



PLANET ECLIPSE: EMF 200

USER MANUAL: ENGLISH

EMF 200/



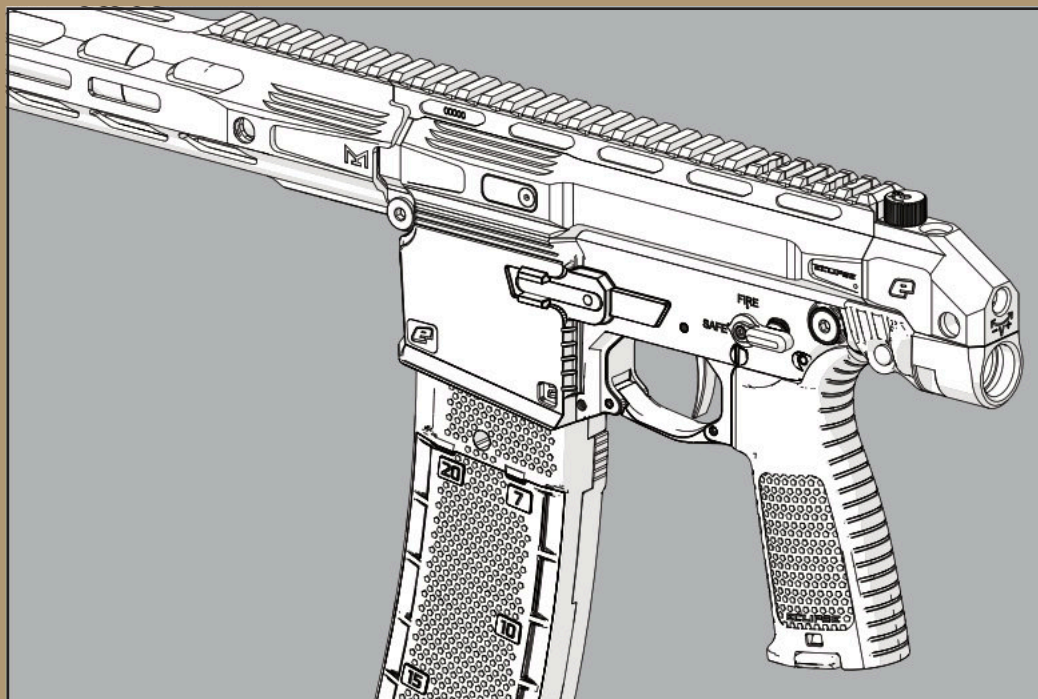
AIR



68CAL

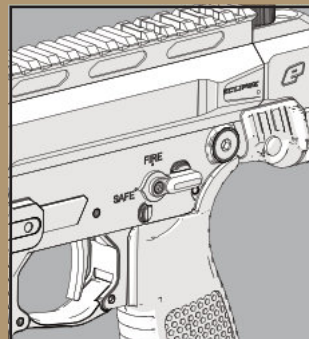
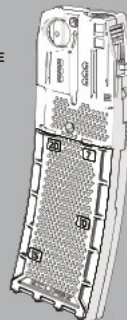


SHAPED ROUND
COMPATIBLE



CF 20 PRO
CONTINUOUS
FEED MAGAZINE
AS STANDARD.

CF
20
PRO





WARNING!

IMPORTANT SAFETY NOTICES



PLANET ECLIPSE PAINTBALL EQUIPMENT IS NOT A TOY. PAINTBALL SAFETY RULES MUST BE FOLLOWED AT ALL TIMES.



Careless or improper use of the marker and/or parts, including failure to follow instructions and warnings within this user manual could cause serious injury or even death.



Do not remove / deface any warnings attached to the marker.



Paintball industry standard eye/face/ear and head protection designed specifically to stop paintballs and meeting ASTM standard F1776 (USA) or CE standard (Europe) must be worn by the user and any person within range. Proper protection must be worn during assembly, cleaning and maintenance.



Hearing protection should be worn.



Never shoot towards a person who is not wearing proper protection.



Never look directly into the barrel of the marker. Accidental discharge into the eyes may cause permanent injury or even death. Never look into the barrel or breech area of the marker whilst the marker is switched on and able to fire.



Keep the marker in safe mode until ready to shoot.



Treat every marker as if it is loaded and ready to fire.



The safety selector is the marker's disabling device. Always set it to safe when not in use.



Always fit a barrel blocking device when not in use, such as the barrel sock provided with this marker. Once the barrel is shrouded, ensure the elasticated tethers are securely hooked around the grip frame and are taut to keep the marker safe.



If the barrel blocking device is damaged you **MUST** replace it.



Always remove paintballs from the marker when not in use.



Do not field strip or remove any parts while the marker is pressurised.



Do not pressurise the marker without the components of the marker correctly installed; high-pressure gas may be emitted.



Do not fire the marker without the bolt correctly installed.



Never allow pressurised gas to come into contact with any part of your body.



Always remove the first stage regulator and relieve all residual gas pressure from the marker before disassembly and before transport or storage.



Always follow guidelines given with your first stage regulator for safe transportation and storage.



Always store the marker in a secure place.



Observe all local and national laws, regulations and guidelines.



Persons under 18 years of age must have adult supervision when using or handling the marker.



WARNING!

IMPORTANT SAFETY NOTICES



Only use professional paintball fields where codes of safety are strictly enforced.



Use compressed air/nitrogen only. Do not use any other compressed gas or pressurised liquid including CO₂.



Always follow instructions, warnings and guidelines given with any first stage regulator you use with the marker.



Use 0.68 inch calibre paintballs or shaped rounds only.



Always measure your marker's velocity before playing paintball, using a suitable chronograph.



Never shoot at velocities exceeding 300 feet per second [91.44 metres], or at velocities greater than local or national laws allow.



Any installations, modifications or repairs should be carried out by a qualified individual at a licensed and insured paintball facility.



This marker and its component parts are designed and manufactured to be used for paintball games only.

This user manual should accompany the product in the event of resale or new ownership. Should you be unsure at any stage you must seek expert advice.



THIS USER MANUAL IS IN ENGLISH.

It contains important safety guidelines and instructions. Should you be unsure at any stage, or unable to understand the contents of this manual you must seek expert advice.



LE MODE D'EMPLOI EST EN ANGLAIS.

Il contient des instructions et mesures de sécurité importantes. En cas de doute, ou s'il vous est impossible de comprendre le contenu du mode d'emploi, demandez conseil à un expert.



ESTE MANUAL DE USUARIOS (OPERARIOS)

Usuarios está en Inglés. Contiene importantes normas de seguridad e instrucciones. Si no está seguro de algún punto o no entiende los contenidos de este manual debe consultar con un experto.



DIESE BEDIENUNGS - UND BENUTZERANLEITUNG IST IN ENGLISCH.

Sie enthaelt wichtige Sicherheitsrichtlinien und -bestimmungen. Sollten Sie sich in irgendeiner Weise unsicher sein, oder den Inhalte dies Heftes nicht verstehen, lassen Sie sich bitte von einen Experten beraten.

05	Welcome To Planet Eclipse	20	Detaching / Attaching The Handguard
06	Setting Up	21	Accessing The Rubber Detents
08	Safety Selector	22	Unloading The Marker
09	Adjusting The Velocity	24	Storage And Transportation
10	Loading The CF 20 Pro Magazine	25	We Got Your Back
12	Inserting The CF 20 Pro Magazine	26	Fault Finding Tables
14	Ejecting The CF 20 Pro Magazine	28	Bolt Assembly
15	Ambidextrous Magazine Release	30	Marker Parts List
16	Adjusting The Trigger	32	Interchangeable Parts
17	Fitting / Removing An Air System	34	Index
18	Attaching The EMC Adjustable Stock		



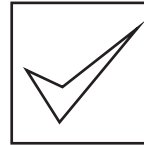
SUPPORT

Eclipse customers have access to our worldwide technical support network that will help you with any technical problems from localised service centres to on-site* tech support.



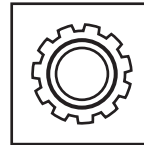
WARRANTY

Our exceptional 24 months from date of manufacture OR minimum of 12 months with proof of purchase warranty ensures your claim will be repaired or replaced in a snap!



QUALITY

All Eclipse products undergo meticulous checks by experienced specialists who care about the product that arrives at your door. Precision materials + high standards = a quality product.



STANDARD

Your Eclipse marker is awesome and requires no after market parts however, for genuine Eclipse accessories and support please consult your local Eclipse Dealer for upgrade options.

* Conditions apply, see online policies for full details at planeteclipse.com

FIG.1

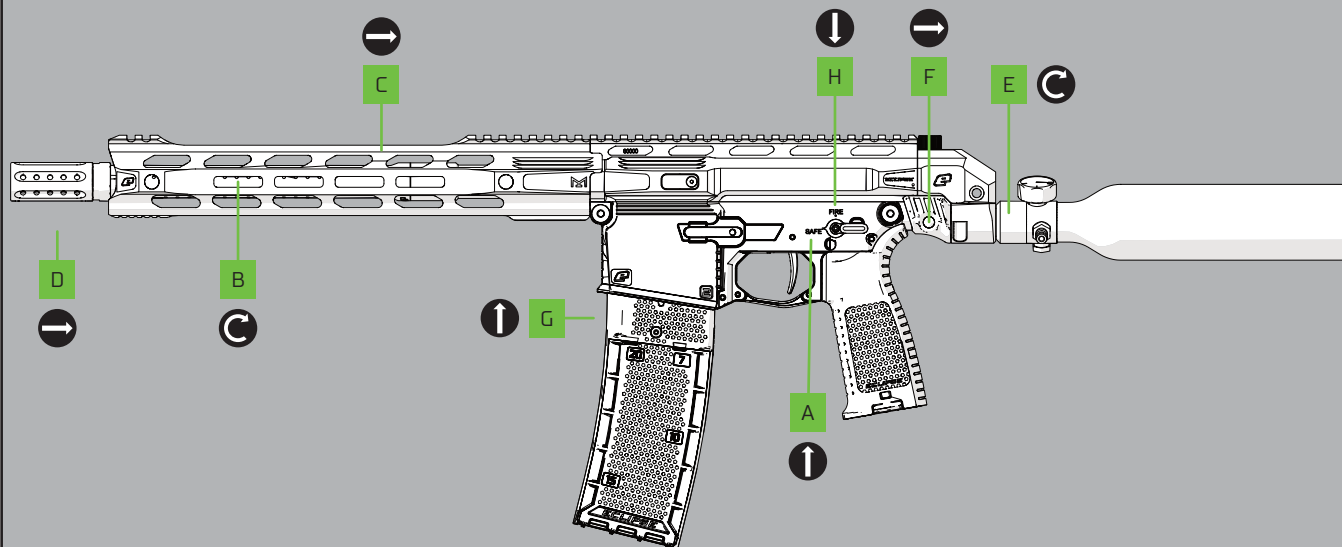


FIG.1

- A ENSURE THE MARKER IS SAFE BEFORE YOU BEGIN.**
See page 08 for safety selector guidance.
- B ATTACH THE COMPLETE S63 TACTICAL BARREL.**
Slide the PWR Insert into the back section.
Rotate the adaptor counter-clockwise into the barrel back.
Attach the muzzle brake clockwise into the adaptor.
Rotate barrel (back) clockwise into the marker body.
- C ATTACH THE HANDGUARD.**
Carefully slide the handguard over the barrel.
Secure using the two screws (see page 12).
- D FIT A BARREL BLOCKING DEVICE FOR SAFETY.**
Cover the barrel tip and handguard completely with the barrel blocking device. Ensure the tethers are taut and secured around the grip frame for safety.
- E ATTACH A PRE-SET AIR SYSTEM.**
Ensure POPS bonnet is pushed towards the grip beforehand.
Rotate the air system clockwise into the POPS body.
- F GAS THE MARKER.**
Pull the POPS bonnet towards the air tank to engage.
- G INSERT CF 20 PRO MAG INTO THE MAG WELL.**
Ensure the magazine clicks into place (see pages 10/11).
- H READY TO PLAY?**
Remove barrel blocking device and select fire mode to make the marker live and ready to shoot.

- ! IMPORTANT!** To select safe/fire modes see page 08.
- ! DO NOT** over-tighten the barrel.
- ! ALWAYS** ensure marker is de-gassed when setting up.
- ! NEVER** use CO2. Only use compressed air or Nitrogen.

WARNING!

Always make sure that the marker is safe with a barrel blocking device installed and that no paintballs are in the marker or magazine before attaching an air system.

Compressed air and nitrogen systems can be extremely dangerous if handled or used incorrectly.

Only attach an air system certified for use within the country of use.

Never add lubricants or grease into the fill adaptor of the air system regulator.

Ensure that all screws are tightened and no parts are loose before installing an air system.

Do not pressurise the marker without the bolt system correctly installed, as high pressure gas will be emitted.

Do not install a compressed air system or load paintballs into the marker until you feel confident with your ability to handle the marker safely and responsibly.

FIG.1

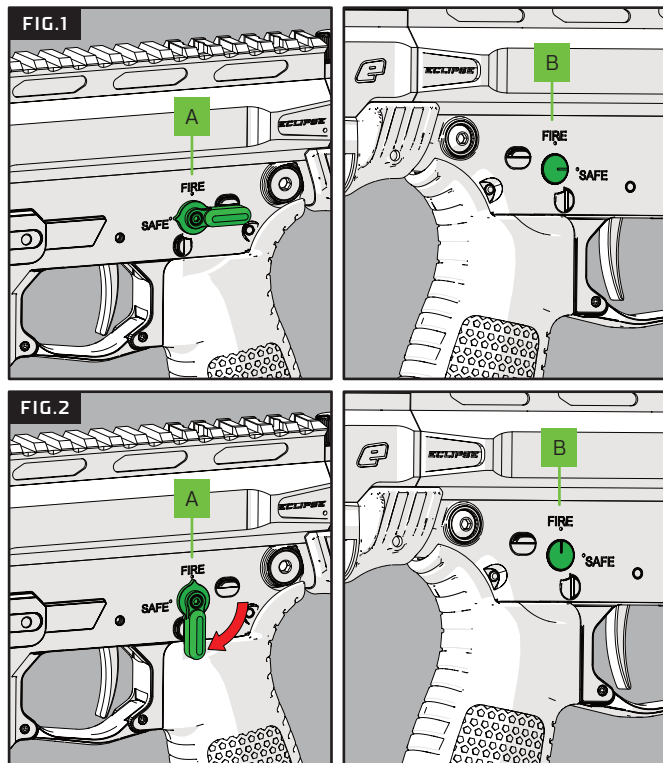
The safety selector **A** sits on the left side of the frame and can quickly and securely switch between safe and fire modes.

When safe is selected, the trigger will lock and the marker will not fire when pulled.

FIG.2

When fire is selected, the trigger is free and the marker will fire with each pull, if an air system is fitted and engaged.

The current mode is also indicated on the right side of the marker **B**.



WARNING!

When safe is selected the marker is still live until the air system has been fully removed. Ensure that a barrel blocking device is always attached when the marker is set to safe.

INTRODUCTION

ADJUSTING THE VELOCITY

09

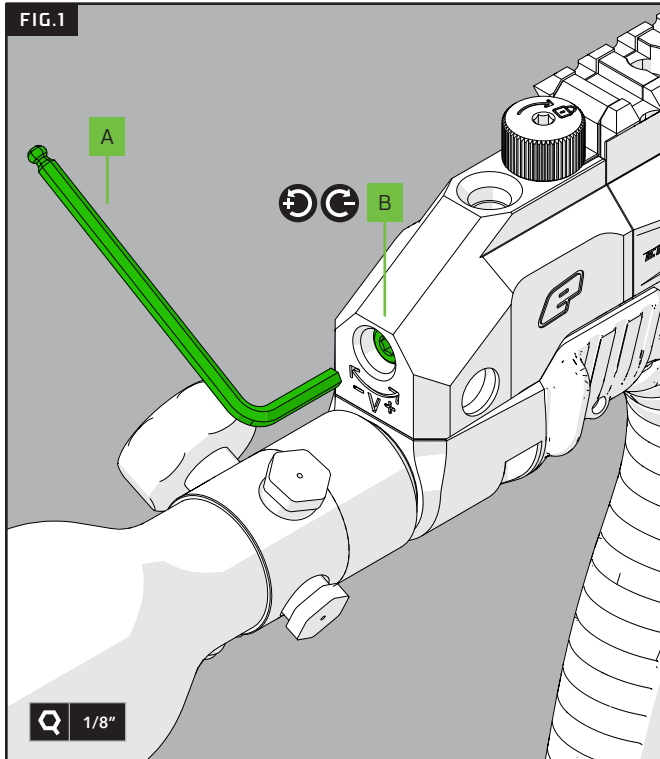







FIG.1

The velocity adjustment screw is accessed from rear of the marker above the air system docking point. Insert a 1/8 hex key **A** into the adjuster screw **B** to increase/decrease the velocity.

Turn the hex key clockwise to reduce velocity.

Turn the hex key counter-clockwise to increase velocity.

-  Fire two clearing shots after each velocity adjustment for an accurate velocity reading.
-  **DO NOT** turn the adjustment screw in too far as this will prevent the marker from firing.
-  **DO NOT** exceed 300 FPS when using .68 calibre paintballs.
-  **DO NOT** exceed 300 FPS when using shaped rounds.
-  **ALWAYS** play within the FPS limits set by the venue and all applicable local laws.

WARNING!

ALWAYS conform with the velocity limits of the venue and/or local laws.
ALWAYS wear correct protective equipment when firing your marker.
NEVER point your marker in the direction of other people when not on the field.
ALWAYS be aware of where the barrel is facing when adjusting the velocity.

FIG.1

Ensure the side panel **A** is correctly installed and locked in position.

FIG.2/3

Push the follower **B** into the magazine body so it is only partially covered by the shutter door **C**. Do not close the shutter door fully before winding up the magazine, to ease tension on the spring.

FIG.4

Turn the winder **D** counter-clockwise using finger tips or a 1/8 Hex key **E** until resistance is met. The magazine is now primed.

Do NOT over-wind the magazine!

FIG.5

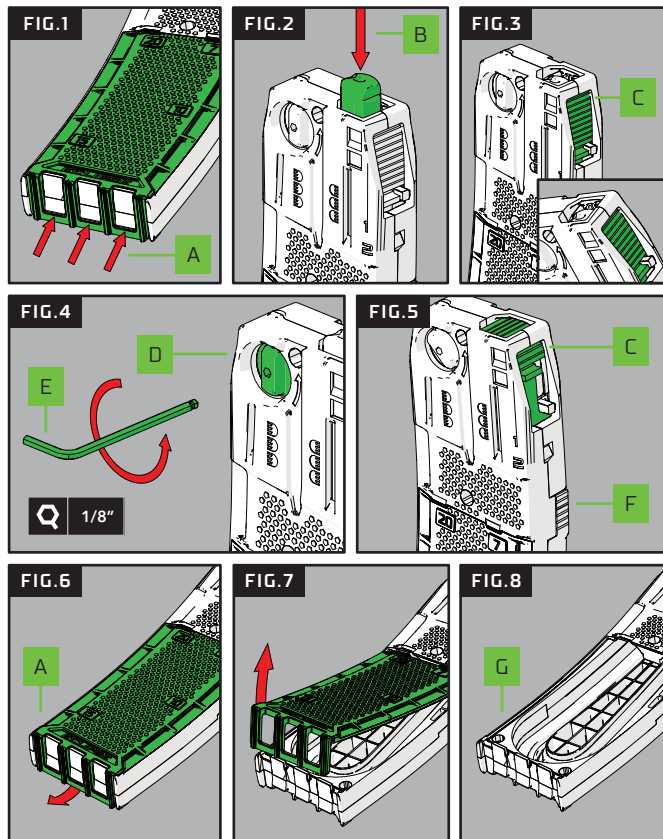
Press the shutter door release **F** to fully close the shutter door **C**.

FIG.6/7

Release the side panel clips **A** until they click, then remove.

FIG.8

You now have access to the magazine loading chamber **G**.



WARNING!

Loaded magazines will eject rounds once the shutter door opens. Do not open while a magazine is pointed towards a person or animal. For safety, always point the top of a loaded magazine towards a suitable receptacle before opening the shutter door.

Do not discharge a primed magazine without rounds or without the side panel correctly installed. Doing so may damage the follower or magazine.

INTRODUCTION

LOADING THE CF 20 PRO MAGAZINE

11

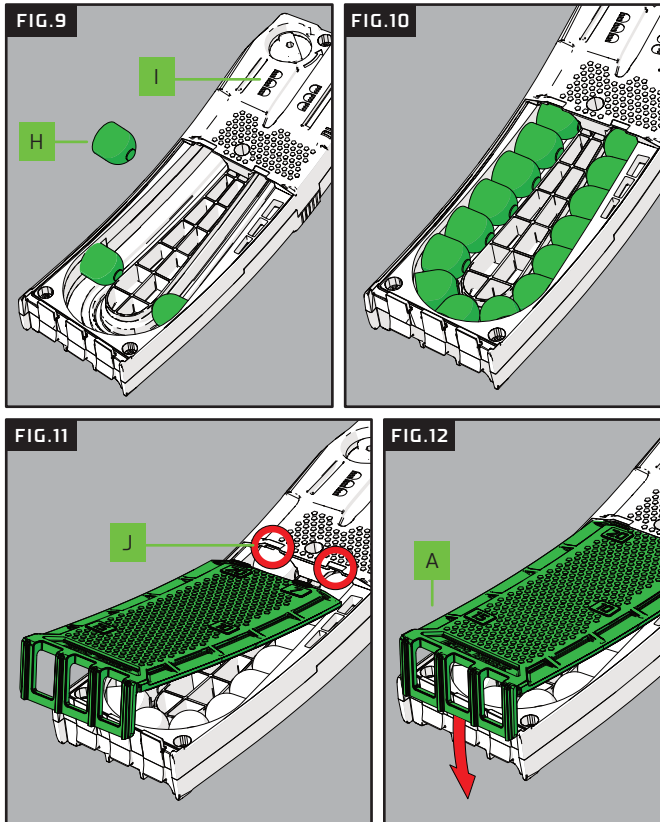


FIG.9/10

Insert 21 round ball or 20 shaped rounds **H** into the magazine. Shaped rounds must face towards the centre of the magazine, as shown by the shaped round indicator **I**.

FIG.11

Replace the side panel ensuring the tabs **J** at the top of the side panel locate inside the body of the magazine.

FIG.12

Push the side panel **A** firmly until it snaps into place. Check the tabs are all correctly in place and secure before using.

WARNING!

It is not recommended to store your magazines in a primed state for longer than 12 hours. Prolonged periods in a compressed state may damage the spring and reduce its effectiveness.

Store in a cool, dry place out of direct sunlight. Long term exposure to direct sunlight, chemicals and large temperature changes may damage the magazine.

Never force the winder. If the winder is hard to turn release the tension from the spring by pulling the shutter door down fully, then releasing the shutter door.

Open the side panel and check the follower is running correctly in its track.

FIG.1

Before inserting the CF 20 Pro Magazine into the marker, ensure the side panel **A** is secure by pushing the panel and shell firmly together until the locking tabs **B** snap securely in place.

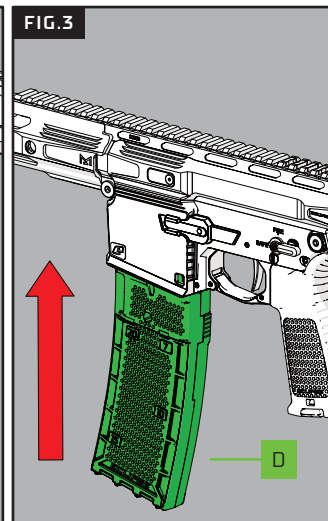
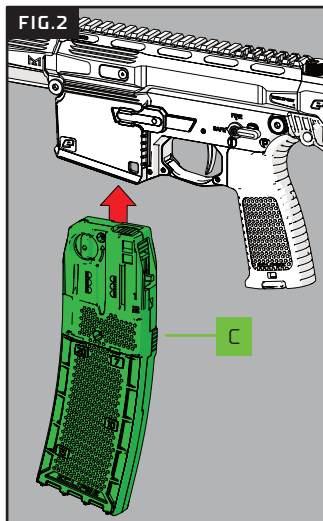
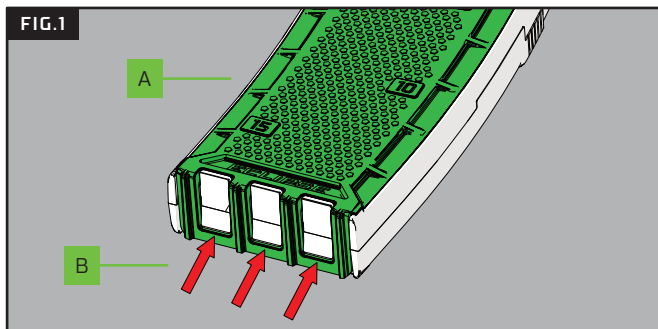
FIG.2

The CF 20 Pro Magazine should be inserted with the side panel and winder facing to the left **C**.

FIG.3

Push the magazine firmly into the magwell until it clicks and will no longer move upwards **D**. The magazine is now fully engaged and ready to use.

See opposite for the two-states of magazine engagement.



WARNING!

Ensure the marker is safe, with a barrel blocking device fitted, when inserting the magazine if you are not in a live playing environment.

If the magazine latch is damaged the magazine will not engage. If this occurs do not use the marker and contact your Local Eclipse Dealer for guidance.

INTRODUCTION

INSERTING THE CF 20 PRO MAGAZINE

13

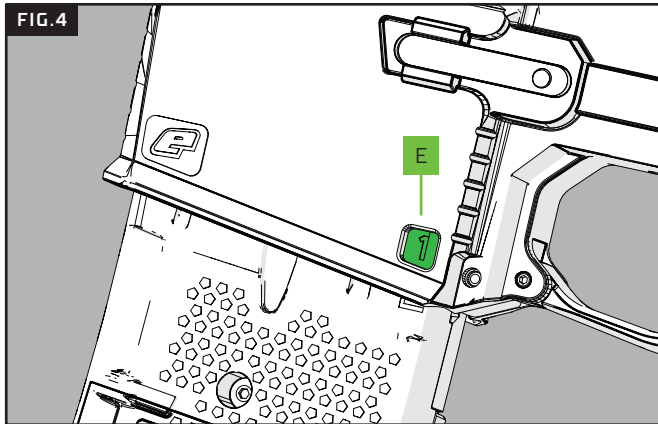


FIG. 4

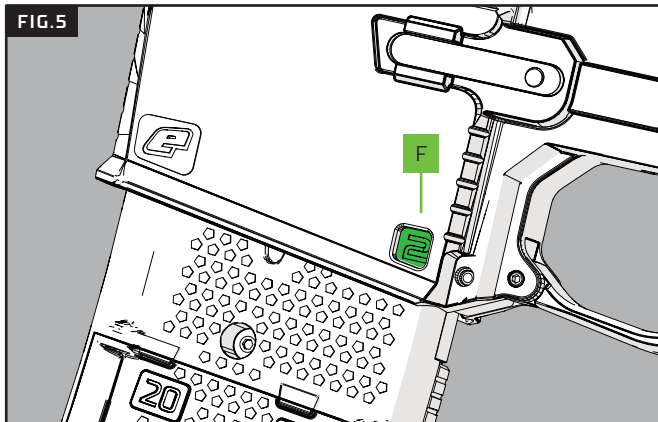
The CF 20 Pro Magazine has two states of engagement. State 1 **E** allows the magazine to be held in the EMF 200 magwell, but will not release the CF 20 Pro follower and put pressure on the ball stack. Only a small amount of force is required to engage 'Stage 1' compared to 'Stage 2'.

FIG. 5

State 2 **B** is to be activated when you are ready to play. When in State 2, the magazine is fully engaged and ready to fire.

It is not recommend to move the CF 20 Pro back to 'State 1' from 'State 2' as this will require putting additional force on the rounds left in the breech when moving back to 'Stage 2'.

If it is desired to move back to 'Stage 1', the CF 20 Pro should be removed, any rounds left in the breech removed, then the CF 20 Pro reinserted and latched on 'Stage 1'.



WARNING!

Ensure the marker is safe, with a barrel blocking device fitted, when inserting the magazine if you are not in a live playing environment.

If the magazine latch is damaged the magazine will not engage. If this occurs do not use the marker and contact your Local Eclipse Dealer for guidance.

FIG.1

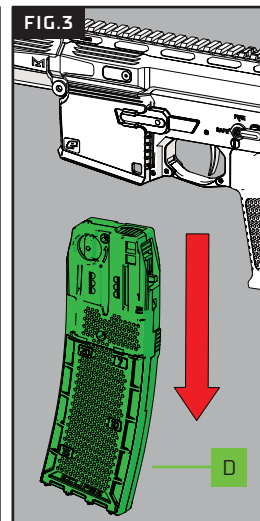
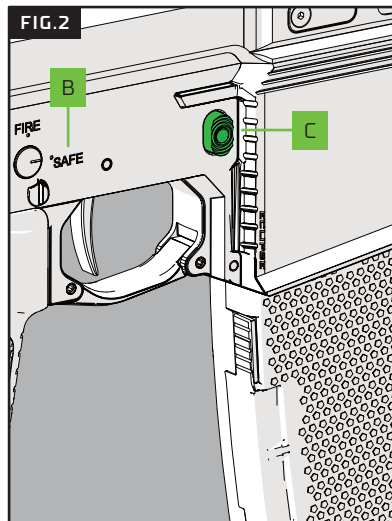
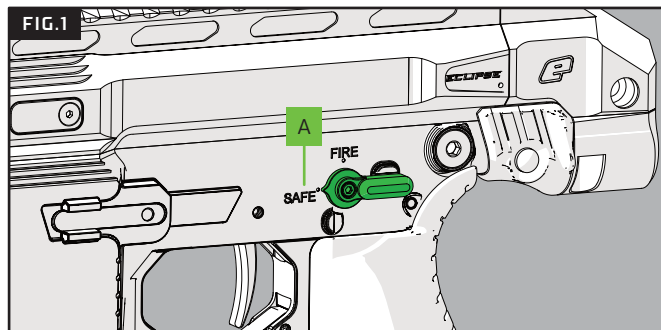
Ensure the marker is safe **A** unless you are in a live playing environment where the marker needs to be live.

FIG.2

If safe mode is required, the safety selector will indicate safe on the right side of the marker **B**. Push the magazine latch **C** to disengage the magazine and release it from the magwell.

FIG.3

The magazine **D** will now eject from the magwell.



Keep the magazine latch depressed to ensure the mag clears both states of engagement (see page 13).



Rounds may still be sat in the breech if a partially loaded mag is ejected.

WARNING!

Ensure the marker is safe, with a barrel blocking device fitted when ejecting the magazine if you are not in a live playing environment.

If the magazine latch is damaged the magazine will not engage. If this occurs do not use the marker and contact your Local Eclipse Dealer for guidance.

INTRODUCTION

AMBIDEXTROUS MAGAZINE RELEASE

15

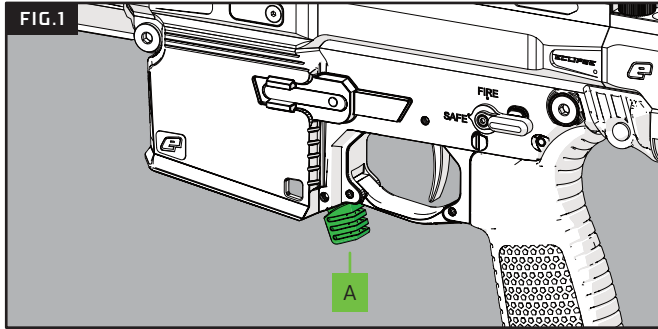


FIG.1

The EMF 200 ships with an optional ambidextrous magazine release latch **A** if preferred. This latch **MUST** be installed if you choose to use the original CF 20 Magazine. See video link (page 27) for details.

FIG.2

Once installed, inserting a magazine **B** is the same as demonstrated on pages 12-13, taking note of the states of engagement.

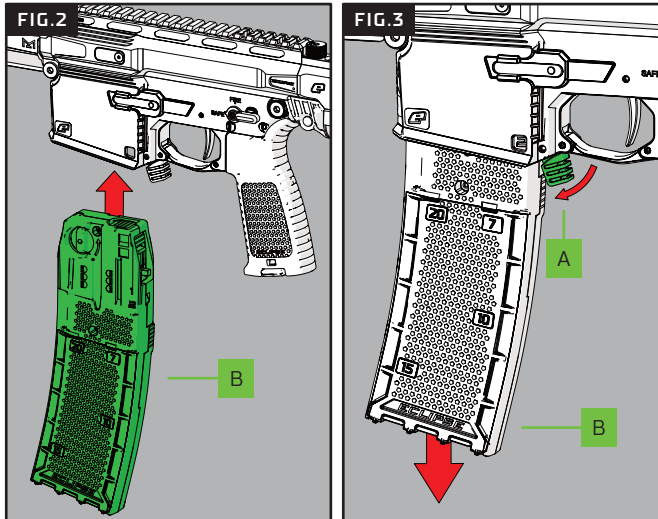


FIG.3

To eject your magazine simply squeeze and hold the ambidextrous release latch **A** and the magazine **B** will release.



The original CF 20 magazine will **ONLY** work with the ambidextrous magazine release and will **NOT** work with the standard Milspec AR-Style EMF 200 magazine release.



The **NEW** CF20 Pro magazine will work with **EITHER** the ambidextrous magazine release **OR** with the standard Milspec AR-Style EMF 200 magazine release mechanism.

WARNING!

Ensure the marker is safe, with a barrel blocking device fitted, when inserting the magazine if you are not in a live playing environment. If the magazine latch is damaged the magazine will not engage. If this occurs do not use the marker and contact your Local Eclipse Dealer for guidance.

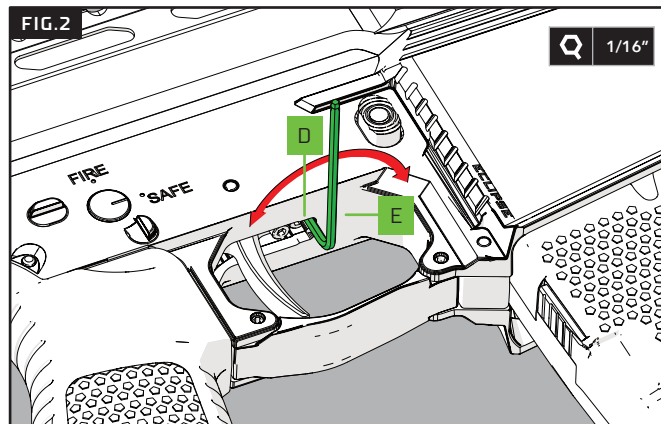
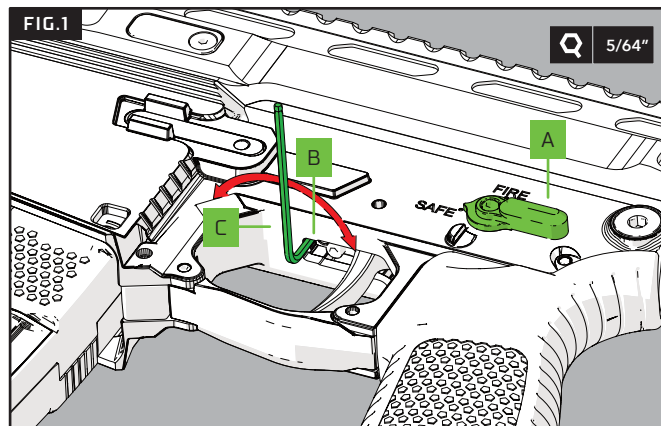
There are two trigger adjustment screws (pre-travel and post-travel) that alter the way the trigger feels when pulled. Ensure the marker is safe **A** before making any adjustments.

FIG.1

On the left side, locate the post-travel screw **B** which controls the distance the trigger travels once the marker fires. Using the Hex key slot for guidance, use a 5/64" Hex key **C** to adjust the screw counter-clockwise to reduce the trigger travel and clockwise to increase the trigger travel.

FIG.2

On the right side, locate the pre-travel screw **D** which controls the distance the trigger travels before the marker fires. There are two Hex key slots to make locating each screw easier. Using a 1/16" Hex key **E** rotate the screw clockwise to reduce the trigger travel (shortening the trigger pull) and counter-clockwise to increase the trigger travel (lengthening the trigger pull).



WARNING!

Ensure the marker is safe, with a barrel blocking device fitted when making trigger adjustments.

Do not wind the screws in too tight as this may prevent the marker from firing and may even damage the trigger.

INTRODUCTION

FITTING / REMOVING AN AIR SYSTEM

17

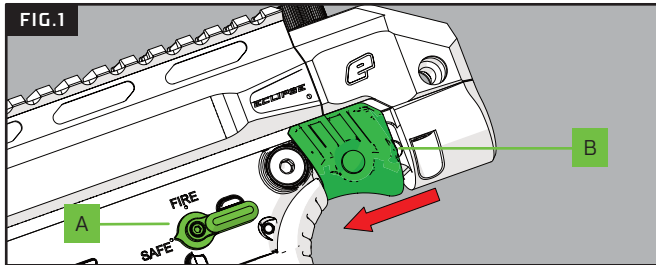


FIG.1

Always make sure the marker is in safe mode **A** before fitting an air system. Ensure the POPS bonnet **B** is pushed towards the grip to disengage the ASA. This will prevent the air system from engaging once fitted.

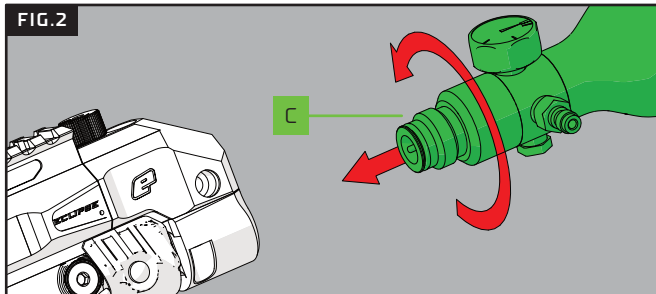


FIG.2

Attach the air system by rotating the regulator **C** clockwise into the ASA. If air starts to escape, check the POPS is disengaged properly.

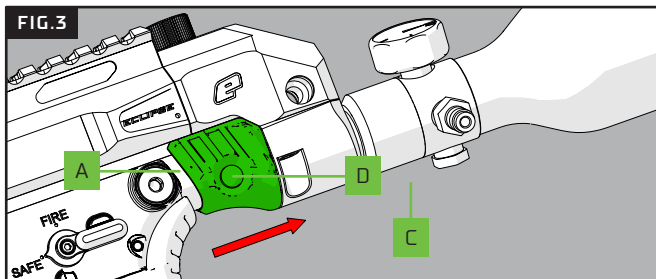


FIG.3

Once the air system **C** is fully fitted pull the POPS bonnet **A** rearwards, towards the air system to engage.

The air system should make an audible seal with the ASA to signify the marker is ready to fire.

To remove the air system, ensure the marker is safe, squeeze the POPS button **D** and simply repeat the process in reverse.

WARNING!

Ensure the marker is safe and has a fully functioning barrel blocking device fitted before engaging/disengaging the air system.

INTRODUCTION

ATTACHING THE EMC ADJUSTABLE STOCK

FIG.1

Position the adjustable stock rail **A** underneath the tank **B** with the cushioned cradle **C** securely held in the tank's neck.

FIG.2

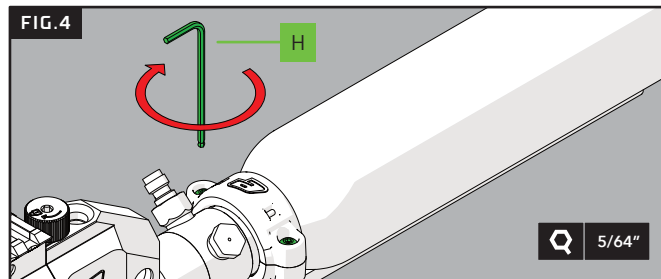
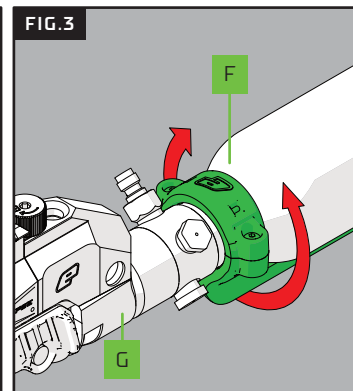
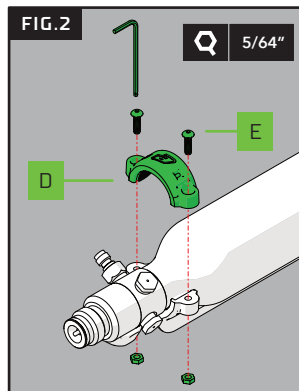
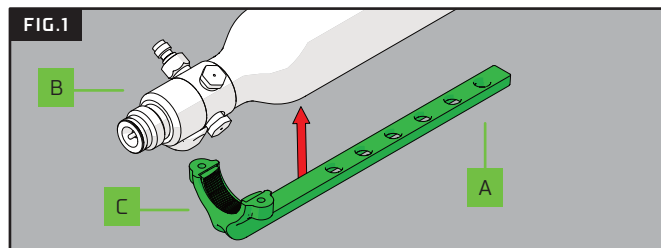
Attach the second half of the cushioned cradle **D** taking care to fit it correctly, easily spotted by the slightly tapered construction. Secure the nuts and bolts **E** using a 5/64 Hex key.

FIG.3

Make sure the cradle **F** is secure then attach the tank assembly to the marker by screwing clockwise into the POPS ASA **G**.

FIG.4

Once in place, tighten up the cradle screws for security using the 5/64 Hex key **H**.



WARNING!

Ensure the marker is safe, with a barrel blocking device fitted, when installing an air system.

Check that all paint has been removed from the magazine well and breech before attempting.

INTRODUCTION

ATTACHING THE EMC ADJUSTABLE STOCK

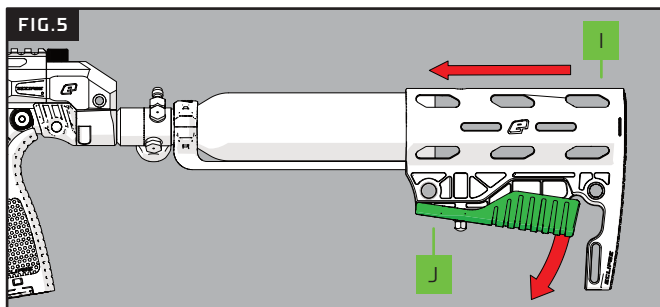


FIG. 5

To attach the EMC Stock **I**, pull the stock adjustment lever **J** down and hold. This releases the locking mechanism and allows the stock to easily slide back and forth over the tank and adjustable rail assembly.

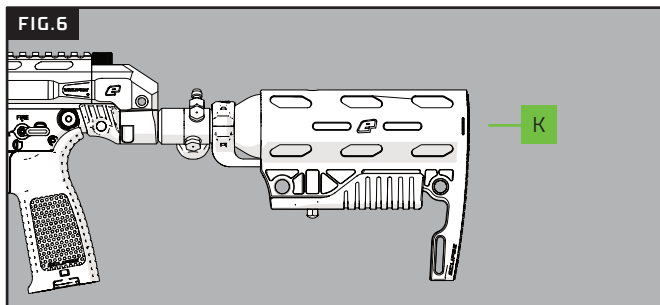


FIG. 6

Release the lever to lock the EMC Stock **K** in position.

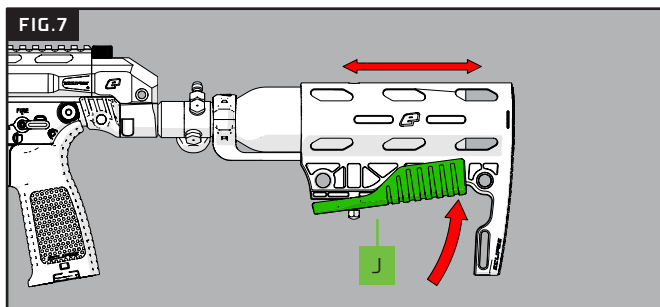


FIG. 7

To make further adjustments to the length of the stock, push the adjustment level **J** up to slide the stock back and forth.

WARNING!

Ensure the marker is safe, with a barrel blocking device fitted, when adjusting an air system.

Check that all paint has been removed from the magazine well and breech before attempting.

FIG.1

Using the 5/32 Hex key, turn the handguard screws **A** counter-clockwise to release the handguard from the marker body.

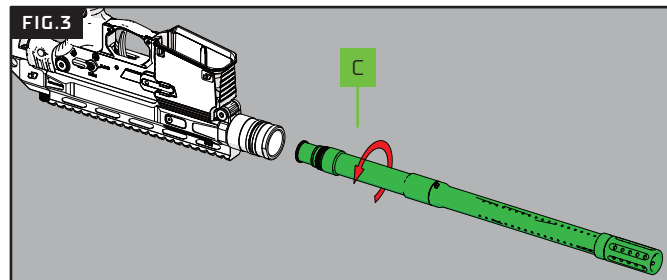
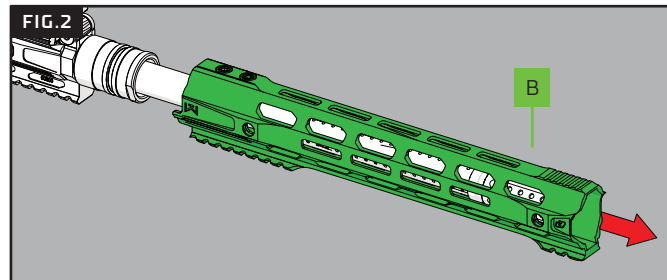
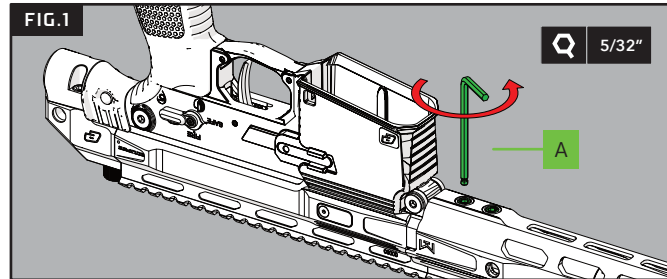
FIG.2

Gently slide the handguard **B** over the barrel and away from the body taking care not to scratch any metal parts.

FIG.3

To remove the barrel system **C** unwind the complete barrel counter-clockwise from the marker body.

Simply reverse the steps to rebuild.



WARNING!

Ensure the marker is degassed and all paint has been removed from the magazine well and breech before attempting.

INTRODUCTION

ACCESSING THE RUBBER DETENTS

21

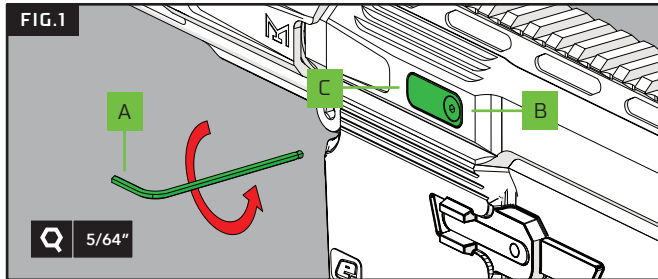


FIG.1

Use the 5/64 Hex key **A** to unwind the detents cover screw **B** counter-clockwise and release the detents cover **C**.

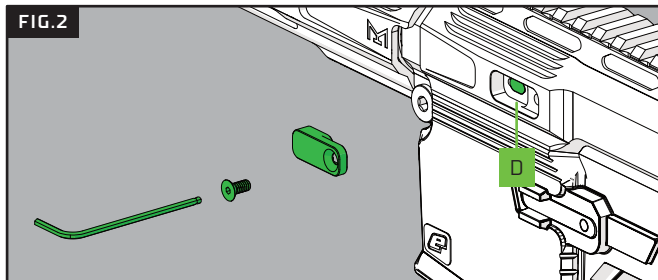
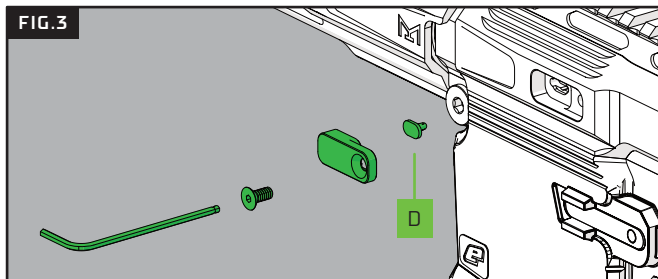


FIG.2/3

Once removed, you can access the detents **D** for maintenance or replacement if required.

Simply reverse the steps to replace the detents and cover.



WARNING!

Ensure the marker is safe, with a barrel blocking device fitted, when inserting the magazine if you are not in a live playing environment.

FIG.1

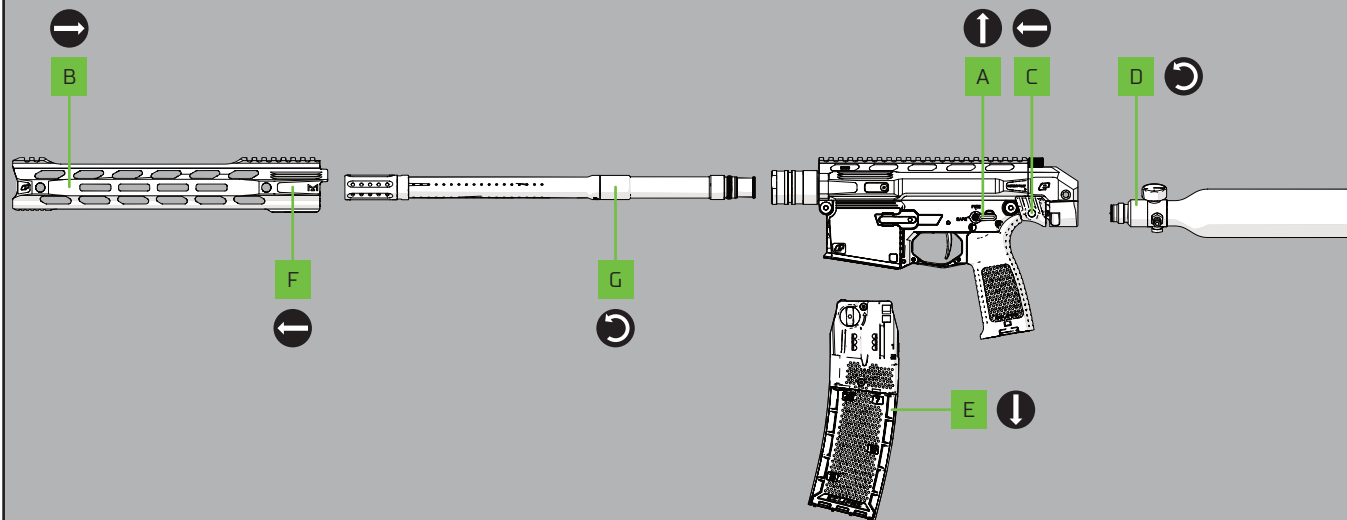


FIG.1

- A ENSURE THE MARKER IS SAFE BEFORE YOU BEGIN.**
- B FIT A BARREL BLOCKING DEVICE FOR SAFETY.**
Cover the barrel tip and handguard completely with the barrel blocking device. Ensure the tethers are taut and secured around the grip frame.
- C ENSURE THE MARKER IS DE-GASSED.**
Push and hold the POPS button then slide the POPS bonnet towards the grip frame.
- D REMOVE THE AIR SYSTEM.**
Rotate the air system counter-clockwise.
- E REMOVE THE CF20 PRO MAGAZINE.**
Hold the magazine release switch to fully release the mag.
- F REMOVE THE HANDGUARD.**
Remove the barrel blocking device.
Remove the handguard retaining screws (page 12).
Gently slide the handguard over the barrel.
- G REMOVE THE S63 TACTICAL BARREL.**
Rotate the barrel counter-clockwise from the marker body.

- ! IMPORTANT!** To select safe/fire modes see page 08.
- ! DO NOT** over-tighten the barrel.
- ! ALWAYS** ensure marker is de-gassed when setting up.
- ! NEVER** use CO2. Only use compressed air or Nitrogen.

WARNING !

Always make sure that the marker is safe with a barrel blocking device installed and that no paintballs are in the marker or magazine before attaching an air system.

Compressed air and nitrogen systems can be extremely dangerous if handled or used incorrectly.

Only attach an air system certified for use within the country of use.

Never add lubricants or grease into the fill adaptor of the air system regulator.

Ensure that all screws are tightened and no parts are loose before installing an air system.

Do not pressurise the marker without the bolt system correctly installed, as high pressure gas will be emitted.

Do not install a compressed air system or load paintballs into the marker until you feel confident with your ability to handle the marker safely and responsibly.

- ! Your marker must be clear of all paint and propellant during transportation or storage.
- ! Make sure the marker is safe.
- ! Remove the barrel from the marker.
- ! Make sure the marker and magazine are clean of any paint residue, dirt and moisture.
- ! Do not store the CF 20 Pro fully wound up for an extended period of time as this may damage the spring. Best practice is to leave the spring fully unwound, with the follower pushed inside the mag and side door fully closed.
- ! Store your marker in a clean, cool, dry place.
- ! Keep your marker away from any unauthorised, unprotected or unsafe users.
- ! Protect your marker from excessive heat during transportation.
- ! When transporting a paintball marker by air, check with the airline regarding their policies on transporting paintball equipment as hold luggage before arriving at the airport.
- ! Observe and obey all local and national laws concerning the transportation of paintball markers.
- ! Use the box in which the marker was originally supplied to protect the marker against rough handling during transport.

WARNING!

Never carry your marker out of its case when in a non paintball environment. The non-playing public and law enforcement personnel may not be able to distinguish between a paintball marker and a real firearm. For your own safety and to protect the image of paintball, always carry the paintball marker in a suitable marker case, such as the one in which it was supplied.



MAINTENANCE

WE GOT YOUR BACK

25



From our live tech services, instructional videos and ongoing warranty support you'll quickly discover that our reputation for industry-leading after-sales care goes way beyond anything you've experienced before.

So pat yourself on the back for making the right choice and welcome to the family.

#WEGOTYOURBACK



OUR PLANET

Scan for everything Eclipse:
planetecclipse.com



TECH ROOM

Scan for Tech Videos:
youtube.com/planetecclipsestv



WORKSHOP MANUALS

Scan for maintenance guides:
planetecclipse.com/manuals



PARTS FINDER

Scan to identify parts:
planetecclipse.com/kb/part-finder



WARRANTY

Scan for warranty eligibility:
planetecclipse.com/warranty

SYMPTOM	POSSIBLE CAUSE	SOLUTION
The EMF 200 leaks from the 3-way when the trigger is released.	The 3-way valve may be dirty or dry.	Replace and/or lubricate 3-way internal and external spool guide seals.
	The 3-way is over-pressurised.	Check the output pressure of the inline regulator and adjust accordingly. Clean and inspect the inline regulator assembly paying particular attention to the piston tip and regulator seal. Replace damaged components as necessary.
The EMF 200 leaks from the 3-way when the trigger is being held.	Some of the drivetrain seals may be damaged or dry.	Replace and/or lubricate the 020NBR70 o-rings on the valve body and the 016 NBR70 o-rings on the switch
	The 3-way valve may be dirty or dry.	Replace and/or lubricate three-way internal and external spool guide seals.
The EMF 200 leaks down the barrel.	Dirty or damaged can o-rings.	Clean and lubricate or replace 020 NBR70 and 017 NBR o-rings on the front of the can.
	Dirty or damaged o-rings on the spool.	Clean and lubricate or replace the 011 NBR70 and 012 NBR70 o-rings on the main spool.
	Dirty or damaged bolt o-rings.	Clean and lubricate or replace the 14x2 NBR70 o-ring on the back of the bolt.
	Dirty or damaged rear bolt guide o-ring.	Clean and lubricate or replace the 017 NBR70 o-ring towards the back of the bolt guide.
The marker is breaking paintballs in the barrel or breech.	The ball detents are damaged or missing.	Replace the ball detents.
	The paint is poor quality.	Try a higher grade of paint.
	The velocity is set too high.	Check and adjust the velocity of the EMF 200.
	The magazine requires maintenance.	Disassemble and clean the magazine. Replace if necessary.
The EMF 200 does not fire.	The air system is not fully engaged.	Screw in the air system until it fully engages.
	The POPS bonnet is not engaged.	Make sure the POPS bonnet is pushed towards the POPS body.
	The 3-way is damaged.	Replace the 3-way.
	The trigger is not adjusted correctly.	Check and adjust the trigger stop screws.
	Rear o-ring on the valve body may be damaged or dry.	Inspect, clean, grease, or replace the rear 020 NBR20 on the valve body.

MAINTENANCE

FAULT FINDING TABLES

27

SYMPTOM	POSSIBLE CAUSE	SOLUTION
Low constant velocity.	The inline regulator output pressure is set too low.	Increase the output pressure of the inline regulator.
High velocity first shot.	The inline regulator pressure is creeping.	Strip and clean the inline regulator replacing the regulator seal inside the regulator adjuster assembly.
Velocity drop-off during rapid fire.	Air system regulator does not have high enough flow.	Try another air system.
	Dirty/partially blocked inline regulator.	Strip, clean, lubricate and rebuild the inline regulator.
Two or more balls are being fed into the breech.	Worn, damaged or missing ball detents.	Change the rubber ball detent.
EMF 200 is inconsistent.	The inline regulator is dirty.	Strip and clean inline regulator, replace regulator seal.
	Poor quality paintballs.	Use better quality paintballs.
	Poor paintball size to barrel bore match.	Use a closer paintball to barrel bore size.
	Inconsistent air supply from the air system.	Service the air system.
EMF 200 is inefficient.	Poor paintball size to barrel bore match.	Use a closer paintball to barrel bore size.
	The drivetrain is dirty or dry.	Clean and grease the drivetrain. Replace any o-rings in the drivetrain if required.
The EMF 200 is leaking from the small hole at the rear of the main body	The regulator o-rings may be damaged or dry.	Inspect, clean, grease, or replace the 008 NBR70 and the top 011 NBR70 in the reg adjuster. And the 014 NBR70 on the regulator piston.
	Rear o-ring on the valve body may be damaged or dry.	Inspect, clean, grease, or replace the rear 020 NBR20 on the valve body.

FIG.1

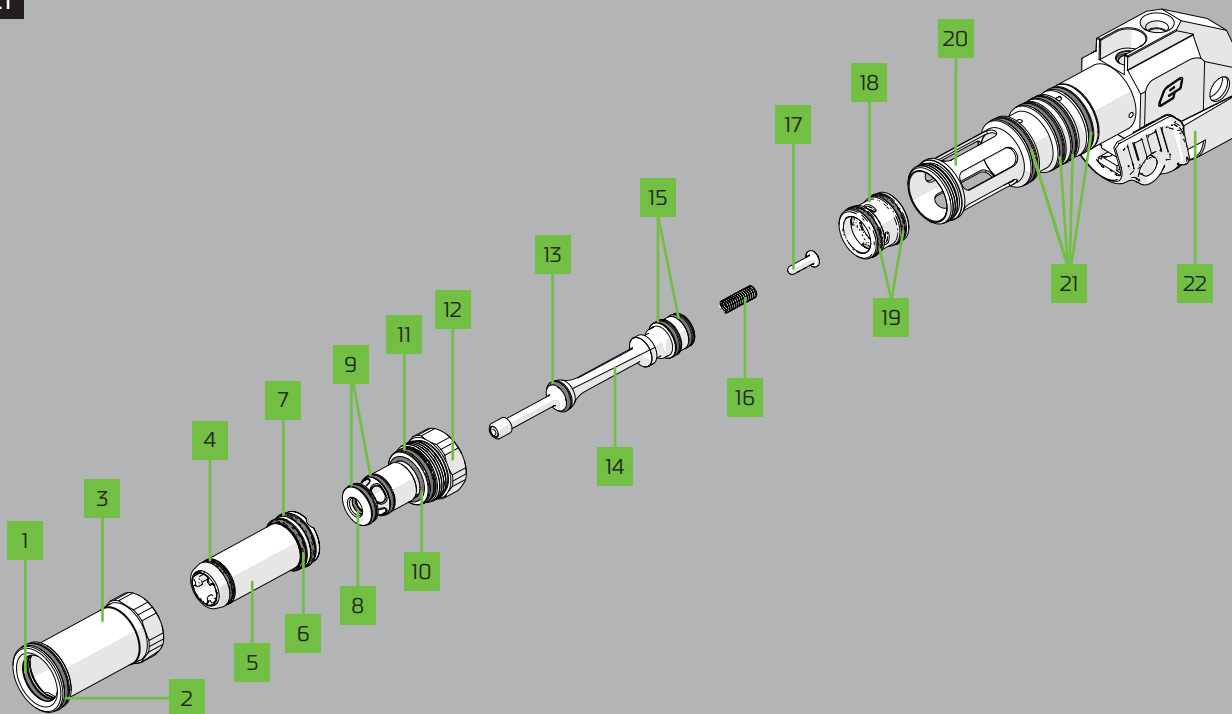


FIG.1

- | | | | |
|----|--------------------------|----|-----------------------------|
| 1 | #017 NBR70 (internal) | 12 | Bolt guide |
| 2 | #020 NBR70 | 13 | #011 NBR70 |
| 3 | Can | 14 | Spool |
| 4 | #013 NBR70 | 15 | #012 NBR70 |
| 5 | Cure FT Bolt | 16 | Spool spring |
| 6 | #015 NBR90 | 17 | Spring guide |
| 7 | 14 x 2 NBR70 o-ring | 18 | Switch |
| 8 | 6 x 1.5 NBR70 (internal) | 19 | #016 NBR70 |
| 9 | #013 NBR70 | 20 | Joiner |
| 10 | #013 NBR70 | 21 | #020 NBR70 |
| 11 | #017 NBR70 | 22 | Regulator and POPS assembly |

FIG.1

A	Marker body	J	Grip
B	Barrel back	K	Grip plug
C	Handguard	L	Trigger guard
D	Drivetrain assembly	M	Trigger assembly
E	Drivetrain/Regulator assembly bolt	N	Safety switch
F	Regulator adjuster	O	Magazine release
G	POPS insert	P	Rubber detent
H	3-Way valve assembly	Q	Magwell
I	Trigger lever	R	Regulator assembly

The EMF 200 has been designed with customisation in mind for the more mil-sim oriented player. The following parts (and shown opposite) can all be replaced with most third-party Milspec AR-Style components to help create your ideal mil-sim loadout.

FIG.1

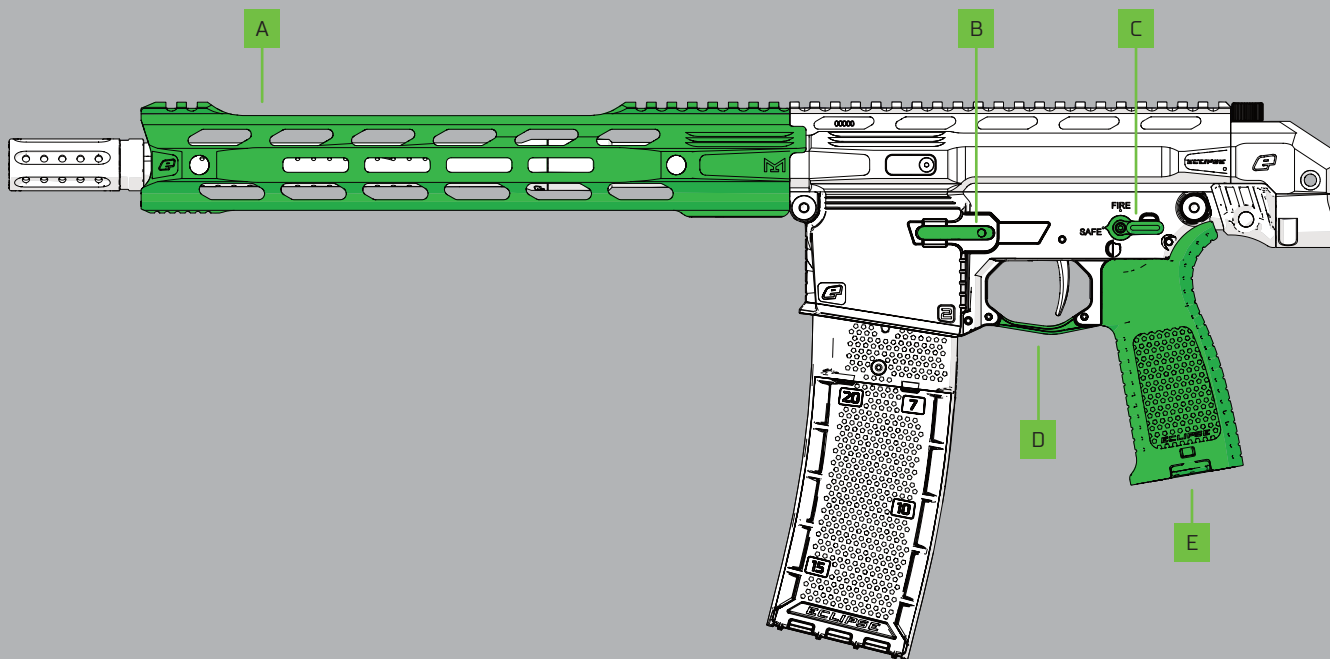
- A** Handguard and barrel nut
- B** Magazine release
- C** Safety selector
- D** Trigger guard
- E** Grip

WARNING!

Always ensure the marker is safe when removing and replacing any marker parts. If you are not confident in removing or replacing parts seek help from an approved Eclipse Tech. All marker parts have been designed, manufactured and tested to be used for paintball games only.



FIG.1



3-WAY, 26, 31

ADJUSTABLE STOCK, 04, 18-19

AIR SYSTEM, 04, 07-09, 17-19, 23, 26-27

AMBIDEXTROUS, 04, 15

ASTM, 02

BARREL BLOCKING DEVICE, 02, 07-08, 12-19, 21, 23

BOLT, 02, 04, 07, 18, 23, 26, 28-29, 31

BREECH, 02, 13-14, 18-20, 26-27

CF 20 PRO, 01, 04, 07, 10-14, 24

CO2, 03, 07, 23

DETENTS, 04, 21, 26-27, 31

EMC STOCK, 19

FIRE, 02, 07-09, 13, 16-17, 23, 26-27

GRIP, 02, 07, 17, 23, 31-32

HANDGUARD, 04, 07, 20, 23, 31-32

MAGAZINE, 01, 04, 07, 10-15, 18-21, 23-24, 26, 31-32

MAGAZINE LATCH, 12-15

MAGAZINE RELEASE, 04, 15, 23, 31-32

MAGWELL, 12-14, 31

PARTS FINDER, 25

POPS, 07, 17-18, 23, 26, 29, 31

POST-TRAVEL, 16

PRE-TRAVEL, 16

PWR INSERT, 07

REGULATOR, 02-03, 07, 17, 23, 26-27, 29, 31

S63, 07, 23

SAFE, 02, 07-08, 12-19, 21, 23-24, 32

SAFETY SELECTOR, 02, 04, 07-08, 14, 32

SIDE PANEL, 10-12

SPOOL SPRING, 29

SPRING GUIDE, 29

STATES OF ENGAGEMENT, 13-15

TECH VIDEOS, 25

TRANSPORTING, 02, 04, 24

TRIGGER, 04, 08, 16, 26, 31-32

TRIGGER GUARD, 31-32

VELOCITY, 03-04, 09, 26-27

WARNING, 02-03, 07-21, 23-24, 32

WARRANTY, 05, 25

WINDER, 10-12

WORKSHOP MANUALS, 25



GET MORE PLANETECLIPSE.COM



SCAN ME!
FOR THE FULL
PLANET ECLIPSE
EXPERIENCE.



802.091.A-000

THIS PRODUCT IS COVERED BY AND/OR LICENSED UNDER ONE OR MORE OF THE FOLLOWING PATENTS:

G.B. PATENTS:

2,342,710; 2,345,953; 2,352,022; 2,391,292; 2,391,063;

U.S. PATENTS:

7,836,873; 7,603,995; 7,073,284; 8,104,463; 7,509,953; 7,921,839; 7,089,697; 7,866,307; 8,082,912; 7,076,906;
7,607,424; 7,980,238; 8,960,175; 8,528,877; 8,201,547; 8,397,706; 8,210,160; 7,073,284; 6,311,682; 6,748,938;
6,860,259; 6,941,693; 6,973,748; 5,881,707; 5,967,133; 6,035,843; 6,474,326; 6,637,421; 6,644,295; 6,810,871;
6,901,923; 7,121,272; 7,100,593; 7,610,908; 7,603,997; 7,946,285; 6,349,711; 7,044,119; 7,185,646; 7,461,646;
7,556,032; 7,591,262; 7,617,819; 7,617,820; 7,640,925; 7,640,926; 7,866,308;

APPLICATION NUMBERS:

12/256,832; 12/613,958; 12/493,777; 11/654,721; 11/747,107; 12/503,504; 11/781,821; 60/832,548; 11/965,886;
10/280,115

Additional U.S. and International Patents may be pending.

UK

Unit 14 Premier Park, Acheson Way
Trafford Park Road, Trafford Park
Manchester, M17 1GA, England
T: +44(0) 161 872 5572
planetecclipse.com/contact

USA

130 Franklin Street
Building L4 & L5
Warren, RI, 02885, USA
T: +1 401 247 9061
planetecclipse.com/contact

EUROPE

PE-Paintball.De Gmbh
Langenberger Str. 9 Tor 5 & 6
Düsseldorf 40233, Germany
T: +49 (0) 211 210 230-0
planetecclipse.com/contact

© Copyright: Planet Eclipse, PlanetEclipse,
Eclipse, The E Logo Devices, GEO and GEO
R5 are all either trademarks, design
trademarks or registered trademarks of
Planet Eclipse Ltd.

20240224__EN_PE-EMF 200-Manual-v1