SAFE GUN HANDLING

You should be fully familiar with the proper and safe handling with your Airsoft gun. The basic principles of gun safety require you to always apply the following rules when handling an Airsoft gun.

Never point at anything you do not intend to shoot.
Always treat the Airsoft gun as though it is loaded and with the same respect the Airsoft gun as the real firearm.
Always aim in a SAFE DIRECTION. Keep the muzzle pointed in a SAFE DIRECTION.
Always keep the selector lever on SAFE until ready to shoot.
Always keep your finger away from the trigger and trigger guard until ready to shoot.
When you or others are in the shooting range, please wear the eye protection that designed for Airsoft sport to protect your eyes.
Use 6mm plastic BBs only.
Do not shoot at hard surfaces or the surfaces of water: the plastic BBs may bounce off or ricochet and hit someone or something you do not want to hit.
DO NOT reuse fired plastic BBs because they might be damage your Airsoft gun.
Make sure ALL of the plastic BBs and power source are unload from the Airsoft gun.
Always store this Airsoft gun in a safe place.
Please make sure the gun is unloaded when getting form storage or another person.
DO NOT ATTEMPT TO DISASSEMBLE OR TAMPER WITH YOUR AIRSOFT GUN.
CONTACT CUSTOMER SERVICE AT VFC FOR REPAIR.

⚠️ WARNING: DO NOT BRANDISH OR DISPLAY THIS AIRSOFT GUN IN PUBLIC - IT MAY CONFUSE PEOPLE AND MAY BE A CRIME. POLICE AND OTHERS MAY THINK THIS AIRGUN IS A FIREARM. DO NOT CHANGE THE COLORATION AND MARKINGS TO MAKE IT LOOK MORE LIKE A FIREARM. THAT IS DANGEROUS AND MAY BE A CRIME.

⚠️ WARNING: NOT A TOY. ADULT SUPERVISION IS REQUIRED. MISUSE MAY CAUSE SERIOUS INJURY, ESPECIALLY TO THE EYE. EYE PROTECTION DESIGNED FOR AIRSOFT GUNS MUST BE WORN BY THE USER AND ANY PERSON WITHIN RANGE. READ THIS OWNER'S MANUAL BEFORE USING. MAY BE DANGEROUS UP TO 220 YARDS (200 METERS).

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HISTORY OF VEGA FORCE COMPANY

Vega Force Company was founded by the people who love guns in 2004. The VFC founders believe that guns are “Works of Art”. VFC uses its expertise to produce highly realistic Airsoft replica with custom grade performance of internal mechanical design, which allows VFC users to have better shooting and operating experience. What’s more than that is every VFC Airsoft product is in the standard of collection grade with strong and refined surface finishing. “Collectors wanted and operators wanted” is the motto for VFC’s products.

The reputation VFC earned is not only from the users, but also from distributors and license holders around the world. With OEM experience of more than a decade, VFC’s team of professionals specializes in designing and developing quality Airsoft products.

The VR16 series is one of the most unique products in VFC. It is distributed around the world, earned a good reputation and market response. It is combined with high-end technology and excellent quality to achieve and reach the high-end Airsoft AEG range. All the details and designs are amazing. It is simply reaching for the best.

VR16 / M4 Series Features

The VFC SR16 series comes with full metal body, nice surface finishing and high quality VR16 engravings. The Internal of VR16 includes High-performance custom gearbox to let your rifle more powerful, and the MOSFET electronic control unit inside for higher efficiency and faster trigger response. Full of the QRS accessories allow you to adjust the rifle to fits your shooting motion. Dust cover can be flipped open to reveal hop-up adjuster, and VR16 also comes with an ambidextrous fire selector which is lefty friendly.

This series has the most popular rail system with ample room for all sorts of sights and accessories. Just like in real world, this makes things much easier when it comes to stabilizing yourself in each and every shot, same in the Airsoft world, and also for aesthetics.

NO COMPROMISE? GET VFC!
**COMPONENTS**

**RIGHT SIDE**
- Stock
- Rear Sight
- Front Sight
- Flash Hider
- Pistol Grip
- Magazine Release Button

**LEFT SIDE**
- Bolt Catch
- Charging Handle
- Retractable Stock
- Barrel
- Handguard
- Lower Receiver
- Trigger
- Selector Lever
- Stock Release Button

**SAFETY SETTING**

**Safety Setting**
(The trigger can not be pulled)
Always set lever to SAFE position when gun is not in use.

**Semi Auto**
(Single Shot)
The gun will fire one shot each time the trigger is pulled.

**Full Auto**
(Automatic Shot)
The gun will fire continuously while the trigger is depressed.

**WARNING • CAUTION**
- Do not operate the selector lever while the trigger is depressed. Damage and malfunction will occur if you attempt to do so.
- Do not pull the trigger while the selector is on SAFE. Doing so will damage the trigger and safety mechanisms.
INSTALLING BATTERY

WARNING • CAUTION
Before changing the battery, point the gun in a safe direction, remove the magazine, and set the selector to SAFE.

Open the battery cap, then plug in the battery.

CAUTION
When batteries have almost lost their charge they can cause gearbox malfunctions that require repair. Batteries should never be over-charged. This can damage the cell. Prolonged overcharging causes permanent damage to batteries. The battery should always be drained before charging. There is no warranty for batteries. Use only those batteries of min. 9.6 V 3000 mAh

LOADING MAGAZINE

Press the magazine release button to remove the magazine.

300 RDS MAGAZINE (HIGH CAPACITY)

100 RDS MAGAZINE (MID CAPACITY)

Use only 6mm BB with the magazine.

WARNING • CAUTION
• Always use high quality 0.20 gram or heavier BB in your airsoft rifle.

We will not be held responsible for any damage or incidents arising from use of poor quality or underweight BB.

Consult with your dealer for proper BB.

Make sure to set the magazine upwards and connect it firmly until a click sound is heard.
ADJUSTING SIGHTS

FOLDING SIGHT

Press the button to flip up front sight.
Press the button to flip down front sight.

To adjust sight post downward, turn clockwise.
To adjust sight post upward, turn counterclockwise.

Press the button to flip up rear sight.
Press the button to flip down rear sight.

ADJUSTING WINDAGE KNOB

Turn the windage knob for windage adjustment.

Forward: Move the sight to the right.
Backward: Move the sight to the left.
The sight can be flipped.
**ADJUSTING THE QRF STOCK**

Press the stock release button, then adjust the stock position.

**CHARGING AND BOLT CATCH**

**CHARGING AND OPEN DUMMY BOLT**

The charging handle can be pulled and the dummy bolt will be remain open.

**RELEASE DUMMY BOLT**

To Release bolt, just press the bolt catch.

**WARNING • CAUTION**

- Be careful not to catch your fingers when operating buttstock functions.

**Pinch Point Warning**

Keep fingers out of bolt area when releasing bolt catch.
FIRING

Set the Selector lever to "SEMI" or "AUTO".

Semi Auto
(Single Shot) The gun will fire one shot each time when the trigger is pulled.

Full Auto
(Automatic Shot) The gun will fire automatically while the trigger remains pulled.

WARNING  CAUTION
• Confirm selector is off SAFE before firing the gun.
• Pulling the trigger while the selector is on SAFE will damage the gun and cause it to malfunction.

CAUTION
• Never put your finger on the trigger unless you are ready to shoot.

1. Set the selector lever to Semi-Auto or Full Auto.
2. Pull the trigger.

VARIABLE HOP-UP SYSTEM

Pinch Point Warning
※Be careful not to catch your fingers in the dummy bolt.

Your VR16 rifle comes standard with a variable hop-up system. This hop-up system allows lift to be added to the bb’s flight thus improving distance performance.

WARNING  CAUTION
• Too much hop up may cause BBs to jam. If a jam occurs, immediately dial back the hop up and test fire again. Otherwise, damage and malfunctions will occur with the gun.

• Open bolt to adjust the Hop-Up system.
• Gradually turn the adjustment dial in positive direction to increase hop up effect.
• Turning excessively adversely affects the trajectory. So, stop turning the dial when bullets fly horizontally.
### Improper Hop-Up Setting Troubleshooting

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Cause</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>BB's flying upward</td>
<td>Hop-up setting too high</td>
<td>Gradually return adjustment lever to normal.</td>
</tr>
<tr>
<td>Short flying distance of bb's (less hop-up effect)</td>
<td>Hop-up setting too high</td>
<td>Gradually return adjustment lever to normal.</td>
</tr>
<tr>
<td></td>
<td>Hop-up system contaminated by oil or dirt.</td>
<td>Clean using the cleaning rod or consult your dealer or VFC for repair.</td>
</tr>
<tr>
<td></td>
<td>Worn or damaged Hop-up system.</td>
<td>Purchase the replacement part at your dealer or from VFC and replace it.</td>
</tr>
<tr>
<td>Can not adjust</td>
<td>Damaged adjustment lever or other parts</td>
<td>Purchase the replacement part at your dealer or from VFC and replace it.</td>
</tr>
<tr>
<td>Frequent BB jamming</td>
<td>Hop-up setting too high</td>
<td>After the adjustment lever is returned to normal side, and the hop is released, it adjusts again.</td>
</tr>
<tr>
<td></td>
<td>Improper or too large sized BB’s</td>
<td>Only use quality Airsoft BB’s.</td>
</tr>
<tr>
<td></td>
<td>Dirty Hop-up system</td>
<td>Clean using the cleaning rod or consult your dealer or VFC for repair.</td>
</tr>
</tbody>
</table>

### Troubleshooting Clinic

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Cause</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>No operation at all</td>
<td>Selector lever is set to safety.</td>
<td>Set the selector lever to fire.</td>
</tr>
<tr>
<td></td>
<td>Battery is not charged.</td>
<td>Charge the battery.</td>
</tr>
<tr>
<td></td>
<td>Battery connector is disconnected.</td>
<td>Connect the connector.</td>
</tr>
<tr>
<td></td>
<td>The + and - of battery connector is reversed.</td>
<td>Connect the connector correctly.</td>
</tr>
<tr>
<td></td>
<td>Fuse is blown out.</td>
<td>Replace the fuse.</td>
</tr>
<tr>
<td>Motor is cycling but gun does not fire</td>
<td>BB's are clogged inside the magazine.</td>
<td>Insert the charging cord into the magazine and move it up and down several times to remove jammed bb's.</td>
</tr>
<tr>
<td></td>
<td>BB's are clogged in the chamber.</td>
<td>Remove jammed bb's in chamber using a cleaning rod.</td>
</tr>
<tr>
<td></td>
<td>Faulty gear.</td>
<td>Purchase the replacement gear from your dealer or VFC and repair.</td>
</tr>
<tr>
<td>Malfunction of full auto operation (automatic firing)</td>
<td>Insufficient battery power.</td>
<td>Charge the battery.</td>
</tr>
<tr>
<td></td>
<td>Faulty bb feed of connection.</td>
<td>Repair clogging of the magazine.</td>
</tr>
<tr>
<td>Malfunction of semi-auto operation</td>
<td>Poor electrical connection.</td>
<td>Consult your dealer, VFC for maintenance or repair.</td>
</tr>
<tr>
<td>Malfunction of semi-auto operation (single shot)</td>
<td>Insufficient battery power.</td>
<td>Charge the battery.</td>
</tr>
<tr>
<td></td>
<td>Poor electrical connection.</td>
<td>Consult your dealer, VFC for maintenance or repair.</td>
</tr>
<tr>
<td>Automatic firing cycles become slow</td>
<td>Insufficient battery power.</td>
<td>Charge the battery.</td>
</tr>
<tr>
<td></td>
<td>Worn or damaged Hop-up system.</td>
<td>Consult your dealer, VFC for maintenance or repair. Replace the chamber packing, piston packing(O-ring) and piston assembly.</td>
</tr>
<tr>
<td></td>
<td>Deteriorated piston spring.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Faulty BB (too small or heavy)</td>
<td>Only use quality Airsoft BB's.</td>
</tr>
<tr>
<td></td>
<td>Shortage of Silicone oil.</td>
<td>Drop a few drops of silicone oil from under the chamber.</td>
</tr>
<tr>
<td>Overly loud operating noise</td>
<td>Gear problems caused by excessive blank firing.</td>
<td>Consult your dealer, VFC for maintenance or repair. Replace the chamber packing, piston packing(O-ring) and piston assembly.</td>
</tr>
<tr>
<td></td>
<td>Worn of damaged gear.</td>
<td></td>
</tr>
<tr>
<td>Bullets falling out from barrel end</td>
<td>Gear problems caused by excessive blank firing.</td>
<td>Consult your dealer, VFC for maintenance or repair. Replace the chamber packing, piston packing(O-ring) and piston assembly.</td>
</tr>
<tr>
<td></td>
<td>Worn of damaged chamber packing.</td>
<td>Only use quality Airsoft BB's.</td>
</tr>
</tbody>
</table>
MAINTENANCE

Silicone Oil

Spray here

BARREL CLEANING

Use patch holder to clean the inner barrel.

WARNING - CAUTION

- Never use Mineral oil based lubricants.
- Please read the warning on page 1 before shooting.

NOTE

◆ After Operation
  - Point the gun in a safe direction, remove the magazine and fire the gun in semi-auto mode to clear the barrel and release the internal spring. Then set the selector to SAFE.
  - Be aware a BB may still be in the barrel after the magazine is removed, or if the magazine is empty.

◆ Cautions on Motor and Battery
  - If the rate of fire noticeably drops, recharge the battery or replace with a fully charged one.
  - Allow adequate time (5-10 minutes) for motor and battery to cool after shooting 500 rounds continuously.

◆ When BB’s Are Clogged
  - If a bb jam occurs, remove the magazine and clear the jam using a cleaning rod.
  - Apply a few drops of silicone oil to the Hop-up service port. If you are unable to clear the jammed bbs, contact your nearest authorized dealer for service.
VR16 SERIES FAMILY MAP
TECHNICAL DATA

SONIC BOOM SERIES

VR16 STINGER S8
- Over all: 490/570 mm
- Inner Barrel: 166 mm
- Weight: 2275 g
- Bullet: 6 mm
- Capacity: 120 Rds
- Muzzle Speed: 100 m/sec

SAVER SERIES

VR16 SABER COB MOD1
- Over all: 690/770 mm
- Inner Barrel: 229 mm
- Weight: 2889 g
- Bullet: 6 mm
- Capacity: 120 Rds
- Muzzle Speed: 100 m/sec

VR16 CALIBUR COC
- Over all: 690/770 mm
- Inner Barrel: 229 mm
- Weight: 2689 g
- Bullet: 6 mm
- Capacity: 120 Rds
- Muzzle Speed: 100 m/sec

VR16 FIGHTER COB MK2
- Over all: 700/783 mm
- Inner Barrel: 275 mm
- Weight: 2700 g
- Bullet: 6 mm
- Capacity: 120 Rds
- Muzzle Speed: 100 m/sec

FIGHTER SERIES

VR16 SABER CARBINE MOD1
- Over all: 700/890 mm
- Inner Barrel: 380 mm
- Weight: 2452 g
- Bullet: 6 mm
- Capacity: 120 Rds
- Muzzle Speed: 100 m/sec

VR16 CALIBUR CARBINE
- Over all: 810/980 mm
- Inner Barrel: 380 mm
- Weight: 2452 g
- Bullet: 6 mm
- Capacity: 120 Rds
- Muzzle Speed: 100 m/sec

VR16 FIGHTER CARBINE
- Over all: 822/903 mm
- Inner Barrel: 380 mm
- Weight: 2800 g
- Bullet: 6 mm
- Capacity: 120 Rds
- Muzzle Speed: 100 m/sec

CLASSIC SERIES

VR16 M105 CLASSIC
- Over all: 755/760 mm
- Inner Barrel: 275 mm
- Weight: 2900 g
- Bullet: 6 mm
- Capacity: 120 Rds
- Muzzle Speed: 100 m/sec

VR16 COBR SOPMOD
- Over all: 700/783 mm
- Inner Barrel: 275 mm
- Weight: 2700 g
- Bullet: 6 mm
- Capacity: 120 Rds
- Muzzle Speed: 100 m/sec

SOPMOD SERIES

VR16 M145 CLASSIC
- Over all: 745/770 mm
- Inner Barrel: 380 mm
- Weight: 2850 g
- Bullet: 6 mm
- Capacity: 120 Rds
- Muzzle Speed: 100 m/sec

VR16 RIS SOPMOD
- Over all: 816/895 mm
- Inner Barrel: 380 mm
- Weight: 3090 g
- Bullet: 6 mm
- Capacity: 120 Rds
- Muzzle Speed: 100 m/sec

SOPMOD II SERIES

VR16 COR II
- Over all: 696/777 mm
- Inner Barrel: 275 mm
- Weight: 2752 g
- Bullet: 6 mm
- Capacity: 120 Rds
- Muzzle Speed: 100 m/sec

VR16 M202 CLASSIC
- Over all: 500 mm
- Inner Barrel: 509 mm
- Weight: 3020 g
- Bullet: 6 mm
- Capacity: 120 Rds
- Muzzle Speed: 100 m/sec

VR16 SPR SOPMOD
- Over all: 908/990 mm
- Inner Barrel: 475 mm
- Weight: 2850 g
- Bullet: 6 mm
- Capacity: 120 Rds
- Muzzle Speed: 100 m/sec

Notice:
1. In different countries have their own specific restrictions of muzzle velocity. Please follow the muzzle velocity restrictions of local laws.
2. The specification of products may differ in future. Please check newest specifications on VFC official website.
3. You can download the PARTS LIST of products on VFC official website.

VFC official Website http://www.gb-tech.com.tw