





A WORD FROM OUR ENGINEERS AND DESIGN TEAM

OUR CHALLENGE WAS TO BLEND THE ART OF METAL SCULPTURE WITH MASTERFUL ELECTRONICS IN A PACKAGE THAT SYMBOLIZES STRENGTH, POWER, AND DEXTERITY.

BUILT WITH PASSION, THE DP G5 WAS UNLEASHED.

CONGRATULATIONS ON OWNING THE MOST ADVANCED PAINTBALL MARKER ON THE PLANET



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WARNINGS

IMPORTANT SAFETY INSTRUCTIONS AND GUIDELINES!



WARNINGS IMPORTANT SAFETY INSTRUCTIONS AND GUIDELINES!

- 11 The DP G5 is NOT A TOY. Treat it with the same respect and care you would a firearm.
- 2 Carelessness misuse and failure to adhere to the warning and guidelines printed in this Owner's Manual may result in property damage, injury or death. User assumes all risks associated with use of the marker.
- 3. Always ensure that proper safety gear eyes. face, ear, and head protection - conforming to ASTM standard F1776 (USA) or CE (Europe) are worn at all times when paintballs are within range.
- 4. Persons under the age of 18 must have adult supervision at all times during use of the G5, or any paintball firing device.
- 5. Observe all local and national laws regarding rules and regulations.
- 6. The G5 should only be used on a permitted and regulated paintball field where safety rules and guidelines are strictly enforced.
- 7. Only use compressed air or nitrogen. Do NOT USE CO2!

- 8. Only use high quality, .68 caliber paintballs.
- 9. Never point your G5 at an unintended target.
- 10. Always treat your G5 as if it were loaded.
- 11. Keep your G5 turned OFF until ready to
- 12. Always measure the velocity of paintballs from your G5 with a suitable chronograph device before play.
- 13. Never look down the barrel or breech area of the G5 without first ensuring that the marker is switched to the OFF position, with NO AIR in the marker.
- 14. Never put any body parts or foreign objects into the breech or feed tube.

- 15. Always use the supplied barrel cover when your G5 is not in use at the field. Doing so will help secure the safety of yourself and those around you.
- 16. Never allow pressurized gas to come into contact with your body. Serious harm, injury. or death may occur.
- 17. When not in use, always turn your G5 to the OFF position.
- 18. Promptly remove any paintballs from your G5 when not in use
- 19. Always remember to remove residual air from your G5 before attempting to do maintenance, store or transport.

NOTE-POWERING 'OFF' THE MARKER WILL NOT AUTOMATICALLY REMOVE RESIDUAL AIR. TO SAFELY REMOVE RESIDUAL AIR, PLEASE DO THE FOLLOWING:

- A. Remove loader and paintballs from marker.
- B. Turn Eve Sensors to the OFF position.
- C. Point marker in a safe direction.
- D. Fire marker until all residual gas is removed.
- 20. Always store your G5 in a safe place.
- 21. Do not discard the Owner's Manual, In the event of transfer or resale, this guide must accompany the marker.
- 22. When in doubt, ALWAYS seek for an expert advice by contacting Dangerous Power Authorized Service Dealer or DP Engineering's Customer Service Staff.









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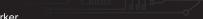




FEATURES

- 1. O-ring less design with innovative and highly efficient bolt system.
- 2. Extremely light weight body (1.89lbs with barrel and battery).
- 3. Increased air efficiency.
- 4. High precision light weight 3-D milled aluminum alloy body and accents.
- 5. Stocked fully programmable micro-switch board.
- 6. 4 way adjustable magnet plus spring return ball bearing trigger.
- 7. Patented low profile clamping feedneck.
- 8. Redesigned flip lever Rapid Air Pressurizing System (RAPS) ASA.
- 9. Hose free inline regulator design.
- 10. Low pressure operating (170psi / 280FPS)

CONTENTS OF PACKAGE



- 1. G5 Marker
- 2. 13"/ .689 aluminum Auto Cocker barrel.
- 3. Barrel Sock
- 4. Ball end Allen key set
- 5. Maintenance kit
- 6. DP-40 PLUS Lubricant
- 7. Owner's Manual
- 8. Product Registration Card









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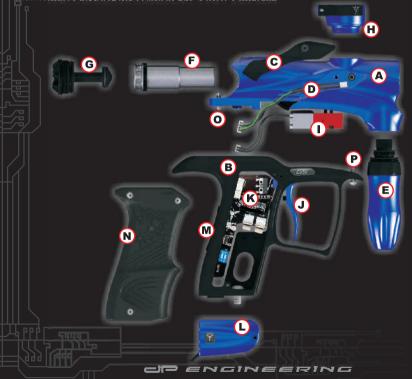
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KNOW YOUR G5

Your G5 is a sophisticated piece of machinery, designed for superior performance along with ease of use and maintenance. For maximum enjoyment and safety while using your G5, please take the time to acquaint yourself with its operation, controls, programmable features, care and maintenance instructions found in this Owner's Manual.



G5 PARTS LIST

- A. G5 body
- B. G5 Trigger Frame
- C. Eye Cover
- D. Sensor eye
- E. OPR (Operating Pressure Regulator)
- F. Dump Valve Bolt
- G. Back Cap
- H. Low-Rise Clamping Feedneck
- I. Two-Way Solenoid
- J. Trigger
- K. Electronic Board

- L. RAPS™ (Rapid Air Pressurizing System) ASA
- M. Power Button
- N. Grip
- O. Body / Frame Connector Screw#1
- P. Body / Frame Connector Screw#2



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INLINE REGULATOR

- A. Operating Pressure Regulator Body
- B. Regulator Piston
- C. Regulator Spring
- D. Piston Seal
- E. Regulator Adjustment Screw
- F. OPR Bottom Housing









- A. Bolt Body
- B. Bolt Bumper
- C. Back Cap
- D. Back Cap Bumper



















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EVERYTHING YOU NEED TO GET STARTED

Prepare the following items in order to begin using your G5:

- One 9V battery. Be sure that the battery is fresh and from a reputable manufacturer.
- Paintball loading device. (Recommended minimum load rate of 25 BPS)
- Always use fresh, high quanlity paint with proper bore size .68 calber paintball for best result.
- Approved air tank utilizing COMPRESSED AIR or NITROGEN ONLY.

BARREL COVER

Always use the supplied barrel cover before airing up your G5 when it is not in use at the field.
 Doing so will help secure the safety of yourself and those around you. (SEE PIC A)



PIC A

OP ENGINEERING





INSTALLING THE BATTERY

- Carefully remove the 3 hexagonal screws (5/64") holding the right grip panel in place. (SEE PIC A- 1 2 3)
- Refer to the "+" and "-" for the installation of the 9V battery. (SEE PIC B)
- Replace battery in grip frame as shown in illustration C. Do not use excessive force.
- Replace grip frame and screws. Do not over tighten screws!



OP ENGINEERING

ATTACHING A PAINTBALL LOADER



- Release clamp on feedneck. (SEE PIC A)
- Loosen thumbscrew counterclockwise by hand. (SEE PIC B)
- Insert feed tube of loader unit.
- Close clamp securely. Loader should fit snug within feedneck. (SEE PIC C)
- If loader is loose, remove and adjust thumbscrew clockwise.

WARNING

EXCESSIVE FORCE MAY CAUSE DAMAGE TO LOADER OR THE G5



PIC A PIC B PIC C

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ATTACHING AIR TANK TO RAPS™ FLIP LEVER ASA

- Swing flip lever to the 'release' position. (SEE PIC A)
- Attach air tank by carefully screwing it into the threaded portion of the RAPS[™] ASA. Make sure tank fitment is tight and all the way in. (SEE PIC B)
- Return flip lever of the RAPS™ ASA to the 'close' position. (SEE PIC C)
- A brief sound of air entering the system is normal. The G5 is now pressurized. (SEE PIC D)

WARNING

NITROGEN OR COMPRESSED AIR TANKS ONLY! NEVER USE CO2.



OP ENGINEERING

VELOCITY ADJUSTMENT



- Use a 1/8" Allen key to adjust the velocity adjustment screw located at the bottom of the OPR.
- Turn screw counterclockwise to increase velocity.
- Turn screw clockwise to decrease velocity.

WARNING

OP ENGINEERING RECOMMENDS THAT THE VELOCITY NEVER EXCEED 300 FPS.
FAILURE TO FOLLOW REGULATIONS REGARDING MAXIMUM ALLOWABLE VELOCITY,
CALCULATED IN FEET PER SECOND (FPS). MAY RESULT IN DAMAGE OF PAINTBALL
MARKER, SERIOUS INJURY OR DEATH. BE RESPONSIBLE AND ALWAYS USE A
CHRONOGRAPH TO DETERMINE ACCURATE VELOCITY BEFORE PLAY







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TRIGGER ADJUSTMENT

- There are four adjustment screws (marked A, B, C and D) to adjust the trigger on the G5.
- Screw A (5/64") adjusts the amount of trigger travel prior to the marker firing. Turning this screw clockwise will reduce the amount of trigger travel. Turning this screw counterclockwise will increase the amount of trigger travel. (SEE PIC A)
- Screw B (5/64") sets the amount of trigger travel after the marker has been fired. Turning the screw clockwise will reduce the amount of trigger travel. Turning the screw counterclockwise will increase the amount of trigger travel. (SEE PIC B)



DIC /

PIC P

OP ENGINEERING

TRIGGER ADJUSTMENT (CONTINUED)



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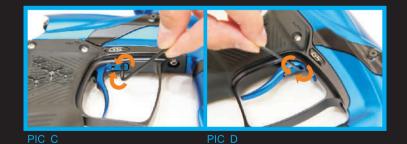
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- Screw C (3/32") adjusts the strength of the trigger's return to rest by either reducing or
 increasing the magnetic pull. Turning this screw counterclockwise will decrease the strength.
 Turning this screw clockwise will increase the strength. Do not turn the screw too far doing
 so may weaken the magnetic pull and prevent the trigger from being able to rest. (SEE PIC C)
- Screw D (5/64") adjusts the length of the trigger's touch the micro switch. Turning this screw counterclockwise will decrease the length. Turning this screw clockwise will increase the length. Do not turn the screw too far - because it can damage the micro switch. (SEE PIC D)

NOTE

BE CAREFUL NOT TO TURN THE SCREW TOO FAR IN EITHER DIRECTION, AS DOING SO MAY PUSH THE TRIGGER PAST THE FIRING POINT AND CAUSE OPERATIONAL FAILURE.





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BOARD

LED

POWER ON

Green light indicates battery level is operational, Red light indicates battery level low.

TOURNAMENT LOCK —



MICRO-SWITCH

Fires the marker

Programming mode cycles through setpoint and enters setpoint values via trigger pulls.

POWER BUTTON

POWER ON

Press and hold until board lights up. Release and marker is ready to fire.

POWER OFF

Press and hold 2 seconds until board turns off.

EYE CONTROL

Tap to toggle eye sensor on/off.

PROGRAMMING YOUR G5

1. POWER

POWER ON

- Press and hold down Button A to turn on the marker with eye sensors on.
- When battery voltage is lower than 7.2V, the indicator light will flash red. When battery voltage is over 7.2V then the indicator light will flash green.
- When the G5 eye sensors are on the indicator will blink a slow green light (1 blink/0.5 seconds). The indicator light will remain solid green when paintball is in the breech.
- To turn the eye sensors off, press and release Button A When the G5 eye sensors are off the indicator light will blink a quick green light (1 blink/0.2 seconds).

POWER OFF

- Press and hold down Button A for 2 seconds before indicator light turns off. .
- The marker will shut down automatically after being idle for 20 minutes. The marker will retain
 the last adjusted set points whether it shutdown automatically, manually or by removing the
 battery.











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PROGRAMMING YOUR G5 (CONTINUED)

2. TOURNAMENT LOCK

 Dip Switch 1 set to "ON". Modes cannot be set without unlocking tournament lock.

Dip Switch 2 is non functional.



3. CONFIGURATION MODE

To enter programming mode, marker must first be turned off and dip Switch 1 must be set to OFF position.

 Pull and hold down trigger then press Button A for 2 seconds. Release button A and then trigger and the indicator light will flash multiple colors and stop at solid red which indicates programming mode.



PROGRAMMING YOUR G5 (CONTINUED)



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3. CONFIGURATION MODE

Setting Options as below:

Functionality Made	LED	Factory Default	Min/Max
Rate of Fire	Red	13(USA)/12.5(Europe)	10/25(USA),10/20(Europe)
Firing Mode	Green	1	1/4
Ramp Point	Yellow	3	1/10
Trigger Debounce	Red Flash	10	1/20
Solenoid Dwell	Green Flash	12	12/20
ABS Dwell	Yellow Flash	8	1/8





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PROGRAMMING YOUR G5 (CONTINUED)

ATTENTION:

In Rate of Fire, pull the trigger 1 Time indicate increase 0.5 BPS, below table can reference:

LED LIGHT AMOUNT	BPS
1	10
2	10.5
3	11
4	11.5
5	12
6	12.5
7	13
 8	13.5
9	14
10	14.5
11	15
12	15.5
13	16
14	16.5
15	17
16	17.5

LED LIGHT AMOUNT	BPS
17	18
18	18.5
19	19
20	19.5
21 (Europe)	20
22	20.5
23	21
24	21.5
25	22
26	22.5
27	23
28	23.5
29	24
30	24.5
31 (USA)	25

PROGRAMMING YOUR G5 (CONTINUED)

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FIRING MODE

Mode	Description		
Semi	Fire 1 shot per trigger pull.		
PSP3	Three semi shots then transitions to 3 Rounds Burst. It returns to semi mode after 1 second of no a activity.		
NXL	Semi for the first 3 shots, then full automatic on the 4th pull and hold. Resetting to semi after 1 second of no activity.		
Millennium When triggering pull speed up to 7.5 BPS ramping will turn on at the 6th trigger pull, which trigger pull speed lower than 7.5 BPS then the fire mode will be back to semi fire mode.			

SOLENOID DWELL

This value controls the allotted time (in milliseconds) the solenoid is open. If the value is too high, the solenoid will remain open too long therefore decreasing battery and air efficiency.

ABS DWELL

Adds an additional 1-7 milliseconds of dwell time to the programmed solenoid dwell setpoint on the first shot of any string of shots after a fixed 20 seconds of shooting inactivity. A value of 8 disables the ABS Dwell feature.





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PROGRAMMING YOUR G5 (CONTINUED)

RESET

To reset the marker to manufacturing default settings, press and hold down the trigger then press and hold down the on/off button. Release the on/off button and hold on to the trigger for 5 seconds until yellow light appears.

4. EXAMPLE SETTING FROM SEMI TO MILLENNIUM

- 1. Turn off the marker before entering the setting mode and switch dip 1 to the OFF position.
- 2. Pull and hold the trigger then press power button to turn on the marker. Release the power button then trigger, the LED will turn RED which indicates the Rate of Fire setpoint.
- 3. Pull trigger once to proceed to the next function selection mode, when the LED turns green then the functional mode will be at the Firing Mode. Press the POWER button once to enter the observation mode which will display the last setting. The LED will flash the value that was previously set.
- If you pull the trigger at the observation mode then it will skip to the next function.
- If the original setting is at 4 then the LED will flash green 4 times.
- 4. Follow-up to Step (3), then press POWER button once (LED will blink red green and yellow in a second indicating access to the adjustable settings mode.
- 5. Following steps (4), in accordance with pulling the trigger 4 times (it will set the value to 4 [Millennium Mode]). Press the power button one time to indicate the set and to leave the adjustment mode back to Step 3 observation mode. The last settings well be reflected in the blinking of the indicator light.)
- 6. The board may now be turned off, setting the mode, or cycled through to other options.





CARE AND MAINTENANCE

DEGASSING THE G5

Always be sure to completely de-gas your marker before performing maintenance or service repair.

Carefully follow the instructions below in sequence to ensure that all remaining air has been removed from the entire marker:

- 1. Flip the RAPS™ ASA to the 'Off' position. This disconnects the air system from the marker.
- 2. Remove the paintball loading device and check to make sure there are no paintballs within the breech.
- 3. Unscrew the air system from the RAPS™ ASA.
- Point the marker in a safe direction, and then dry fire 1-2 shots to remove air from the OPR. Be aware that the marker may still fire without any air system attached.
- 5. Power OFF the marker.

IMPORTANT NOTES BEFORE SERVICING YOUR MARKER:

- DP ENGINEERING SUGGESTS YOU ALWAYS USE DP-40 PLUS LUBE TO SERVICE YOUR MARKER.
- DO NOT APPLY EXCESSIVE LUBRICANT.
- ALWAYS INSPECT AND CLEAN YOUR MARKER AFTER EACH USE.
- NEVER APPLY EXCESSIVE FORCE WHEN REMOVING OR REPLACING SCREWS.

 DOING SO MAY STRIP THE SCREW HEADS OR DAMAGE THREADS.
- ALWAYS USE THE CORRECT SIZE AND THE APPROPRIATE TOOLS.
- REFRAIN FROM SUBMERGING ENTIRE MARKER IN LIQUID. KEEP SENSITIVE ELECTRONICS PARTS SUCH AS SOLENOID AND CIRCUIT BOARD FREE FROM MOISTURE.
- NEVER ALLOW SOMEONE WHO IS UNFAMILIAR WITH YOUR MARKER TO PERFORM MAINTENANCE OR REPAIR WORK. WHEN IN DOUBT, CONTACT DP ENGINEERING CUSTOMER SERVICE.





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CLEANING THE EYE-SENSOR BREAK BEAM SYSTEM

The function of the break beam eye sensor is to allow the firing circuit to 'time' the activation of the solenoid. This prevents 'chopping' of paint, which is caused by the bolt cycling within the breech without the paintball being actually seated in the proper firing position. When the eye sensors are ON, the our will not fire if the beam does not sensor a paintball. To ensure proper function, the eye sensors should be cleaned after every other use, or when paintballs have been broken within the marker. More frequent cleaning may be necessary when using paintballs that have 'oily residue' on the surface of the shell. To avoid malfunction, always use fresh and clean paint from a reliable manufacturer.

To clean the eyes:

- 1. Locate the eye cover plates on either side of your G5 body. (SEE PIC A)
- 2. Using provided Allen key wrench (5/64"), carefully remove the eye cover screw on one side by inserting ball point tip and turning wrench handle counterclockwise. (SEE PIC B)
- 3. Lift eye cover plate, exposing eye wires, spring, and ball detent. (SEE PIC C)



CLEANING THE EYE-SENSOR BREAK BEAM SYSTEM (CONTINUED)



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- 4. Carefully lift eye wires and pull out the eye sensors from the socket. Be careful not to lose the spring and the ball detent. (SEE PIC D)
- 5. With a cotton swab, gently wipe the back and front side of the eye sensor and the eye socket to remove any debris or residue. (SEE PIC E)
- 6. Replace eye sensor back to original position. Be sure the eyes are aligned correctly and facing the direction of the breech.
- 7. Replace eye cover plate in original position and gently tighten eye cover screws clockwise. DO NOT OVERTIGHTEN! (SEE PIC F)
- 8. Repeat the same procedure on the other side.

HELPFUL HINT

DO NOT PULL ON THE EYE WIRES. USE A SMALL PICK OR SCREW DRIVER TO GENTLY LIFT THE WIRES UP. THIS WILL LIFT THE EYE SENSORS OUT OF THE EYE SOCKET



PIC E



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CLEANING THE BALL DETENTS

The ball detents and spring should be inspected during the cleaning of the eye sensors. Replace these parts should you notice any damage, no matter how slight.

- 1. Locate the eye cover plates on either side of your G5 body.
- 2. Using provided Allen key wrench (5/64"), carefully remove the eye cover screw on one side by inserting ball point tip and turning wrench handle counterclockwise. (SEE PIC A)
- 3. Lift eye cover plate, exposing eye wires, spring, and ball detent. (SEE PIC B)
- Remove spring by carefully lifting it up by hand or with the aid of small tweezers.
 (SEE PIC C)



OP ENGINEERING

CLEANING THE BALL DETENTS (CONTINUED)



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- 5. Place finger within breech, and gently push on the detent from the inside of marker body. Remove ball detent. (SEE PIC D)
- 6. Check the spring for proper tension and the ball detent for any damage. Replace with new part(s) if necessary.
- 7. With a cotton swab, clean the spring, ball detent, and detent groove. (SEE PIC E)
- 8. Replace detent back to original position, with the circular side down towards the breech.
- 9. Replace spring over the detent in the original position.
- 10 Replace eye cover plate in original position and gently tighten eye cover screws clockwise.

 DO NOT OVERTIGHTEN! (SEE PIC F)
- 11. Repeat the same procedure on the other side.







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OPERATING PRESSURE REGULATOR (OPR) DISASSEMBLY AND MAINTENANCE

The OPR regulates the amount of air-flow. which determines paintball velocity. Regular inspection and cleaning of your OPR is an essential part of keeping your G5 running in top condition. Follow the easy steps outlined below to ensure that your OPR remains trouble-free.

1. With a firm hold on the OPR body, unscrew by hand the entire unit in a counterclockwise direction. If the OPR unit is difficult to turn by hand, a rubber strap wrench available in most hardware stores may be used. (SEE PIC A)



NOTE

OP ENGINEERING

DO NOT UNSCREW BY USING WRENCH OR PLIERS, AS DOING SO MAY SCRATCH AND DAMAGE THE ANODIZED SURFACE.

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- 2. By hand or with the assistance of a strap wrench, unscrew the Operating Pressure Regulator Body from the OPR Bottom Housing. (SEE PIC B)
- 3. Remove the regulator piston and spring. (SEE PIC C)
- 4. Using supplied Allen key wrench (1/4") and (7/32"), carefully dissasemble the Regulator Bottom Housing and Piston Seal by turning wrench handle counterclockwise.(SEE PIC D)







PIC B

PIC C

PIC D



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OPERATING PRESSURE REGULATOR (OPR) DISASSEMBLY AND MAINTENANCE (CONTINUED)

- 5. Using supplied Allen key wrench (1/8") turn clockwise to remove Regulator Adjustment Screw. (SEE PIC E . F)
- 6. Remove all visible debris and dirt with a lightly dampened and clean cotton cloth. Do not scratch the surface of any regulator parts.
- 7. Lightly apply a small amount of DP-40 PLUS lubricant to the tip of a cotton swab. (SEE PIC G)

Please do not apply excess force to the parts that may damage sensitive parts and/or strip delicate threads.

NOTE

CAREFULLY INSPECT O-RING PRIOR TO APPLYING LUBRICANT, REPLACE IF O-RING APPEARS WORN, CRACKED, TORN, OR DAMAGED.





OP ENGINEERING

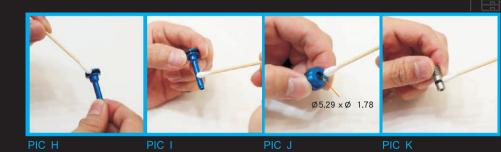


PIC G

OPERATING PRESSURE REGULATOR (OPR) DISASSEMBLY AND MAINTENANCE (CONTINUED)



- 8. Apply lubricant to the o-ring located on the base of the OPR Piston. (SEE PIC H .I)
- 9. Apply lubricant to the 2 o-rings located on the Piston Seal. (SEE PIC J)
- 10. Apply lubricant to the o-ring located on the base of the Regulator Adjustment Screw. (SEE PIC K)



OP ENGINEERING





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DISASSEMBLY AND MAINTENANCE OF DUMP VALVE BOLT AND BACK CAP

- 1. Unscrew front of barrel from G5 body.
- 2. Use supplied Allen key wrench (1/4") and turn counterclockwise to unscrew back cap. (SEE PIC A)
- 3. Remove back cap from marker body. (SEE PIC B)
- 4. Remove Dump Valve Bolt from marker body. You may use your finger to push it out from the breach as illustrated. (SEE PIC C)
- 5. Wipe off all visible debris and grime from the Dump Valve Bolt, back cap and internal of G5 body with a soft dampened cotton cloth and cotton swab.



PIC B

DISASSEMBLY AND MAINTENANCE OF DUMP VALVE BOLT AND BACK CAP (CONTINUED)



- 6. Lightly apply DP-40 PLUS lubricant to the tip of a cotton swab.
- 7. Apply lubricant directly onto the Dump Valve Bolt. (SEE PIC D . E)
- 8. Apply lubricant to the o-rings located on the back cap. (SEE PIC F)

NOTE

THE ABOVE STEPS ARE ALL THAT ARE REQUIRED FOR NORMAL BOLT MAINTENANCE.

WARNING

NEVER USE FORCE DURING DISASSEMBLY OR REASSEMBLY. ALWAYS SEEK ASSISTANCE FROM A DP DEALER OR CONTACT DP ENGINEERING CUSTOMER SERVICE IF YOU ARE UNCERTAIN OF ANY INSTRUCTIONS DESCRIBED IN THIS MANI







PIC D

PIC E

PIC F



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SEPARATING G5 BODY FROM TRIGGER FRAME

- Carefully remove the 3 hexagonal screws (5/64") holding the right grip panel in place.
 (SEE PIC A- 1 2 3)
- 2. Gently secure the base of the connectors and pull up to remove the plugs. DO SO ONE AT A TIME. It may be helpful to use needle nose pliers. Note the location and direction of the connectors on the circuit board for reassembly. (SEE PIC B)





SEPARATING G5 BODY FROM TRIGGER FRAME (CONTINUED)



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- 3. Locate screw #1 underneath G5 body between OPR and Trigger Guard and screw #2 behind the trigger frame. Using (3/32") allen key wrench, loosen Connecting Screw by turning it counterclockwise. (SEE PIC C . D)
- 4. Separate the G5 body from the trigger frame. (SEE PIC E)



PIC C

PIC D PIC E







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SOLENOID MAINTENANCE

The G5 solenoid is a delicate electronic component that requires minimal maintenance or service. DP engineers do not recommend frequent maintenance of this part, or its internals. The following instructions are provided for reference and for expert technician only.

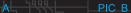
- 1. Using (5/64") Allen wrench key, locate and remove both screws securing the solenoid to the marker body. (SEE PIC A . B)
- 2. Once both screws are removed, gently lift and remove the solenoid. (SEE PIC C)
- 3. Place solenoid on a flat surface, with the wiring harness side facing down and solenoid disassembly screw facing up.
- Secure base of solenoid casing with an adjustable wrench (not provided). Using a flathead screwdriver, remove screw carefully by turning it counterclockwise. Be extremely careful not to strip the screw. (SEE PIC D)











PIC C

PIC D

SOLENOID MAINTENANCE (CONTINUED)



- 6. Remove solenoid spring. (SEE PIC E .E)
- 7. With thin tweezers or needle nose pliers, carefully remove the solenoid piston by gently securing the tip and pulling it out. (SEE PIC F)
- 8. Carefully inspect and clean solenoid piston o-rings. Make sure the o-rings are not cracked, broken, or show signs of wear. Replace parts if necessary.
- 9. With a cotton swab, lightly apply a small amount of DP-40 PLUS lube to the solenoid piston. (SEE PIC G)
- 10. Replace in reverse order.

WARNING

NEVER USE FORCE WHEN REMOVING OR REINSTALLING THE SOLENOID AND ITS INTERNALS. BE CAREFUL NOT TO BEND, TWIST, OR BREAK DELICATE WIRE. DOING SO MAY RENDER THE UNIT INOPERATIVE OR CAUSE IT TO MALFUNCTION.





OP ENGINEERING



PIC E







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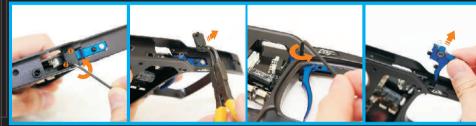
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REMOVING TRIGGER FROM FRAME

- Locate the two trigger return spring plate screws (12). Use (5/64") Allen key wrench to loosen and remove both screws by turning them counterclockwise. Be careful not to misplace the screws and trigger return spring. (SEE PIC A . B)
- 2. Locate two trigger mounting screws and use (3/32") Allen key wrench to loosen and remove screw by turning it counterclockwise. (SEE PIC C)
- 3. Remove trigger by lifting it up out of G5 trigger frame. (SEE PIC D)



PIC A PIC B PIC C

PIC D

RAPS™ FLIP LEVER ASA REMOVAL AND MAINTENANCE



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The RAPS™ASA was designed to be virtually maintenance free. However, it may be necessary to clean and inspect for debris or damage occasionally, as either may cause malfunction or leaking of air.

- 1. Locate screws within grip frame as illustrated, and unscrew with (5/32") Allen key wrench. (SEE PIC A . B)
- 2. Using (5/64") Allen key wrench, loosen and remove screw by turning it counterclockwise. (SEE PIC C)







PIC A

PIC B

PIC C



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RAPSTM FLIP LEVER ASA REMOVAL AND MAINTENANCE (CONTINUED)

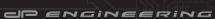
- Use a lightly dampened cloth and/or cotton swab to remove debris or grime from all RAPS™ ASA components, including the piston, spring, lever, and casing. (SEE PIC D)
- 4. Clean and inspect o-ring located on the base of the piston. Replace o-ring if it appears worn, cracked, or damaged. Using a cotton swab, apply a small amount of DP-40 PLUS lubricant on the o-ring. (SEE PIC E)
- 5. Make sure the spring is properly seated on the piston, then reassemble the RAPS™ASA in the reverse order of assembly. (SEE PIC F)

WARNING

REMEMBER TO DE-GAS THE G5 BEFORE SERVICING THE RAPS™ ASA











TROUBLESHOOTING

PROBLEM	POSSIBLE CAUSE	SOLUTION	
	Not activated	Hold down operating button for more than 4 seconds	
CE will make turn an	Low battery power	Replace with fresh battery	
G5 will not turn on	Battery is connected incorrectly	Clean the battery touch panel from PC board	
	to the PC board		
	Low battery power	Replace with fresh battery	
	Low air pressure	Refill the air system	
G5 will not fire	Solenoid wiring may be	Open Grip and press down the harness to ensure	
	disconnected	it is properly secured.	
	OPR pressure is too low	Adjust OPR pressure without paintball present	
	Micro-switch did not activated	Adjust trigger adjustment screws to increase trigger	
	by trigger pulls	travel distance to activate the Micro-switch	
G5 will not fire with sensor system on No paintball present Turn of		Turn on the loader	
	Air pressure is too low	Adjust the operating pressure to 150 to 200 psi	
	Dwell time is too short	See "dwell adjust system"	
G5 will not cycle	Low battery power	Change battery	
completely	Bolt lubricant is exhaust	Lubricate the bolt with DP-40 PLUS lubricant	
	Wrong back cap o-ring was	Replace back cap o-ring	



PROBLEM	POSSIBLE CAUSE	SOLUTION	
Air leaking from	Back cap o-ring is worn	Change o-ring	
barrel area	Internal o-ring is worn or damaged	Change o-ring	
	Barrel size dose not match paintball's	The stock barrel size is .689, change if	
Paintball breaking out of the barrel		necessary	
	Poor quality paintball	Use higher quality paintball	
	Ball detent is worn	Change ball detent	
Paintball chopping internally	Sensor system is not on	Switch it to ON	
	Low battery power	Replace with fresh battery	
	Eye sensor is unclean	Clean eye sensors	



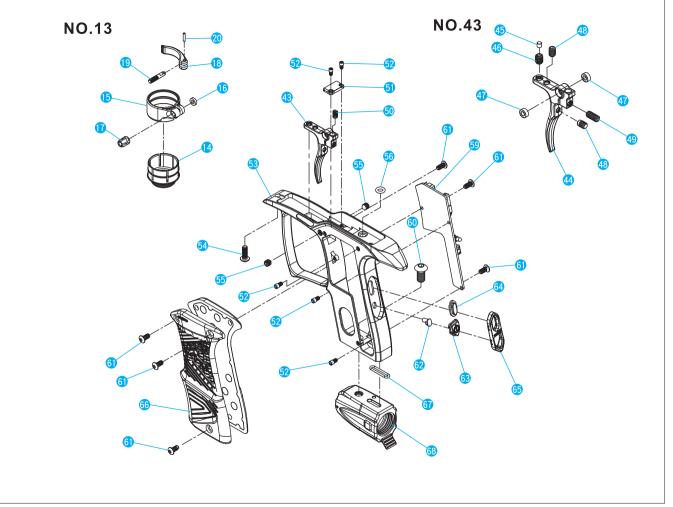


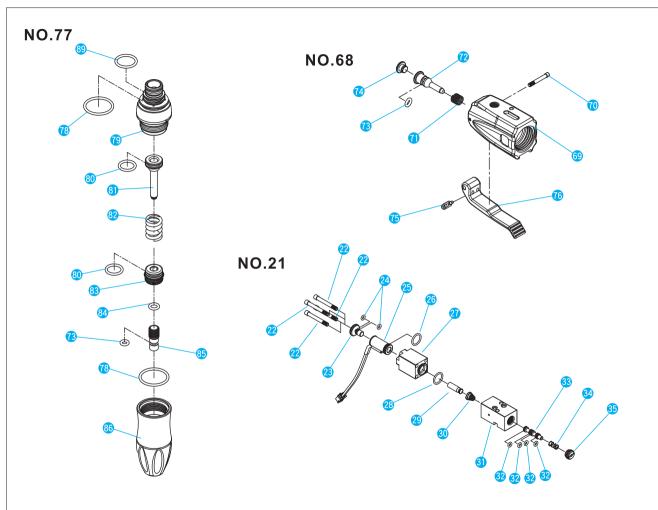






PARTS DIAGRAM NO.4 NO.7





	NO	ITEM NUMBER	Q'ty	NOTE
	1	20-B01324-301-PG500B	1	
	2	20-F01730-000-PTHR7A	2	Ø17.17∗Ø1.78
L	3	20-F01800-000-PSPSE0B	1	ø19*ø2
	4	20-A40220-302-PG500B	1	
L	5	20-B10532-302-PG500B	1	
	6	20-F05050-000-PSPSE0B	1	ø13.8∗ø1.9
L	7	20-A40230-301-PG500B	1	
	8	20-B10564-301-PG500B	1	
L	9	20-E10170-000-PT00	1	
	10	20-F01940-000-PG500B	1	ø13*ø2(GRAY)
L	11	20-F01550-000-PFUS0A	1	Ø21.95∗Ø1.78
	12	20-F01890-000-PE100B	1	Ø23.52∗Ø1.78
L	13	20-A60350-388-PG500B	1	
	14	20-B25803-301-PG500B	1	
	15	20-B16394-301-PG500B	1	
	16	20-E10230-301-PG500B	1	
	17	20-H03250-000-PG500B	1	
	18	20-B31034-301-PG500B	1	
	19	20-C25030-104-PG300B	1	
	20	20-H05560-000-PFUSOA	1	
	21	20-A06192-305-PIQ00L	1	
	22	20-W10780-000-PFUS0A	4	#3-56UNF-19.8L
	23	20-C20040-104-PFUS0A	1	
	24	20-F01780-000-PG300B	4	ø2*ø1(GRAY)
	25	20-A06170-000-PSPI0B	1	
	26	20-F01480-000-PFUS0A	1	ø6*ø1
	27	20-C01042-104-PFUS0A	1	
	28	20-F01470-000-PFUS0A	1	Ø7.5∗Ø1
L	29	20-C20053-104-PTHR7A	1	
	30	20-G10230-000-PFUS0A	1	
L	31	20-B20242-305-PTHR7A	1	
	32	20-F01700-000-PFUS0A	4	Ø2∗Ø1(BLACK)
L	33	20-H05480-000-PTHR7A	1	
	34	20-G10220-000-PFUS0A	1	
L	35	20-H03112-000-PFUS0A	1	
	36	20-W10790-000-PFUS0A	2	#3-56UNF-13.3L
L	37	20-W23660-000-PFX00B	1	
	38	20-E01150-000-PSPI0B	2	
L	39	20-G10300-000-PSPI0B	2	
	40	20-B31083-201-PG500B	1	
	41	20-B31073-201-PG500B	1	
	42	20-W11130-000-PM100B	2	#5-40UNC-6L
	43	20-A60360-301-PG500B	1	
	44	20-B31064-301-PG500B	1	

NO	ITEM NUMBER	Q'ty	NOTE
45	20-W63030-000-PG500B	1	
46	20-W11144-000-PG500B	1	#10-32UNF-4.5L
47	20-W60010-000-PREV0B	2	ø3*ø6*2.5T
48	20-W10952-000-PTHR7A	2	#8-32UNC-6.35L
49	20-W1101C-000-PFUS8A	1	#8-32UNC-3/8"L
50	20-G10380-000-PG500B	1	
51	20-E01210-301-PG500B	1	
52	20-W11020-000-PSPI0B	5	#3-56UNF-4L
53	20-B05373-301-PG500B	1	
54	20-H03190-000-PREV0B	2	#8-32UNC-12L
55	20-W11110-000-PG500B	2	#10-32UNF-6L
56	20-F01930-000-PM100B	1	ø4.47*ø1.78
57	20-W10710-000-PFUS0A	1	#8-32UNC-5/32"L
58	20-W11100-000-PM100B	3	#5-40UNC-1/8"L
59	20-W23730-000-PG500B	1	
60	20-H03170-000-PREV0B	1	#1/4"-28UNF-12L
61	20-H03260-000-PG500B	6	#6-32UNC-1/4"L
62	20-E20160-000-PG500B	1	
63	20-E20150-301-PG500B	1	
64	20-E10240-000-PG500B	1	
65	20-E05270-301-PG500B	1	
66	20-A13980-301-PG500B	1	
67	20-F05070-000-PG500B	1	
68	20-A01330-388-PG500B	1	
69	20-B25795-301-PG500B	1	
70	20-W10810-000-PFUS0A	1	#3-56UNF-17.3L
71	20-G10250-000-PFUS0A	1	
72	20-H05540-000-PG300B	1	
73	20-F01590-000-PFUS0A	2	ø3.69*ø1.78
74	20-E01130-000-PFUS0A	1	
75	20-E01200-301-PG500B	1	
76	20-B31044-301-PG500B	1	
77	20-A23360-388-PG500B	1	
78	20-F01870-000-PG400B	2	Ø20.35∗Ø1.78
79	20-B25813-301-PG500B	1	
80	20-F01560-000-PFUS0A	2	Ø10.82*Ø1.78
81	20-B10582-303-PG500B	1	
82	20-G10410-000-PG500B	1	
83	20-B10572-303-PG500B	1	
84	20-F01520-000-PFUS0A	1	ø 5.29*ø1.78
85	20-H03223-000-PFX00B	1	
86	20-B05363-301-PG500B	1	
87	20-F01820-000-PSPE0B	1	Ø12.42*Ø1.78
88	20-B16292-301-PG400B	1	
89	20-F01810-000-PSPE0B	1	ø13*ø2(BLACK)



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STATEMENT OF LIABILITY

The manufacturer assumes no responsibility for this product's sale or distribution. PROPERTY DAMAGE, BODILY INJURY, OR DEATH could occur due to misuse, abuse or failure to follow the manufacturer's instructions stated in this manual. The manufacturer will assume no responsibility for physical injury or property damage resulting from the use of this marker. The information in this document is subject to change without prior notice. The manufacturer assumes no responsibility for any errors that may appear in this document.

DISCLAIMER

Notice is hereby given that this owner's manual is part of the article owned in whole by the manufacturer, known as indicated by this disclaimer and all illustrations within the manual. All rights for manufacturing and reproducing of such articles or any part thereof are reserved by the manufacturer. Neither said article nor any part thereof may be manufactured or reproduced in any way except by the written authorization of the manufacturer. All proprietary truths and information are the sole property of the manufacturer.

LIMITED WARRANTY



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DANGEROUS POWER™ warrants this G5 paintball marker, to the initial retail purchaser, to be free from defect in original materials and/or workmanship for twelve(12) months from the original date of purchase, with the following exceptions:

- Disposable parts (o-rings, seals, micro switch, rubber and/or plastic material parts, etc.) are not included in this limited warranty.
- 2. Electronic parts on this marker are fully warranted for 30 days from the original date of purchase.
- 3. Bolt and striker system of this marker are fully warranted for 6 months from the original date of purchase.
- 4. Surface damages (scratches and nicks) or operation failure due to accident, neglect, improper disassembly and reassembly, are expressly not covered under this warranty.

PURCHASER IS RESPONSIBLE FOR ALL RENDERED SERVICES NOT COVERED UNDER THIS LIMITED WARRANTY, INCLUDING ANY APPLICABLE SHIPPING COSTS, LABOR, AND /OR INSTALLATION.

DANGEROUS POWER™ reserves the right to determine the legitimacy of claimed defective original parts and their eligibility for coverage under the terms of this warranty. DANGEROUS POWER™, its authorized dealers, affiliates, and/or agents, will not be held liable under this warranty, state, federal, or common law for any product failure, personal injury, or property damage resulting from improper use and/or alteration of this product. Any attempt to alter the G5 marker assembly will instantly void your warranty and may result in automatic default of all expressed warranties.

This limited warranty is non-transferable and is valid only upon presentation of a completed warranty registration card and original proof of purchase. There are no other warranties or quarantees, expressed or implied, made by the manufacturer on this paintball marker.

PAINTBALL MARKERS ARE NON-REFUNDABLE AND ARE NOT SUBJECT TO EXCHANGE FROM MANUFACTURER.



OP ENGINEERING

OP ENGINEERING





