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HANDLINGCAUTIONS AND INSTR





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## **WARNING**

Alway read through this manual before operation

- **■** Always wear eye protective gear.
- Never aim or shoot a person or animal as the target.
- You may be punished if you are shooting for practical joke.
- Never look into the gun muzzle.
- Always direct the muzzle towards a safe direction.
- Never shoot the air gun at places where people and cars pass cross.
- **■** Avoid pulling the trigger carelessly.
- ▶ Please put away your fingers from the trigger, except when you are ready to shoot a target.
- Always put the gun in a case or bag when you are carrying it.
- Store the gun at places out of reach by children.



## Vega Force Company http://www.gb-tech.com.tw

## 1 HISTORY

The M4 and variants fire 5.56x45mm NATO ammunition and are gas-operated, air-cooled, magazine-fed, selective fire firearms with a 4-position telescoping stock. Original M4 models had a flat-ended telescoping stock, but newer models are now equipped with a redesigned telescoping stock that is slightly larger with curvature at the end. The M4 is similar to much earlier compact M16 versions, such as the 1960s-era XM177 family. Some of those visual designs are obvious in both weapons, however most of the similarities are not very noticeable.

As with many carbines, the M4 is handy and more convenient to carry than a full-length rifle. The price is slightly inferior ballistic performance compared to the full-size M16, with its nearly 6" longer barrel. This becomes most apparent at ranges of 300 yards and beyond. Statistically, however, most small-arms engagements occur within 100 yards. This means that the M4 is very much an adequate weapon for the majority of troops. The marginal sacrifice in terminal ballistics and range, in exchange for greatly improved handling characteristics, is usually thought to be a worthwhile compromise.

While the M4's maneuverability makes it a candidate for non-infantry troops (vehicle crews, clerks and staff officers), it also makes it ideal for close quarters combat (CQC), and airborne and special operations, which is the most popular usage for the weapon. It has been adopted by United States Special Operations Command (USSOCOM) and is the preferred weapon of the U.S. Army Special Forces and Navy SEALs. M4's have also been fielded by the Australian Special Air Service Regiment. Malaysia purchased M4 Carbine service rifles to replace the Steyr AUG service rifles in its armed forces in 2006 and will be manufactured in Malaysia under license by SME Ordnance Sdn Bhd. It is expected that the M4 will be adopted by law enforcement agencies in Malaysia, such as the Royal Malaysian Police and the Malaysian Maritime Enforcement Agency.

The M4 was developed and produced for the United States government by Colt Firearms, which has an exclusive contract to produce the M4 family of weapons through 2009; however, a number of other manufacturers offer M4-like firearms. The M4A1, along with the M16A4, has mostly replaced the M16A2; the U.S. Air Force, for example, plans to transition completely to the M4 Carbine.

The United States Marine Corps has ordered its officers (up to the rank of lieutenant colonel) and (senior) Staff Non-commissioned officers to carry the M4A1 carbine instead of the M9 handgun. This is in keeping with the Marine Corps motto, "Every Marine a rifleman." United States Navy corpsmen will also be issued M4A1s instead of the M9.

## PROFILE

As the simple living has become the world trend, the concept of **Economic, Enough, Valuable,** has become a new mainstream consumer, VFC naturally should have not stay outside in with this trend. Thus, **E Series** has become the VFC year of 2009 mainly product lines.

VFC is different from the past, invariably to meet the luxury demand of Heavy User. E Series is about the high cost/performance to **Economic, Enough, Valuable,** for the entire idea of the product. In other words, **Take an affordable price in order to provide users with a useful electric gun.** 

Appropriate adjusted the part of the process, the process has oversimplified, also to omit excessive packaging; however, the entire product of the metal parts remain metal, the place is still as real steel without losing quality and detail. The most important part of AEG, **GEAR BOX SYSTEM** does not compromise because it's cheaper. We still use precision CNC machining of 8mm gear box, with high-strength pistons and steel gear, making the former settings can be directly using the Li-poly battery. Therefore, the **E Series** AEG is not only high rate of fire (ROF), high performance, easy to use, but also easy to upgrade.

E Series to represent the excellent in value of price, but without losing quality, even greater

durability, practical and truly able to meet the majority of players on the VFC brand demand.

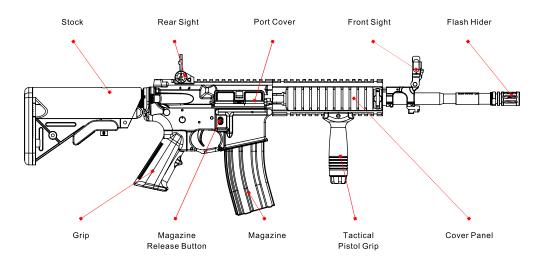




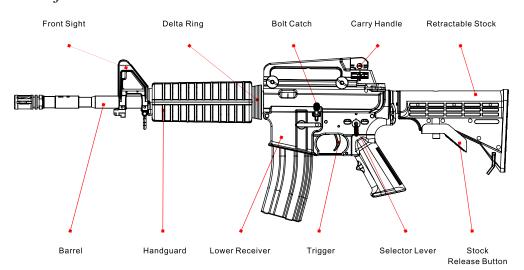


## **3 COMPONENT NAME**

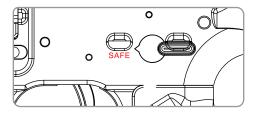
#### ■ Right Side



#### ■ Left Side

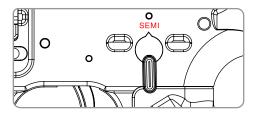


# 4 SELECTOR LEVER & SAFETY SETTING



#### Safety Setting (The trigger can not be pulled)

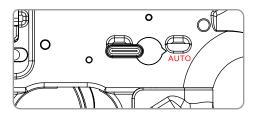
Always set the lever to the Safety position when you are not firing the gun or during storage.



#### Semi Auto

(Single Shot)

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



#### Full Auto (Automatic Shot)

The gun will fire automatically while the trigger remains pulled.

#### WARNING · CAUTION

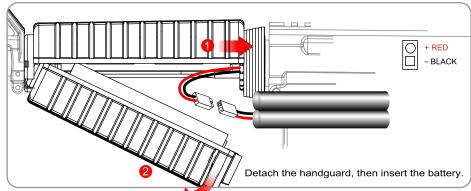
- Never operation the Selector while pulling the trigger. Otherwise, malfunctions are possible, resulting in accidents.
- Pulling the trigger with the Selector being set to safe may damage the gun.



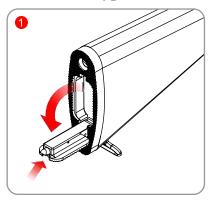


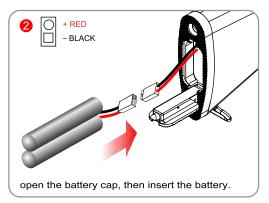
## **5 SETTING BATTERY**

#### ■ Handguard Type

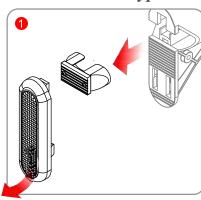


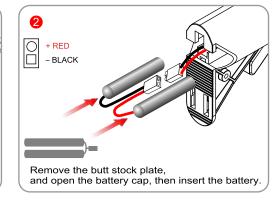
## ■ Fixed Stock Type



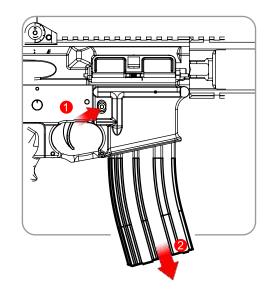


#### ■ SOPMOD Stock Type

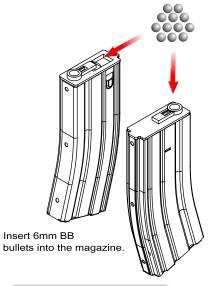




## **6 SETTING MAGAZINE**

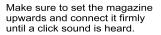


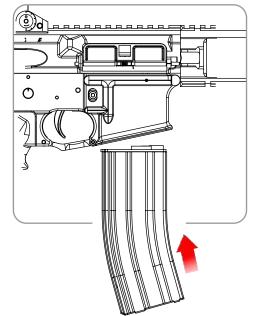
Press the magazine release button to remove the magazine.



## WARNING · CAUTION

Always use the VFC BB bullet for this air gun.
 We will not be held responsible for any damage and accidents arising from use of bad quality bullets supplied by other manufacturers.



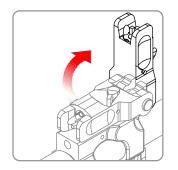


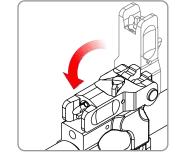




## **SETTING SIGHT**

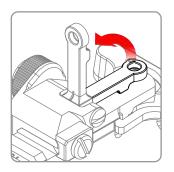
#### ■ Use the Front Sight

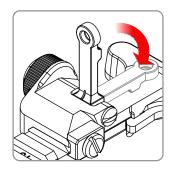




Turn the sight to front when using.

## ■ Use the Rear Sight





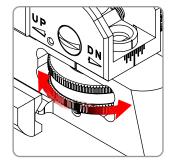
Turn the rear sight to front when using.

## ■ Adjustment the Windage Knob

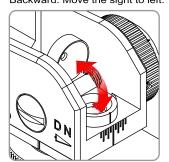
Turn the windage knob for windage adjustment.







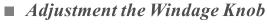
Forward: Up the sight. Backward: Down the sight.

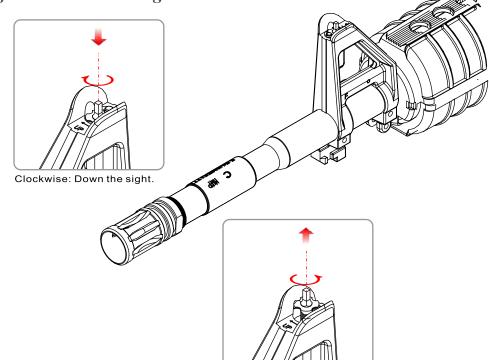


The sight can be flip up and down.



#### • Be carefully and don't get hurt when turning the rear sight.





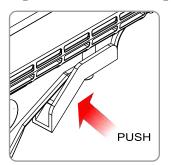
Counterclockwise: Up the sight.





## **MOVABLE PARTS**

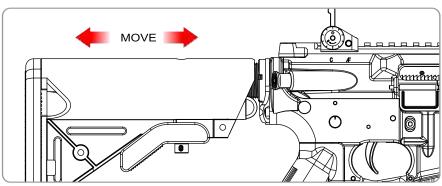
## A. Operate the Telescoping Stock



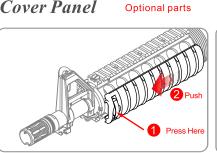
#### **WARNING • CAUTION**

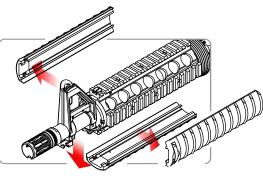
• Be carefully and don't get hurt when using the folding stock.

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



## B. Cover Panel



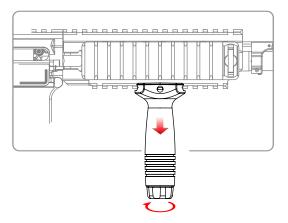


- Pressing the front clips of the rail cover panel toward the center.
- Simultaneously, push the rail cover panel forward and it can be taken out

## C. Forward Pistol Grip

Optional parts

The knob under the forward pistol grip face down the grip, twist clockwise and then the grip can be taken out.



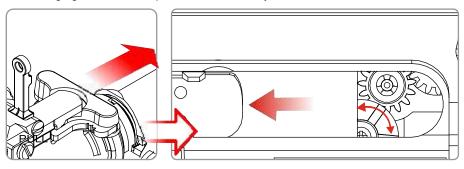






## E. Charging and Bolt Catch

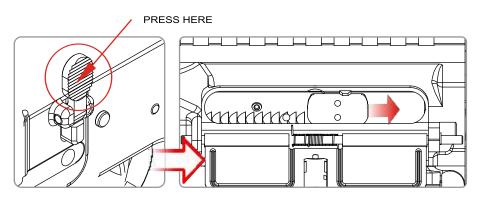
The Charging handle can be pulled and the dummy bolt will be fastened.



#### WARNING · CAUTION

 Don't push the charging handle forward while charging handle in the rear position.

To Release bolt, just press the bolt catch.



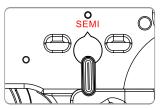
#### **WARNING • CAUTION**

• Be carefully and don't get hurt when press the bolt catch.

## 9 FIRING

\* Confirm safety sufficiently before beginning firing.

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

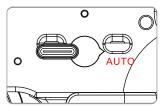


#### WARNING · CAUTION

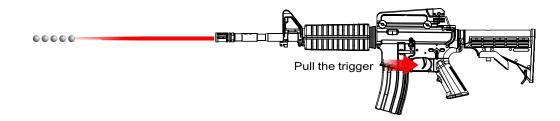
 There are possible cases that no firing occurs after pulling the trigger in the semi auto mode.
 In this case, do not pull the trigger furiously. Fire 5 to 6 sho

In this case, do not pull the trigger furiously. Fire 5 to 6 shots in the full auto mode and then return the semi auto operation.

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



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

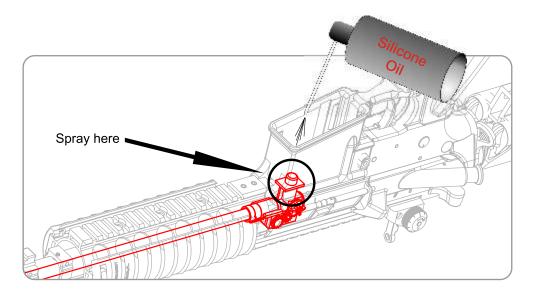


#### WARNING · CAUTION

- Activating the trigger carelessly is extremely dangerous. Never put your finger onto the trigger unless you are ready to shoot a target.
- A blank firing may occur at triggering after setting the magazine, this is the normal operation
  of the gun.







#### After Operation

- Remove the magazine and dry fire the gun in the semi auto mode directing the muzzle to a safe direction. (Otherwise, the spring may be weakened.) Set the selector to the safe position.
- Bullets may remain in the chamber even if the magazine contains no bullets (or if the magazine is not connected).

#### • Cautions on Motor and Battery

- Charge the battery if the firing cycle becomes slow.
- give the air gun a rest for 5 to 10 minutes after firing about 500 rounds, in order to ensure long service lives of the motor and battery.

#### WARNING · CAUTION

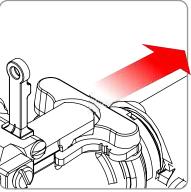
- Never use WD40, CRC556 or other mineral oil.
- Please read the warning on page 2 before shooting.

#### • When Bullets are Clogged

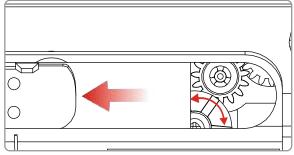
• If bullets are clogged, remove them and apply a few drops of silicone oil into the chamber from the magazine entrances or spray silicone oil for 0.5 to 1 sec to obtain smooth continuous firing.

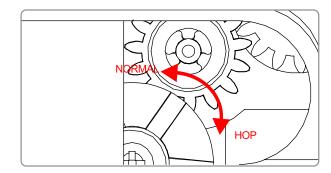


⊗Be careful not to catch your fingers in the dummy bolt. By giving rotation of the fixed direction to BB bullet, a lift is



By giving rotation of the fixed direction to BB bullet, a lift is given and it flies horizontally toward a long distance target. Variable Hop-Up system can tune finely that a spin starts.





#### WARNING · CAUTION

 Moving the dial too much towards Hop causes bullets to clog. Adjust again after stopping shooting immediately, returning the dial to the Normal side and canceling hop, since a piston and gears will be damaged, if it continues shooting then.

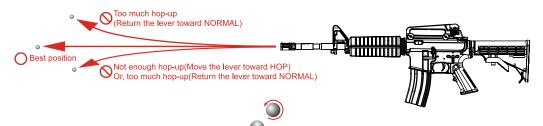
- · Open bolt to adjust the Hop-Up system.
- · Gradually turn the adjustment dial towards Hop to give hop up to bullets. (The best setting is where bullets fly horizontally.)
- Turning excessively adversely affects the trajectory. So, stop turning the dial when bullets fly horizontally.

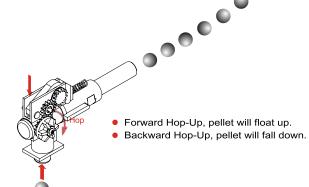




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 The best position is where the bullets fly horizontally and the longest flying distance is obtained.





#### WARNING · CAUTION

- Never hold the gun sideways as the BB bullets will curve right or left.
   This is due to the Hop-Up system.
- When about 10,000 rounds are fired, spry silicone oil to the chamber for 0.5 to 1
  sec.

#### When HOP-UP is Improper

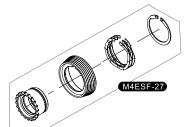
Symptom	Cause	Action
Bullets flying upwards	Too much hop setting.	Gradually return adjustment lever towards Normal.
Chart fluires dia	Too much hop setting.	Gradually return adjustment lever towards Normal.
Short flying dis- tance of bullets (less hop-up effect)	Hop packing contaminated by oil or dirt.	Clean using the cleaning rod or consult your dealer or VFC for repair
	Worn or damaged hop packing.	Purchase the replacement part at your dealer or from VFC and replace it.
Can not adjust	Damaged adjustment lever or other parts	Purchase the replacement part at your dealer or from VFC and replace it.
Frequent bullet	Too much hop setting.	After the adjustment lever is returned to anormal side, and the hop is released, it adjusts again.
clogging	Improper or too large sized BB bullets.	Use the BB bullet supplied by VFC.
	Dirty hop packing	Clean using the cleaning rod or consult your dealer or VFC for repair

## 11 TROUBLE CLINIC

Symptom	Cause	Action	
	Selector lever is set to safety	Set the selector lever to fire.	
	Battery is no charged.	Charge the battery	
No operation at all	Battery connector is disconnected.	Connect the connector	
	The + and - of battery connector is reversed.	Connect the connector correctly	
	Fuse is blown out.	Replace the fuse.	
	Bullets are clogged inside the magazine	Insert the charging ord into the maga- zine and move it up and down a few	
Although motor is revolving gun does't fire	Bullets are clogged in the chamber	times to remove clogged bullets. Remove clogged bullets using the cleaning rod.	
	Faulty gear	Purchase the replacement gear from your dealer or VFC and repair	
Malfunction of full auto operation	Insufficient battery power	Charge the battery	
(automatic firing)	Faulty bullet feed of magazine	Repair clogging of the magazine.	
Malfunction of semi- auto operation	Poor electrical connection	Consult your dealer or VFC for overhaul maintenance or repair	
Malfunction of semi- auto operation	Insufficient battery power	Charge the battery	
(single shot)	Poor electrical connection	Consult your dealer or VFC for overhaul maintenance or repair	
Automatic firing cycles become slow	Insufficient battery power	Charge the battery	
	Worn or damaged chamber packing	consult your dealer or VFC for overhaul maintenance or repair . Replace the chamber packing., piston packing(O-ring)	
	Worn or damaged piston packing(O-ring)		
Shooting distance	Deteriorated piston spring	and piston assembly	
becomes shorter	Faulty BB bullets (too small or heavy)	Use the genuine VFC BB bullets.	
	Shortage of Silicone oil	Drop a few drops of silicone oil from under the chamber	
	Gear problems caused by excessive blank firing		
Overly loud operating	Gear problems caused by excessive blank firing	consult your dealer or VFC for overhaul maintenance or repair . Replace the	
noise	Worn of damaged gear	chamber packing., piston packing(O-ring) and piston assembly	
Bullets falling out from	Gear problem caused by excessive blank firing		
barrel end	Worn or damaged chamber packing	Use the genuine VFC BB bullets.	

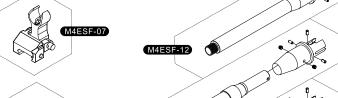








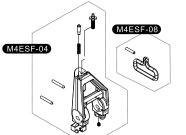




M4ESF-06

M4ESF-13

M4ESF-11



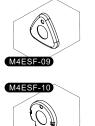


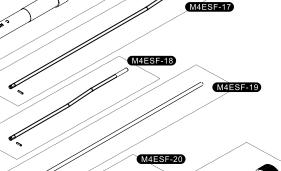
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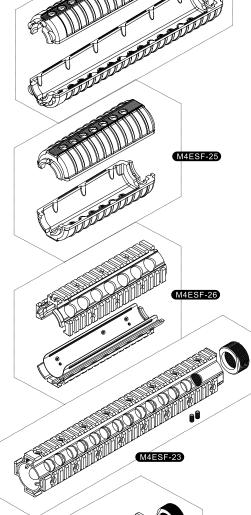




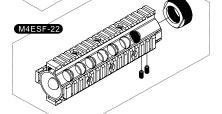




M4ESF-21



M4ESF-24



M4ESF-01-M4 Flash hider

M4ESF-02-M4 2000 Flash hider

M4ESF-03-SB Flash hider

M4ESF-04-M4 front sight

M4ESF-05-Knight type flip-up front sight with Gas block

M4ESF-06-Tory Front Sight (M4 type)

M4ESF-07-Tory Front Sight (416 type)

M4ESF-08-Front Sling Swivel

M4ESF-09-M16A2 handguard cap

M4ESF-10-M4 handguard cap

M4ESF-11-6.5 inch barrel for Baby M4

M4ESF-12-7.5 inch barrel for Defender

M4ESF-13-9.7 inch barrel for Quake

M4ESF-14-10.5 inch barrel

M4ESF-15-14.5 inch barrel

M4ESF-16-20 inch barrel

M4ESF-17-M16A2 Gas tube

M4ESF-18-M4 Gas tube

M4ESF-19-URX 12.7" Gas tube

M4ESF-20-URX 7" Gas tub

M4ESF-21-URX 3.7" Handgurad

M4ESF-22-URX 7" Handgurad

M4ESF-23-URX 12.7" Handgurad

M4ESF-24-M16A2 Plastic Handguard

M4ESF-25-M4 Plastic Handguard

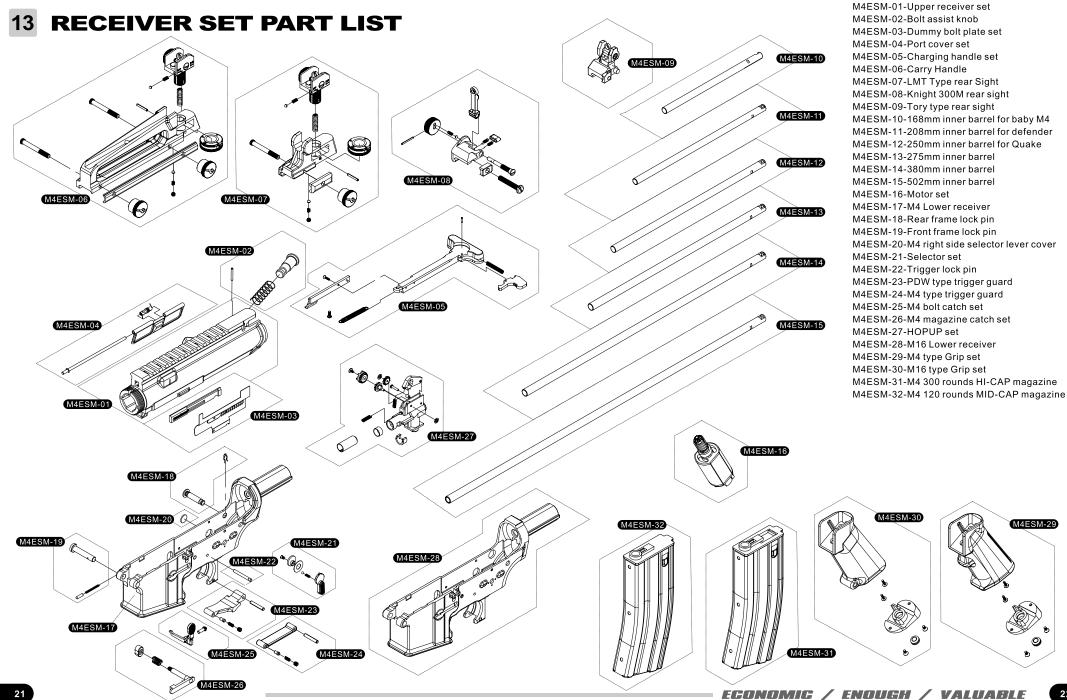
M4ESF-26-R.I.S. For Mark18 & Warrior

M4ESF-27-M4 Delta ring

M4ESF-02



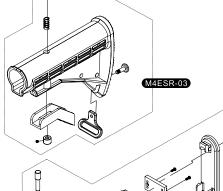






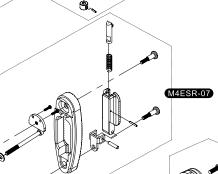






M4ESR-06







M4ESR-08

M4ESR-02-Stock tube set for M4/416

M4ESR-03-M4/416 type stock

M4ESR-04-CQD type sling swivel

M4ESR-05-Stock tube set for LMT type crane SOPMOD stock

M4ESR-06-LMT type crane SOPMOD stock

M4ESR-07-M16A2 fixed stock

M4ESR-08-Baby M4 Sling swivel adapter

## 15 AFTER SERVICE

#### **Limited Warranty**

- Vega Force Company (VFC) warrants the AEG against defects in materials and workmanship for a period of one month or 30,000 rounds BB bullets shoot from the date of original purchase ("Warranty Period").
- Warranty coverage: Internal parts of gearbox. The cosmetic parts and electric motor are not cover by warranty.
- We inspect and test each product before delivery to customer . In warranty period, the repair service will be provide by ours certify technician after determine the problem or damage defects in materials and workmanship.
- This warranty does not apply: (a) to damage caused by accident, abuse, misuse, misapplication, or non-VFC products; (b) to a product or a part that has been modified without the written permission of VFC or his agent; or (c) to no register your series number with VFC with in 7 days of purchase date; (d) to if any VFC serial number has been removed or defaced; or (e) to disassembly or modify by unauthorized person; (f) to the products not purchase from VFC authorize dealer with valid warranty card.

#### Maintenance & Replacement Parts

- The Hop-Up bucking and few parts will be recommended to change each 30,000 rounds BB bullets shoot.
- We may unable to provide match series number on replacement parts.
- If you unable to obtain locally, Please check http://www.gb-tech.com.tw for more information.



M4ESR-04

