084	Paintball Sleeve .680
	1085	Paintball Sleeve .684
	1086	Paintball Sleeve .687
	1087	Paintball Sleeve .691
11	1105	Plug
12	1020	Tool, Extraction / Velocity
13	1011	Valve Body Assembly
14	9470	Pressure Gauge
15	90XX	Barrel 6", 8", 11", 14"
16	1016	Pin, Trigger/Sear 3/32 x 3/4
17	1024	#6 O-Ring
18	1021	Washer
19	1019	Retainer
20	1018	Velocity Adjuster
21	1050	Power Port Assembly
22	1051	#16 O-Ring
23	1052	#114 O-Ring
24	1053	#11 O-Ring
25	1030	Power Piston Air
	1031	Power Piston CO ₂
26	1032	#10 O-Ring
27	1036	#111 O-Ring
28	1035	#12 O-Ring
29	1070	Bolt Cylinder
30	1040	Plunger
31	1041	Buffer Spring
32	1025	#6 O-Ring
33	1066	#14 O-Ring
34	9010	#014 O-ring

Description and Operation

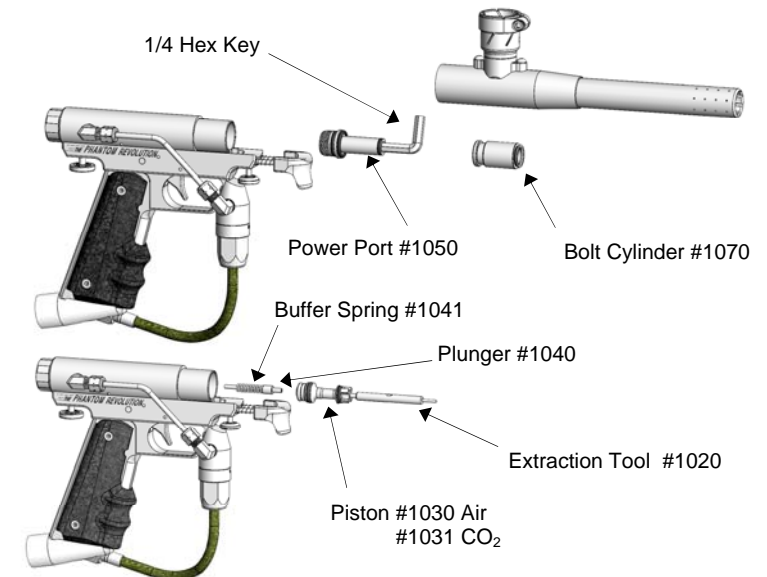
Power Piston

The power piston sets the gross volume dump of the gas chamber. The smaller piston with O-rings is used for compressed air and the larger piston for CO₂

Remove the breech / barrel assembly from the trigger frame. Loosen the rear thumb screw so the bolt cylinder clears the connector block. Slide the bolt off the power port.

Unscrew the power port from valve body with a 1/4 hex key. Using the 6-32 threaded end of the extraction tool screw into the power piston and pull out of valve body. Extract plunger and buffer spring and install into selected power piston. Seat piston with plunger with spring in power port and screw assembly into valve body.

Align bolt cylinder with connector block and tighten rear thumb screw. Slide breech / barrel assembly in place and tighten thumb screws.



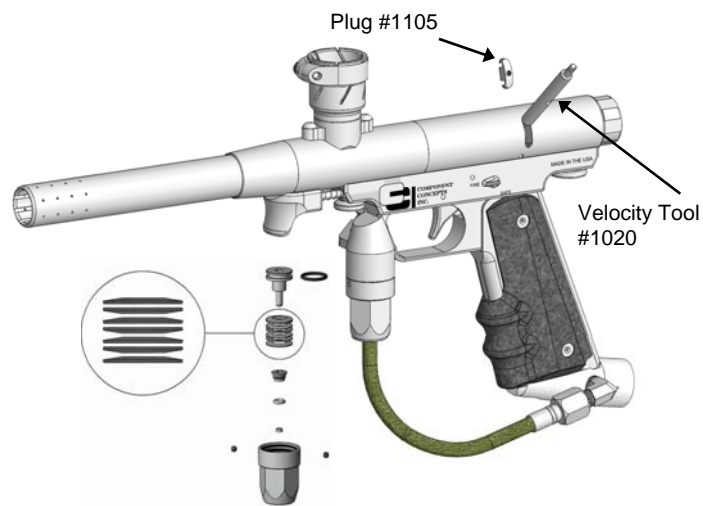
Description and Operation

Velocity Adjustment

Paintball fit, (paintball sleeve), temperature, pressure input, (regulator), altitude and gas type influences the velocity.

Use the velocity tool to remove the cover. Insert the pin end into the velocity adjuster and rotate clockwise to increase velocity and counterclockwise to decrease velocity.

The range (275-300 FPS) is set by the correct power piston. Removing O-rings on the small piston increases the volume of the dump chamber and velocity.



Regulator

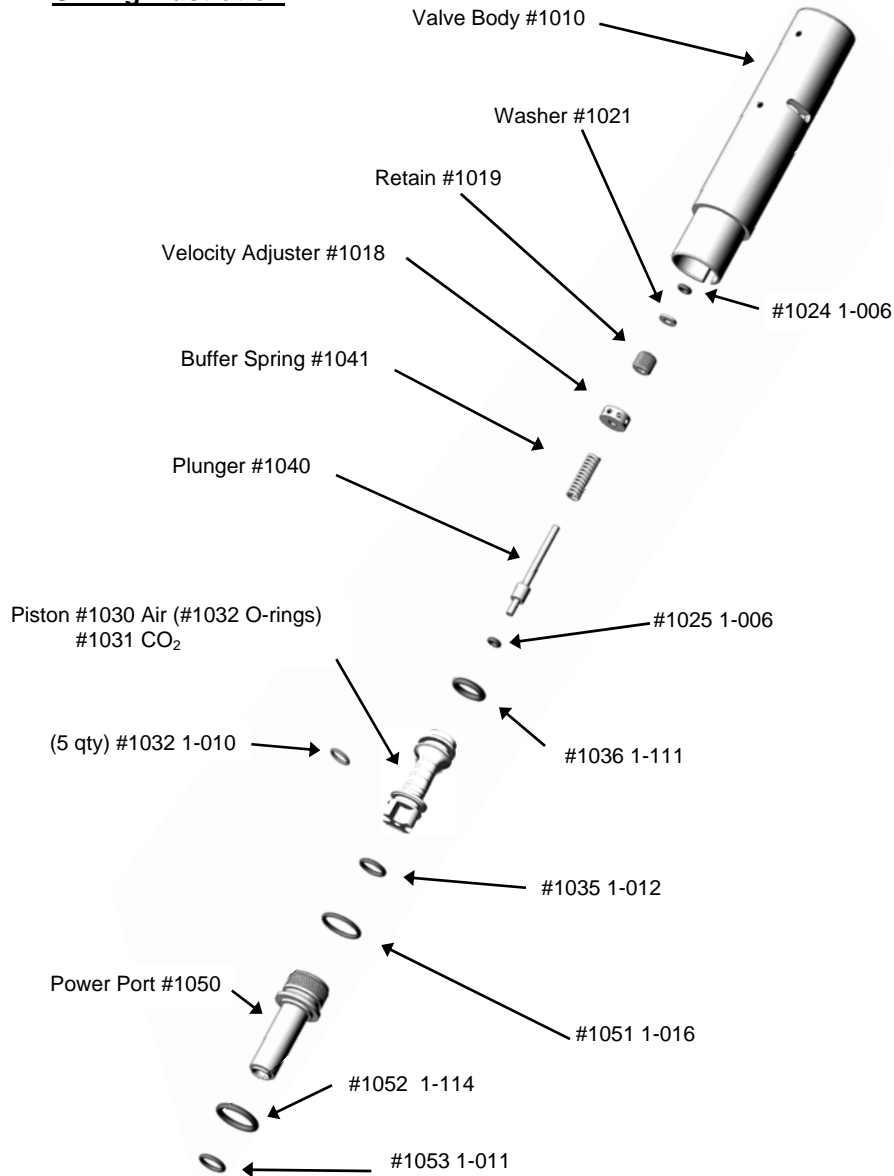
The regulator is pre-set @ 700+ psi with a 6 disc stack. However, the disc springs can be flipped from series to parallel adding or subtracting 50 psi. Normally you would not change stack orientation unless velocity can not be adjusted with power piston, paintball sleeve and or velocity adjuster.

Service and Maintenance

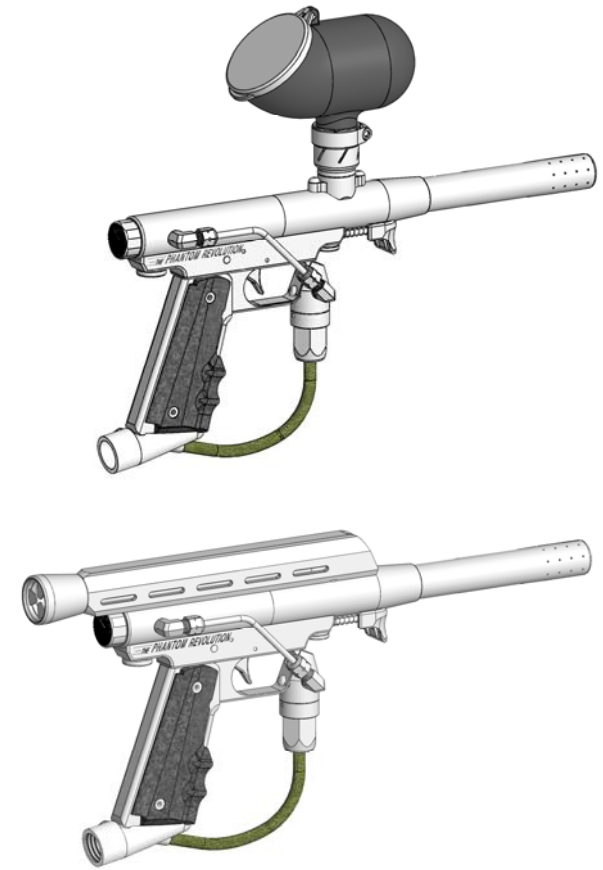
Troubleshooting

Trouble	Cause	Remedy
Gas leak: Down the barrel Trigger frame Valve body & frame Regulator Body	O-ring: → → → →	Replace O-rings: Part 1035 Part 1024 / 1036 Part 1051 Part 1066
Will not fire	Not pressurized Safety	Check gas source Rotate lever to fire
Will not feed paintball	Paintball opening	Engage bolt cylinder with connector block
Velocity	Too high / low Out of minor or major adjustment range Paintball sleeve Regulator	Turn velocity adjustment Power piston: Large piston less velocity Smaller piston greater velocity Add or subtract #1032 O-rings on small piston Match paintball size to paintball sleeve Change disc stack Replace disc spring
Pump slide sticks	Debris on rods Set screws	Clean rods /oil Adjust or tighten set screws

O-Ring Illustration



Load and Fire Paintballs



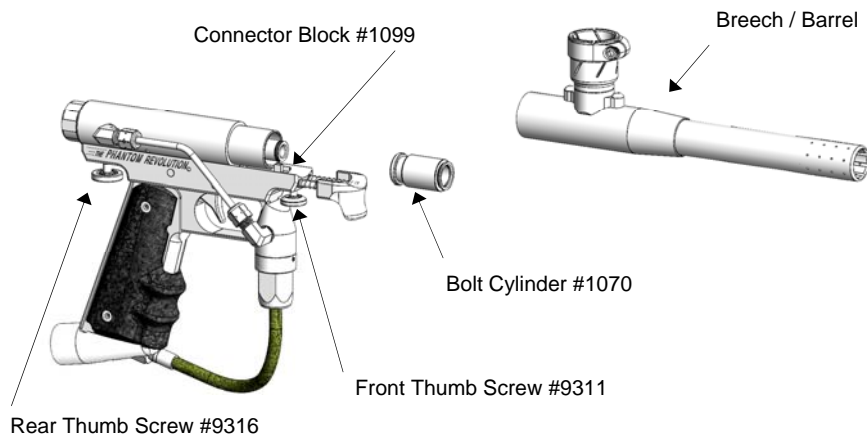
Observe all safety precautions. Connect gas source, pour paintballs into ammo loader or stock class feed tube. When ready to fire, rotate the safety lever to the "FIRE" position. Move the pump slide back until it stops then release. The quicker the action the less likely you are to double feed a paintball. Insure the pump slide is in the forward position. Squeeze the trigger to fire the paintball.

Service and Maintenance

Bolt Cylinder

Unscrew front thumb screw and separate the breech from the valve body by pulling the breech assembly forward.

Loosen the rear thumb screw and slide out the bolt cylinder. Clean and lightly oil. Insure the slot in the cylinder bolt aligns with the connector block when reassembling.



Rear Thumb Screw #9316

Front Thumb Screw #9311

Bolt Cylinder #1070

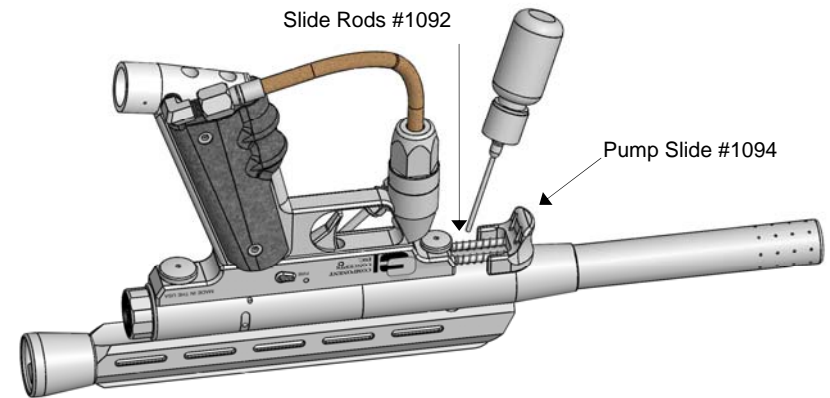
Breech / Barrel

Connector Block #1099

Service and Maintenance

Connector Block / Slide Rods

The pump slide does not need to be removed. A drop of light weight oil on the stainless steel rods is all that is needed.



Slide Rods #1092

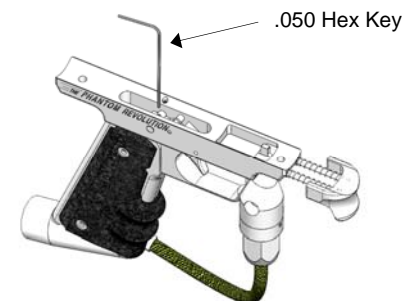
Pump Slide #1094

Trigger Adjustment

Remove the breech assembly, then remove the rear thumb screw and rotate the valve body for access. The trigger pull is adjustable by changing the angle of the trigger link. Turning the set screw clockwise in the safety decreases trigger effort.

Caution:

Over adjustment will cause a continuous or no fire state.



.050 Hex Key