



P.M.O.G.
AIRSOFT / PAINTBALL 40MM PROJECTILES
INSTRUCTION MANUAL
Version 2.0

P.M.O.G. INSTRUCTION MANUAL

Version 2.0 Updates:

1. Added pyrotechnic impact fuse, chalk-filled projectiles section.
2. Removed P.M.O.G. Adapter and related sections.
3. Revised P.M.O.G. Projectile Instruction.
4. Added P.M.O.G. Assembly and Refill Instruction.



1. When loading / unloading or launching this product during practice or gameplay, you and all people around you should wear proper eye protection.
2. Load the projectiles AFTER putting gas in the grenade shells. Failure to do so may cause the projectiles to be launched accidentally if there are gas leaks in the grenade shells.
3. Load the projectiles with them pointed at a safe direction. Failure to do so may result in serious injuries if the trigger mechanism of the grenade shells is accidentally activated.
4. This product should not be aimed at personnel directly, or targets within 30 feet / 9 meters.
5. This product is intended for responsible Airsoft / paintball players who are 18 years old or older. Players should follow the rules set by the fields they play at. Minors may use this product under close supervision of adults.
6. Users should not brandish or launch this product in public places. Failure to do so may result in users being prosecuted by law.

P.M.O.G. INSTRUCTION MANUAL

Table of Contents

WARNING.....III

1. Introduction..... 1

2. Madbull XC-03 Portable CO2 Charger Instruction 4

3. P.M.O.G. Projectiles Instruction 6

4. P.M.O.G. Assembly and Refill Instruction 9

5. Carrying P.M.O.G. Projectiles 12

1. Introduction

The P.M.O.G. Airsoft / paintball 40mm Projectiles is designed to be used in Airsoft and paintball gameplay as means to paint a target as being destroyed. The target can be a cover, bunker, vehicle, or group of players in a 10 feet / 3 meters radius.



Figure 1. Chalk-filled projectiles (blue) and foam projectiles (yellow)

The P.M.O.G. Airsoft / paintball 40mm Projectiles come in three types (Figure 1):

1. Chalk-filled projectiles: feature a frangible blue foam tip with red chalk fillings, and a green rubber body. The tip is designed to break open upon contact and expels the chalk fillings.
2. Foam projectiles: feature a spongy yellow foam tip, and a green rubber body. The foam projectiles are designed to be reusable and can be used as practice rounds.
3. Pyrotechnic impact fuse, chalk-filled projectiles: feature a snapper mounted, frangible red foam tip with red chalk fillings, and a green rubber body. The snapper produces loud report upon impact with hard objects. The gas generated by the activated snapper, as well as the kinetic energy of the projectile, help break open the tip and expel the chalk fillings.

Note: The snapper utilized comes in a variety of names: Pop-pop, Mandarin Snaps, Adult Snaps, and etc (Figure 2). It generally have the size and shape of a small fire cracker, but the fillings only contain gravel impregnated with a minute quantity of silver fulminate (~0.0008 grams) of silver fulminate. The Consumer Product Safety Commission (CPSC) reported that a snapper exhibited only one-eighth of the explosive pressure of a fire cracker of similar size (0.85 psi vs. 6.5 psi), and it was so weak that CPSC found it unnecessary to assess the shrapnel injury potential: <http://www.cpsc.gov/Global/Research-and-Statistics/Injury-Statistics/Fuel-Lighters-and-Fireworks/2012fwreport.pdf>. P.M.O.G. Armory's test showed that the snapper can be detonated against human skin without causing burn or any other injuries: <http://youtu.be/7eJhs5l0U0c?t=7m52s>. The snapper is considered as novelty firework and its use is not regulated in most states except NJ, NY, DE, and MA. However, due to some political-motivated advocacy, the snapper in question has been regulated as consumer firework in some municipalities, and made illegal to use. Beside legal ambiguity, users should also be aware that insurance companies may still prevent its use in users' fields. Users should consult the field owners to gain permissions to use it in games. In order to avoid potential legal pitfalls, P.M.O.G. Armory will ONLY sell the pyrotechnic impact fuse, chalk-filled projectiles as DIY kits WITHOUT the snappers. The assembly of the projectile kits will be mentioned in later chapters.



Figure 2. Snapper (a.k.a. Pop-pop, Mandarin Snaps, Adult Snaps, and etc)

P.M.O.G. INSTRUCTION MANUAL

The P.M.O.G. Airsoft / paintball 40mm Projectiles are designed to work with Madbull XC-03 Portable CO2 Charger (Figure 3) and G&P 40mm Rubber Projectile Cap Type Airsoft Gas Grenade Shell (Figure 4). However, other CO2 chargers can be used depending on the grenade shells. The projectiles can also fit directly on top of most BB shower grenade shells.

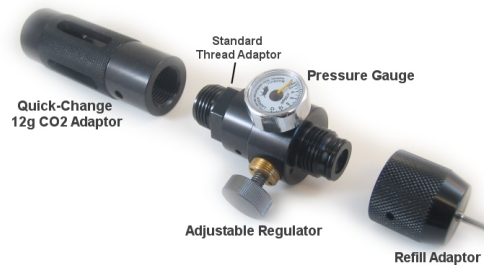


Figure 3. Madbull XC-03 Portable CO2 Charger



Figure 4. G&P 40mm Rubber Projectile Cap Type Airsoft Gas Grenade Shell

2. Madbull XC-03 Portable CO2 Charger Instruction

1. Loosen the adjustment knob by turning it anti-clockwise



2. Insert a CO2 cartridge and attach the CO2 cartridge holder to the charger head. Make sure there is no air leakage from the holder



3. Turn the adjustment knob slowly until the dial rise to the desired pressure on the pressure gauge

P.M.O.G. INSTRUCTION MANUAL

4. In case the pressure exceeds the desired number, loosen the adjustment knob and press down on the charger nozzle against a hard object to release the gas. Repeat step #3. Also, the pressure will climb after charging each grenade shell. Therefore, perform step #4 after each charge.



5. To safely remove the CO2 cartridge, tighten the adjustment knob by turning it clockwise and press down on the charger nozzle against a hard object until the hissing sound stops.

3. P.M.O.G. Projectiles Instruction



Warning: wear goggles and point the tip of the grenade shell at a safe direction

The instruction bellow can also be applied to other makes of grenade shells.

1. Use a rod to push down on the trigger button to reset the air valve. On some makes, a “click” can be felt when the air valves are reset.

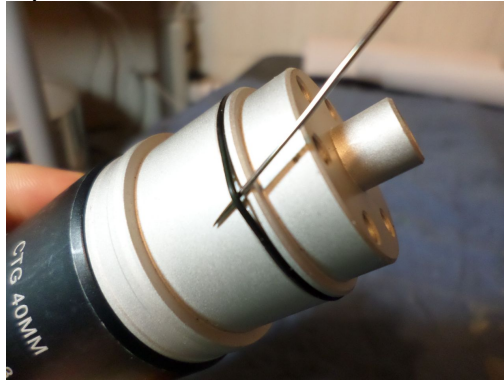


2. Charge the grenade shell with a CO2 charger. A one-second charge should be sufficient, and a longer charge may result in higher pressure within the grenade shell. This is particularly important for shells designed for green gas, as some of them may seize at high pressure. For G&P 40mm Rubber Projectile Cap Type Airsoft Gas Grenade Shell, 550 psi is the maximum pressure that can be used.



P.M.O.G. INSTRUCTION MANUAL

3. Remove the O-ring on the neck of the grenade shell. On G&P 40mm Rubber Projectile Cap Type Airsoft Gas Grenade Shell, use a sewing needle to assist in removing the O-ring. The O-ring in question provides too much resistance thus must be removed.



4. Load P.M.O.G. Airsoft / paintball 40mm Projectiles on top of grenade shells. To make loading easier, apply some silicone oil on the neck of the grenade shell, and use some twisting motion to get the projectile seated. Also, hold the body of the projectile instead of the tip to prevent crushing the tip.



5. Load the projectile / grenade shell into a grenade launcher. It is now ready for use.

P.M.O.G. INSTRUCTION MANUAL



6. To unload the projectile / grenade shell, point the tip at a safe direction and pull the projectile off. Use a rod to push down on the trigger button to release the gas in the grenade shell.

4. P.M.O.G. Assembly and Refill Instruction

The pyrotechnic impact fuse, chalk-filled projectile kit will come with a red foam tip, a green body, and some chalk. The users can purchase the snappers from Pyrocreations: <http://www.pyrocreations.com/inc/sdetail/567/81003>. Choose Priority Mail during checkout to save on shipping. The pyrotechnic impact fuse, chalk-filled projectile refill kit will come with five red foam tips and some chalk. The chalk-filled projectile refill kit will come with five blue foam tips and some chalk. The users will need a hot glue gun and a measurement spoon for assembling the kits.

1. (Only for pyrotechnic impact fuse, chalk-filled projectile kit or refill kit) Glue three snappers together, insert them into the hole on top of the foam tip, and seat the snappers and foam tip on top of the body. Make sure the top of the snappers is level with the ground.



2. (Only for pyrotechnic impact fuse, chalk-filled projectile kit or refill kit) Fill any empty space between the foam tip and the snappers with glue.



P.M.O.G. INSTRUCTION MANUAL

3. After the glue sets, turn the tip upside down, and fill the inside of the tip with chalk. For chalk-filled projectiles, just fill the inside of the tip with chalk. Leave about $\frac{3}{8}$ th of an inch to the lip of the tip unfilled.



4. Fill the groove on the top of the body with glue. A thin layer will do.



P.M.O.G. INSTRUCTION MANUAL

5. Apply glue to the lip of the foam tip. A thin layer will do.



6. Put the tip and the body together quickly and hold them together for 10 seconds. Test the strength of the bondage by slightly pulling them apart in the opposite directions. If they are pulled apart too easily, repeat step #4 to #6.



5. Carrying P.M.O.G. Projectiles

P.M.O.G. Airsoft / paintball 40mm Projectiles feature frangible or spongy tips and hollow bodies, so they need protection during transportation. It is recommended to use a 1.5-inch PVC Schedule 40 pipe cut to 37-inch / 80-centermeter long to protect the projectiles. An AK magazine pouch can easily house two projectile / shell / protector combos (Figure 5). In addition, a Tactical Taylor 40mm Belt can carry the projectiles and shells and provides quick access to them. And if the users wear the belt at their chest level, the chances of falling upon the projectiles and damaging them are quite low (Figure 6).



Figure 5. Condor Double AK Magazine Pouches.



Figure 6. Tactical Taylor 40mm Belt worn at chest level



P.M.O.G. Armory

Gordon Huang

Pmogarmory@gmail.com

<https://www.facebook.com/PMOGArmory>