



**PDW99**  
PERSONAL DEFENSE WEAPON

## Series Manual



**G&G ARMAMENT**  
AIRSOFT GUNS & ACCESSORIES

www.GUAY2.com  
100% Made in Taiwan

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TOP TECH

ADVANCED ▲



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## INTRODUCTION

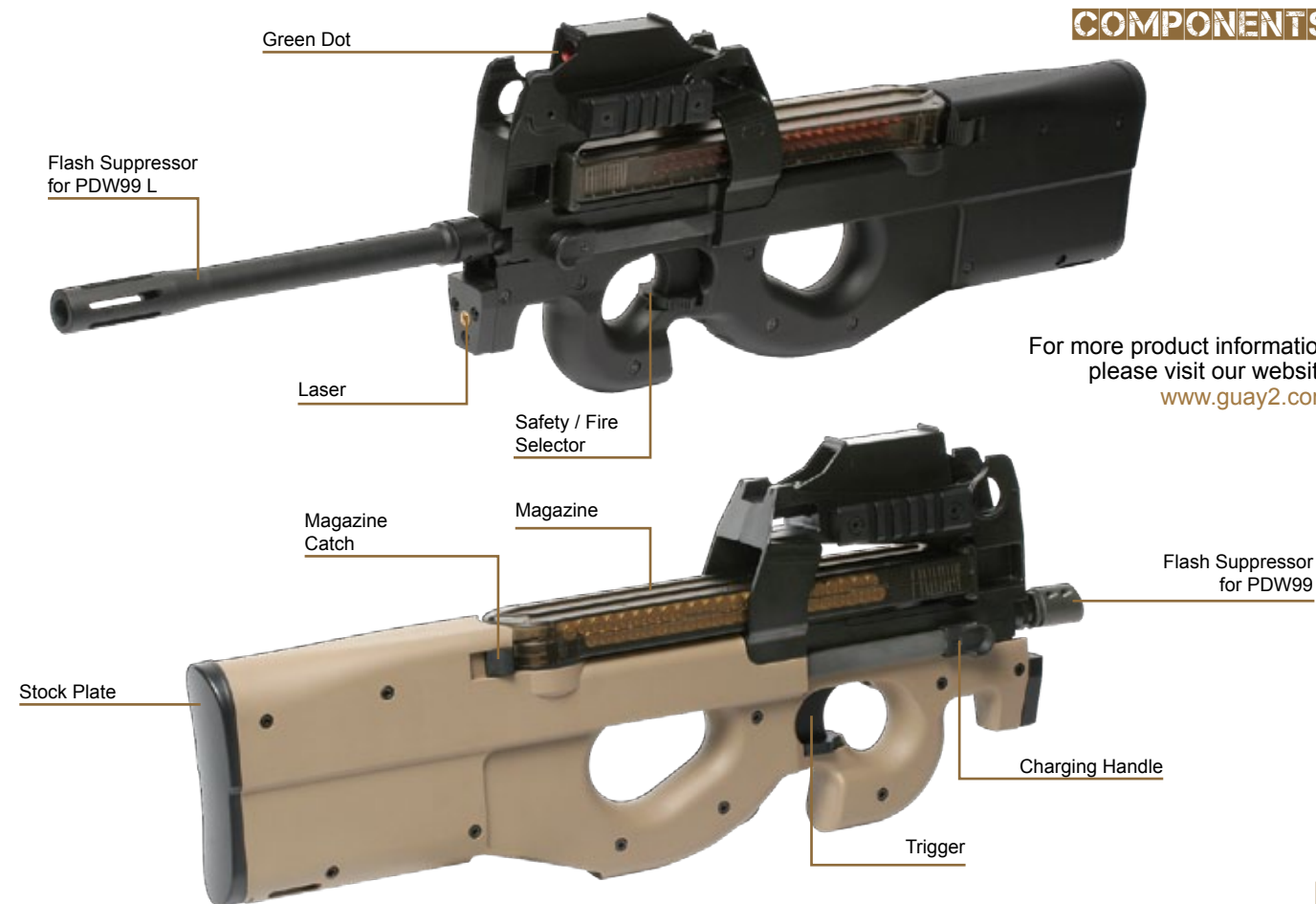
G&G is constantly researching new ways to innovate our designs and materials to ensure the best quality products. All G&G products are designed and built with computer assisted design tools, such as Computer Numerical Control (CNC) turning operation to ensure tight precision and quality.

G&G values the feedback of our customers, as we incorporate improvements and upgrades to our future products. All G&G products are proudly made in Taiwan.

It is G&G's vision that our customers will enjoy and have the best experience using our products. We strive in delivering the best quality products for the best price, and this is the key to our success. G&G has focused on our developments of Automatic Electric Guns with inimitable characteristics. G&G is proud to present its one of a kind, PDW99.

For more inquiries or information on our product and service, as well as any questions or feedbacks, please refer to our website [www.guay2.com](http://www.guay2.com).

## COMPONENTS





For more product information  
please visit our website  
[www.guay2.com](http://www.guay2.com)



**PDW99**  
PERSONAL DEFENSE WEAPON

**PDW99-L**  
PERSONAL DEFENSE WEAPON



For more product information  
please visit our website  
[www.guay2.com](http://www.guay2.com)



## WARNING

### Orange tip disclaimer :

- ⚠ All G&G Airsoft products come with a permanently affixed blaze orange tip required by United States law to comply with any and all safety regulations.
- ⚠ If you alter, remove, or modify the orange tip, the warranty will be Void.

For more product information  
please visit our website  
[www.guay2.com](http://www.guay2.com)



You may be liable for damaging public, personal property, injuring a person or animal even if you only meant to shoot as a "Practical Joke." Always observe Safety First and Good Manners when enjoying the fun sport of shooting.



### Safety procedures:

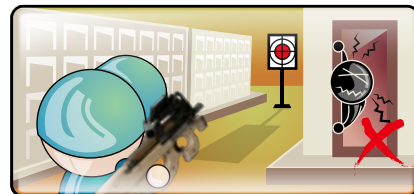
1. Attach the safety cap to the muzzle.
2. Set the selector lever to the safety position.
3. Remove the magazine.
4. Remove the battery.



When shooting the air guns for target practice or in a game situation, you and all participants must wear safety goggles or other eye protective gear. Also, pay attention to ricochets. It is very important to pay attention to third parties other than the participants.



When you carry the air gun, attach the safety cap, set the selector lever to the safety position and always put the air gun in a case or bag.



Select a safe place for operating the air gun, avoid places where people and cars are around.



Always attach the safety cap to the muzzle, remove the battery and store the air gun in a case or bag and in a safe place that is out of reach by children.

## WARNING

- ⚠ All products employ high precision 6.04mm barrel. Use with precision 5.95mm BB pellets is highly recommended. Damage to the product due by faulty BB pellets voids the warranty. Use with caution.
- ⚠ The buyer and the user of this product shall adhere to all local laws regulating the usage and the ownership of airsoft guns.

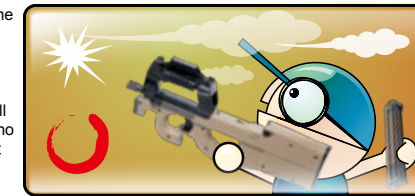
Never direct the muzzle towards a person or animal in any direction. That may cause harm or damage to the third party.



Looking into the muzzle is extremely dangerous regardless if BB's have been loaded or not. If you get hit in the eye by a BB pellet, you may in worst case, lose your eye sight.



There may be cases where some BB's remain in the gun after the magazine has been removed. After removal of the magazine, direct the muzzle towards a safe direction and pull the trigger to confirm there are no BB's that remain in the gun. Set the selector lever to safety, then attach the safety cap.



- ⚠ Adult supervision required.
- ⚠ May be hazardous up to 50 meters.
- ⚠ Read all instructions before using this product.
- ⚠ Always wear safety goggles when using this product.
- ⚠ Misuse or careless handling of this product may cause injury.
- ⚠ This product is intended for users 18 years or older.



Make sure to always put the safety cap on the muzzle when you are not shooting. Do this to prevent accident, discharge of BB's and also for dust protection purposes. Never pull the trigger while the safety cap is attached to the muzzle.



Activating the trigger carelessly is extremely dangerous. Never put your finger on the trigger unless the safety cap is removed and you are ready to shoot a target.



Disassembling or modifying the gun may adversely affect the performance of the gun and be dangerous. It also may Void the warranty and in some areas it might be against the Law.

## SELECTOR AND SAFETY SETTING

### Warning

- ▶ Never operate the selector while pulling the trigger. Otherwise, malfunctions may occur.
- ▶ Pulling the trigger with the selector being set at safe mode may damage the airsoft gun.

Always set the safety mode immediately after firing.



**Safety setting mode**

**The trigger can not be pulled**

When you are not firing the gun always set the selector to the safe position and attach the protective cap on the muzzle. You should also do this whenever you are storing your gun in your gun case.



**Semi mode**

**Single shot**

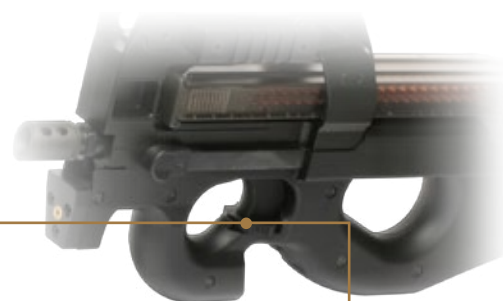
The gun will fire one shot each time the trigger is pulled.



**Fully automatic mode**

**Automatic firing**

The gun will fire automatically while the trigger is held down.



## INSTALLING BATTERY

### Warning

- ▶ Use only the G&G battery purchased from your local dealer.

### Recommended Optional Parts



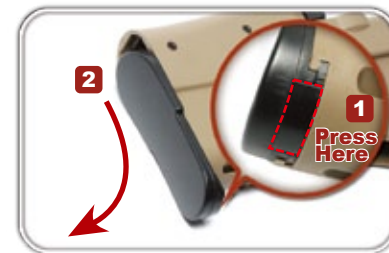
**Li-Po Balance Charger**  
Model No. G-11-035

**Li-Po 11.1v / 1100mAh**  
Model No. G-11-034

### Li-Po Balance Charger LED INDICATION

- [ Power ] Blue Light (ON)
- [ Error Status ] Red Light (Flashing)
- [ Charging ] Green Light (Flashing)
- [ Fully Charged ] Green Light (ON)

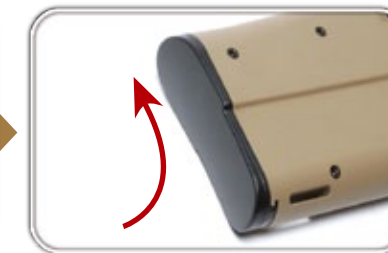
When the green light flashing more frequently shows the charging speed is faster.  
When the battery is nearly full, the green light will be on consistently.



Press the button to remove the stock plate.



1. Connect battery (LI-PO or NI-MH) plug with the connector until you heard a click sound.
2. Insert battery into the stock.



Reinstall the stock plate.

### Caution

- ▶ Carefully arrange the wire when installing the NI-MH battery due to the limited compartment space, the outer core layer may be damaged by the butt plate when closing.

## LOADING THE MAGAZINE



- Warning**
- ▶ Make sure to instal the magazine upwards. It is securely installed when hearing a click sound.
  - ▶ Confirm that the safety lever is set to safety position and do not place your finger on the trigger.

### To release the magazine



Press the magazine release on both sides.



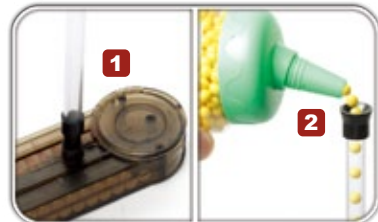
Pull out the magazine.

### Loading the magazine

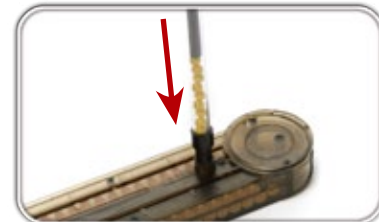


Magazine bottom view.

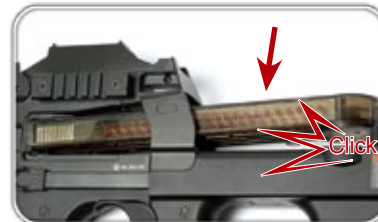
### Loading the magazine



1. Connect the magazine loader.  
2. Load G&G 5.95mm BB pellets into the BB loader. The magazine is capable of containing 60 pellets.



Push BB pellets into the magazine with the charging rod.



Insert the magazine into the body until you hear a click sound.

## HOP-UP ADJUSTMENT

### Open the port cover

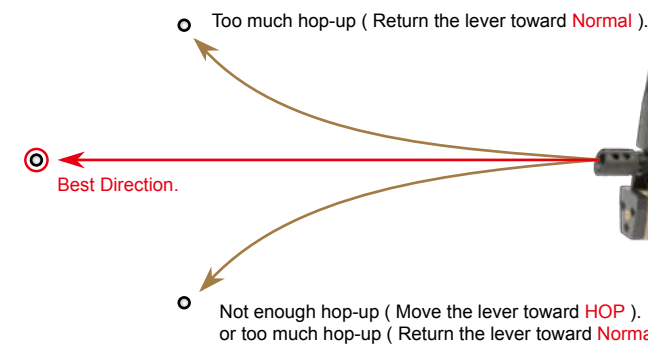


Open the Hop-up protect cover.

### Hop-up adjustment



Turning hop-up dial for desired flight pattern of the BB pellet.  
The hop-up dial can be turned to a certain degree.  
Turning it too much will damage the unit.



### Warning

- ▶ Never hold the gun sideways as the BB pellets will curve right or left.
- ▶ This is due to the HOP-UP system.



## DOT SIGHT / VISIBLE LASER GUIDES

### PDW99 Dot sight feature

Power	<120mW
Operational power current	<30mA
Operational voltage	3V (1.5V x 2)
Battery type	AAA 1.5V
Mode	Day / Night
Operating temperature	- 10°C to 60°C
Storage temperature	- 40°C to 85°C

#### Please Note

If the brightness of the LED light dims, please replace the battery for best performance.

### Eco-friendly Notice

Do not dispose this product into environment.  
In order to decrease the pollution and help save our earth,  
please recycle this product.

#### ⚠ Warning

In order to safely use this product, please carefully read through following warnings and hints:

- 1) Keep the children away from this product.
- 2) Do not point light beam at eyes or anyone or animals.
- 3) Do not use Li batteries without circuit breaker.
- 4) Whenever you are not using this product always be sure to remove the battery.

### PDW99 Visible laser feature

Power	< 1mW (CLASS 2)
Wave length	640 ~ 660 nm (Red illumination)
Output mode	CW (continuously)
Operational power	current <40mA
Operational voltage	3V (1.5V x 2)
Battery type	AAA 1.5V

#### Please Note

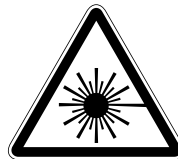
Strictly follow detailed instruction in user guide for correct use of the product.  
Please read carefully the instructions included for this item.

### Storing and Operating Enviroments

**Caution :** Prolonged storage in extreme heat or low temperatures,  
may effect the products performance and battery life.

- 1) Storage : Temperature - 40°C to 85°C humidity 0% to 95%
- 2) Operation environment : Temperature - 10°C to 40°C  
humidity 15% to 85%

**LASER RADIATION**  
**DO NOT STARE INTO BEAM**  
**CLASS 2 LASER PRODUCT**



### Dot sight battery

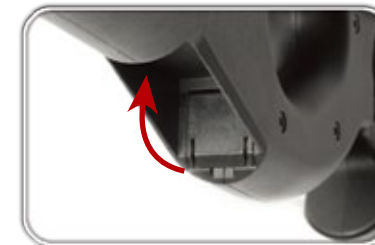


Open the cover.



Insert two batteries and close the cover.

### Visible laser battery



Open the cover.



Insert two batteries and close the cover.

## ADJUSTMENT

### Dot Sight power switch



Switch location.



Middle - Dot sight off.

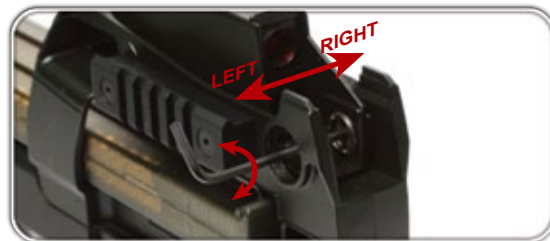


Right - Level 1 brightness.



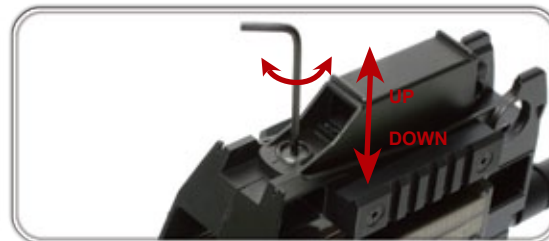
Left - Level 2 brightness.

### Dot sight adjustment - Windage



Adjust the hitting point to left or right with an Allen Key.

### Dot sight adjustment - Elevation

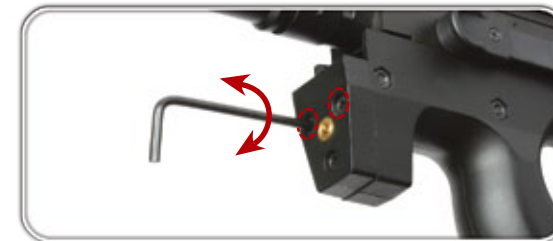


Adjust the hitting point up or down with an Allen Key.

### Visible laser power switch / adjustment



Switch location / Press to turn on.

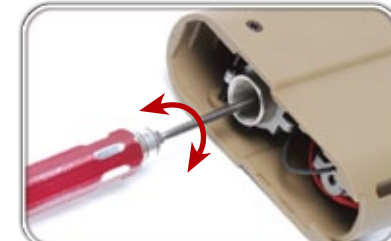


Adjust the laser point with an Allen Key.

### Spring adjustment



Press the button to remove the stock plate.



Adjust the spring force increase or decrease with a screwdriver.

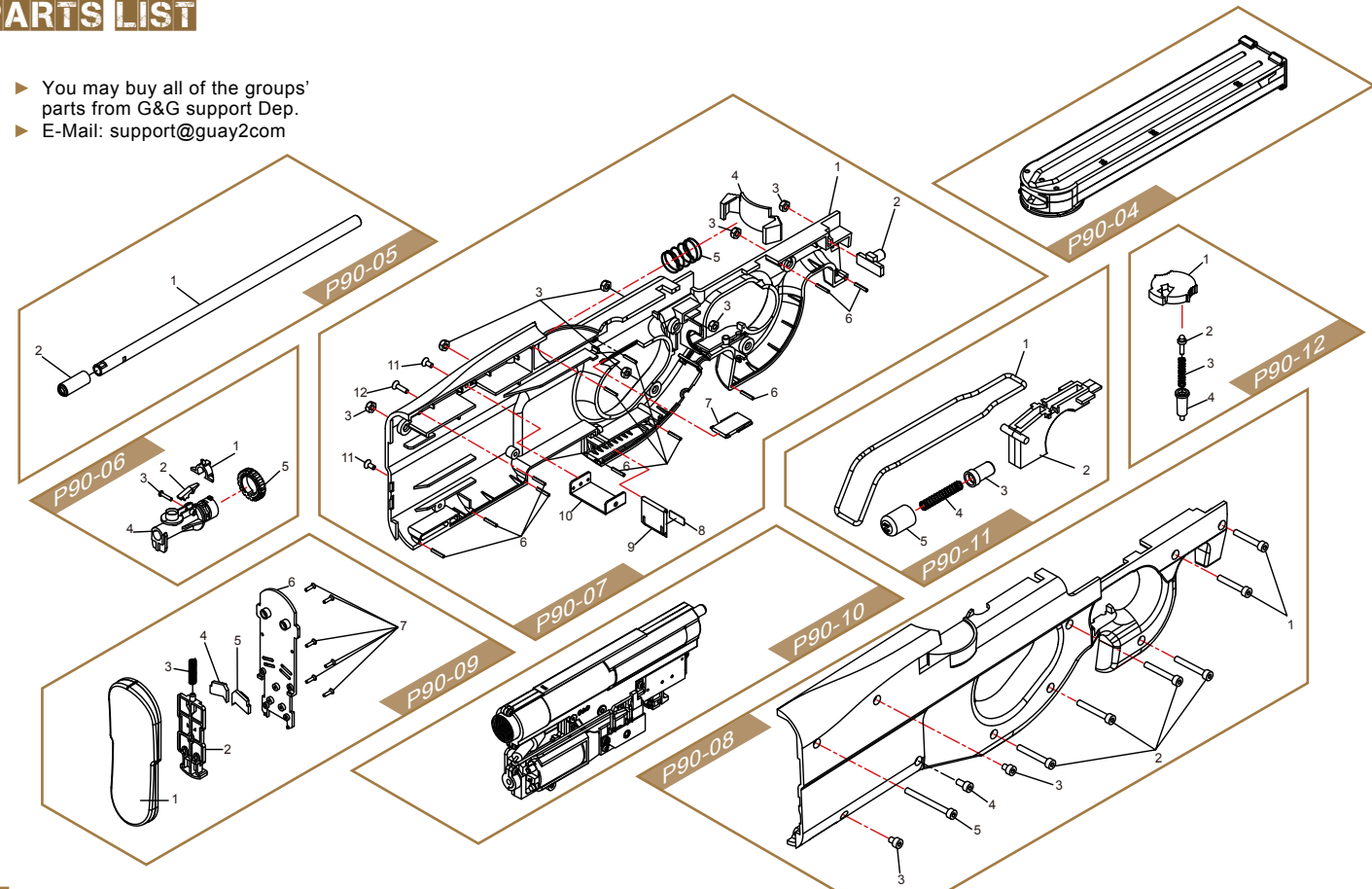


Reinstall the stock plate.



## PARTS LIST

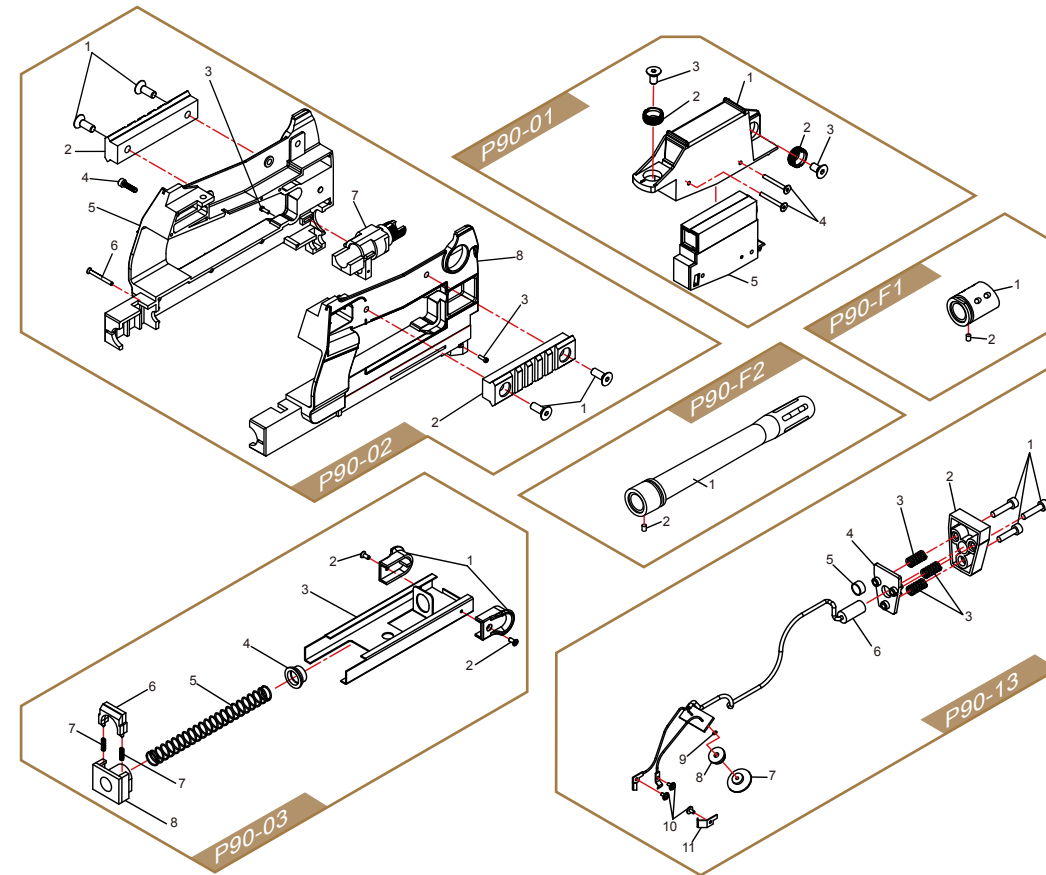
- You may buy all of the groups' parts from G&G support Dep.
- E-Mail: support@guay2com



## PARTS LIST

- You may buy all of the groups' parts from G&G support Dep.
- E-Mail: support@guay2com

P90-01	Green Dot Set
P90-02	Upper Receiver Set
P90-03	Charging Handle Set
P90-04	Magazine
P90-05	Inner Barrel Set
P90-06	Hop-Up Set
P90-07	Lower Receiver Set (Left)
P90-08	Lower Receiver Set (Right)
P90-09	Stock Plate Set
P90-10	Gear Box
P90-11	Trigger Set
P90-12	Selector Set
P90-13	Laser Set
P90-F1	Flash Suppressor Set (Standard)
P90-F2	Flash Suppressor Set (Long Ver.)



## MAINTENANCE



### Maintenance for low FPS

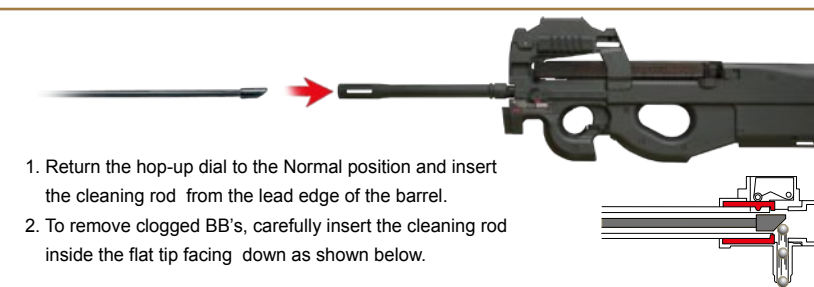


1. Drop a few drops of silicone oil or teflon oil into the pellet entrance. After insert BB pellets into the magazine , fire the gun for up to 200~300 pellets.
2. To complete the cleaning, use the cleaning rod ( with cotton ) to remove excess oil.

### Warning

- ▶ Do not jam the cleaning rod into the barrel by force.
- ▶ Should the BB's remains inside the barrel after following the instruction above, with the protection cap off the barrel, point the gun to a safe direction, and discharge any loosened BB's in semi-automatic mode.

### Removing loose pellets



1. Return the hop-up dial to the Normal position and insert the cleaning rod from the lead edge of the barrel.
2. To remove clogged BB's, carefully insert the cleaning rod inside the flat tip facing down as shown below.

### Warning

- ▶ Make sure no dirt gets into the chamber to avoid clogging of pellets.
- ▶ Hop-up may be unstable for the first 200 to 300 rounds after using silicone oil, this is the normal operation of the gun.
- ▶ Never use CRC-556, WD40 or other corrosive lubricant.

## TROUBLE SHOOTING

SYMPTOM	CAUSE	ACTION
NON Operational	Selector lever is set to safety.	Set the selector lever to Semi or Full Auto.
	Battery is not charged.	Change the battery.
	Battery connector is disconnected.	Connect the connector.
	The ⊖ and ⊕ of battery connector is reversed.	Connect the connector correctly(check the fuse).
	Expired motor life(50,000 to 60,000 rounds) or poor electrical connection.	Replace the motor(purchasing from your dealer or us)or check and repair the contacts.
Although motor is revolving, no pellet can be fired	Pellets are clogged inside the magazine.	Insert the charging rod into the magazine and move up and down a few times to remove clogged pellets.
	Pellets are clogged in the chamber.	Remove clogged pellets using the cleaning rod.
	Faulty gear.	Purchase the replacement gear from your dealer or G&G and repair.
Full-auto operation not functional (automatic firing)	Insufficient battery power.	Charge the battery.
	Magazine feed with faulty pellet .	Repair clogging of the magazine.
	Poor electrical connection. Damaged or worn chamber set.	You should consult a certified airsoft smith or G&G dealer in your area for overhaul maintenance, part replacement, or repairs.
Shooting distance becomes shorter	Damaged or worn piston set (O-ring,piston spring)	
	Something is jammed in the inner barrel	Use the cleaning rod and clean the inner barrel.
	Faulty BB pellets (too small or heavy)	Use the genuine G&G Pellets.
	Shortage of silicone oil	Drop a few drops of silicone oil from the chamber upper .
	Gear problem caused by too many blank firing	You should consult a certified airsoft smith or G&G dealer in your area for overhaul maintenance, part replacement, or repairs.
Operating Noise Becomes Loud	Worn or damaged gear Gear problem caused by too many blank firing	
Pellets are falling out of the end of the Barrel	Damaged or worn chamber set.	Turn the hop adjustment lever toward Hop. Use the G&G Pellets.
	No hop setting.	
	Faulty BB Pellets (too small ).	
Pellets flying upwards	Too much hop setting	Gradually return adjustment lever towards Normal.
Pellets are flying downward	Hop up isn't adjusted enough	Gradually return adjustment lever towards Normal.
	Hop packing contaminated by oil or dirt	Fire pellets equivalent to 4 to 5 magazines or clean the chamber using cleaning rod.
	Dirt inside the barrel	
Cannot adjust	Worn or damaged hop packing.	Purchase the replacement part from your dealer or G&G and replace it.
	Damaged adjustment lever or other parts	Purchase the replacement part from your dealer or G&G and replace it.
Pellets are Clogging frequently	Too much hop setting	Gradually return adjustment lever towards Normal.
	Improper or too large sized BB pellets.	Use the BB pellet supplied by G&G Armament.
	Dirty hop packing	Clean using the cleaning rod or consult your dealer or G&G for repair.
If gun gets wet	Stop operation immediately,disconnect the battery,wipe off water from inside the main body and the battery.After completely dried,carry out trial firing.If the unit is not operational,please contact your local dealer for repair	