

## FOREWORD

For the uninitiated, the SLS represents our very best-of-thebest. We take the basic platform of the Ego10 and rework virtually every aspect and component to create a lighter, leaner, more focused machine.

Although the SLS is designed with ultimate performance in mind that does not mean we have done so at the sacrifice of reliability. As you would expect from any Eclipse marker, the SLS is the perfect blend of lightweight design, rugged reliability, stunning looks and on-field ability.

Right now, the most important thing for you to do as a new owner of this SLS is read through this 'Feature Supplement', as well as the 'Ego10 Operators Manual', paying particular attention to the safety warnings and guidelines, to learn how to operate and optimise your SLS to your exact requirements.

Having done that, ensure that you return your warranty card or complete the online warranty registration form at www.planeteclipse.com to ensure that your warranty is fully activated and that you are in our system to receive any free performance upgrades should they become available to SLS owners during the lifetime of the marker.

And that leaves little more to say than enjoy your time using your SLS. Know that it has been developed and prepared for you by a group of people and players that want nothing more than it to be the very best you have ever had.

Now go out there and use the SLS in the way we always intended it to be used. On the field of battle. In a fire-fight. Winning!





#### WARNING: READ AND ADHERE STRICTLY TO ALL OF THE SAFETY INSTRUCTIONS AND GUIDELINES IN THE EGO10 OPERATORS MANUAL!

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#### SL SHAFT3 BARREL KIT

The Eclipse SLS marker comes as standard with an Eclipse SL Shaft 3 Barrel Kit.<sup>1</sup>

The barrel screws into the body of the SLS using a right hand thread meaning that if you hold the SLS pointing away from you the barrel screws into the body in a counter-clockwise direction.<sup>2</sup>

The barrel comprises of two parts, a Barrel Back **A** and a Barrel Front **B**.

On the Barrel Back there is a 016 NBR 70 o-ring  ${\bf D}$  which prevents the barrel from vibrating loose from the SLS body when the marker is fired. There is a 015 NBR 70 o-ring on the Barrel Front  ${\bf E}$  helps with alignment when the two sections are screwed together.

Replace and lubricate these o-rings with Eclipse Grease as necessary.



#### SLS VALVE GUIDES

WARNING: REMOVE ALL PAINTBALLS & DE-GAS YOUR MARKER, DISCHARGING ANY STORED GAS IN A SAFE DIRECTION, DISCONNECT THE BATTERY & REMOVE THE BARREL, LOADER & AIR SYSTEM TO MAKE THE MARKER EASIER & SAFER TO WORK ON.

Included with the Eclipse SLS marker are two Valve Guides.

A LP (Low Pressure) Valve Guide which is already installed inside the SLS, and a HP (High Pressure) Valve Guide. Both of which will allow you to customize the set-up and feel of the SLS.

To remove the LP Valve Guide and install the HP version see the 'Removing the Valve Assembly' section of your 'Ego10 Operators' Manual. Simply swap over the Valve Guides during this procedure.



#### THE SLS TRIGGER SYSTEMS

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The Eclipse SLS marker comes with two complete Trigger Systems (bearing carrier, trigger, spring and setscrews) that are interchangeable within the SLS frame.

For full details of how to change the Trigger System in the SLS please consult the 'Ego10 Trigger Assembly' section in the 'Ego10 Operators Manual'. If you have any doubts about how to conduct this procedure then do not hesitate to contact your nearest Eclipse Service Center (see Eclipse Certified Service Center pages of Ego10 Operators Manual).

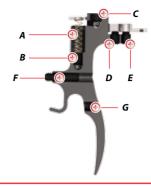
For full details of how to adjust your trigger please refer to the 'Setting the Trigger Section' of the 'Ego10 Operators Manual'.

#### **IMPORTANT**

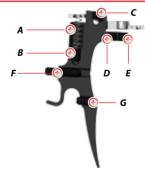
When setting the trigger it is essential to ensure that the electronic trigger detection is working correctly. When the trigger is fully depressed the Trigger Detection Indicator (TDI) should point upwards 

T. When the trigger is fully released the TDI should point downwards 

T. For more information, see 'Understanding the Trigger Detection Indicator (TDI)' and 'Filter Menu' in the 'Eqo10 Operators Manual'.



A Spring
B Spring Return Strength Screw
C Trigger Pin Locking Screw
D Front Stop Trigger Screw
E Magnet Return Strength Screw
F Micro Switch Activation Screw
G Rear Stop Trigger Screw



#### SLS BOLT SYSTEM

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The Eclipse SLS marker comes its own bespoke Cure3+Bolt System complete with an array of interchangeable Cure3+Bolt Inserts.<sup>1</sup>

The Cure3+ Bolt features a contoured front profile similar to the original Cure3 Bolt, allowing the SLS to reliably shoot even the most fragile tournament grade paints.

The interchangeable Cure3+ Bolt Inserts provide additional options so that the SLS can be set-up to your preference. Instructions on how to change Cure3+ Bolt Inserts can be found on page 8 of this Feature Supplement.

<sup>1</sup>The quantity and type of inserts included with the SLS may vary depending on the model you have.



#### INSTALLING CURE3+ BOIT INSFRTS

Pull the Bolt Pin upwards so that it disengages the Rammer and slide the Bolt out from the rear of the marker as described in the 'Cleaning and Lubricating the Bolt' section of the 'Ego 10 Operators Manual'.

Push the pin back down half way. The pin must be half way between the fully up (disengaged) and fully down (engaged) position. Rotate the pin through 90 degrees so that the Plunger can no longer retain the pin (SEE FIGURE 1.1).

Making sure to cover the back of the Bolt to prevent the Plunger and Spring falling out prematurely, pull the Bolt Pin upwards and out of the Bolt (SEE FIGURE 1.2). Tip the Bolt upside down to remove the Plunger and the Spring from the Bolt (SEE FIGURE 1.3).

Take a long blunt tool such as the 1/4" or 3/16" hex key supplied in your tool tube. Insert the long ball ended section into the front of the Bolt and gently push the Bolt Insert out the rear of the Bolt (SEE FIGURE 1.4).

Push the desired insert into the back of the bolt, ensuring that the bolt pin holes in the insert line up with the holes in the bolt (SEE FIGURE 1.5).

If you are installing a Ramped Insert pay particular attention to the orientation of the insert in relation to the gas port on the underside of the bolt. Ensure that the ramp insert does not block this hole off as it will prevent the SLS from firing (SEE FIGURE 1.6).

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Place the Spring inside the access hole at the rear of the Cure3+ Bolt and drop a Plunger onto of it so that the Spring sits inside the body of the Plunger (SEE FIGURE 1.7).

Using a 1/8th hex key, push the Plunger sufficiently so that the Spring is compressed and the Bolt Pin can be installed by pushing it into the hole at the top of the Cure3+ Bolt, until it comes to rest against the hex key (SEE FIGURE 1.8).

Whilst retaining pressure upon the top of the bolt pin, slide out the hex key. The Bolt Pin should slide completely through the Bolt as the hex key is removed (SEE FIGURE 1.9).<sup>1</sup>

When installing the pin, you should hear it "click" into place. If this does not happen ensure that the pin is facing the correct way so that the slot in the pin engages the Plunger and locks the pin correctly in place. Rotate the pin as necessary to ensure this happens.

Noting the position of the Rammer Shaft in the marker body, replace the Cure3+ Bolt and locate the pin into the designated groove in the Rammer Shaft as described in the 'Cleaning and Lubricating the Bolt' section of the 'Ego10 Operators manual'.

Installation of your Cure3+ Bolt Insert is now complete.

'Ensure the pin is installed into the top of the Bolt. The top and bottom of the Bolt are distinguishable by noting the gas port should be at the bottom of the Bolt.







### SL3 INLINE REGULATOR

The Eclipse SLS marker comes with the new SL3 Inline Regulator. This design provides a substantial performance increase over previous Planet Eclipse Inline Regulators. 1,2

Adjusting the velocity of the SLS can be done by inserting 1/8" hex key into the Adjuster Screw at the bottom of the SL3 Inline Regulator. Turning the Adjuster Screw clockwise will decrease the output pressure of the regulator and consequently the velocity. By turning the Adjuster Screw counter clockwise you will increase the output pressure and consequent velocity.<sup>3,4</sup>

Macroline Fitting Adjuster Top Regulator Seal Purge Valve and Spring #011 NBR 70 Adjuster Screw Inline Regulator Bottom #016 NBR 70

#016 NBR 70 Inline Regulator Piston Inline Regulator. Spring Inline Regulator Top Inline Regulator Swive1 #011 NBR 70 #008 NBR 70

WARNING: THE SWIVEL CAN ONLY BE REMOVED FROM THE REGULATOR BOTTOM AFTER THE MACROLINE FITTING HAS FIRST BEEN REMOVED FROM THE SWIVEL.

<sup>1</sup>The threads on the SL3 Inline Regulator are not the standard regulator threads found on all previous Planet Eclipse markers. <sup>2</sup>Both high and low pressure output preset air systems can be used with the SL3 Inline Regulator.

<sup>3</sup>After each adjustment fire at least two clearing shots to gain an accurate velocity reading.

<sup>4</sup>For further information on adjusting the velocity please consult the 'Adjusting the Velocity' section of the Ego 10 operators manual. Disconnect the macroline hosing from your Inline Regulator allowing it to be unscrewed from the Front Regulator Mount (FRM) (SEE FIGURE 2.1). Inspect the o-ring at the top of the threads on the FRM for damage. Replace and re-lubricate as necessary.

Turn the Inline Regulator upside down and carefully unscrew the bottom section from the top section (SEE FIGURE 2.2).

Remove the Inline Regulator Spring from the top section (SEE FIGURE 2.3), then gently push the Piston out of the Inline Regulator Top (SEE FIGURE 2.4).

Insert a 1/8" hex key into the Adjuster Screw in the bottom section of the Inline Regulator, turn the Adjuster Screw clockwise through the top of the Inline Regulator Bottom (SEE FIGURE 2.5), and pull out of the Inline Regulator Bottom when it will no longer turn upwards (SEE FIGURE 2.6 OVERLEAF).<sup>2</sup>

If any o-rings are damaged then replace them. Extra o-rings are available in parts kits available at www.planeteclipse.com

<sup>2</sup>The adjuster screw can only be removed by turning it upwards through the bottom section of the inline regulator. The regulator will be damaged if the adjuster screw is removed incorrectly.

WARNING: REMOVE ALL PAINTBALLS & DE-GAS YOUR MARKER, DISCHARGING ANY STORED GAS IN A SAFE DIRECTION, DISCONNECT THE BATTERY & REMOVE THE BARREL, LOADER & AIR SYSTEM TO MAKE THE MARKER EASIER & SAFER TO WORK ON.











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Thoroughly clean the 011 NBR70 orings<sup>1</sup> that sit on the outside of the Adjuster Assembly, then re-lubricate with Eclipse Grease (SEE FIGURE 2.7).

Using a dry cotton bud, clean the internal 008 NBR70 o-ring that sits inside the top section of the Adjuster Top. Then using a small hex key gently apply Eclipse Grease to the o-ring (SEE FIGURE 2.8).

At this point if you are maintaining the Inline Regulator to fix a supercharging issue, turn to page 14 to the 'Advanced SL3 Inline Regulator Maintenance' section. If you are not fixing a supercharging issue then there is no need to preform this advanced maintenance procedure.

Re-install the Adjuster Assembly into the bottom section of the Inline Regulator threaded end first. Apply light pressure to the top of the adjuster, while using a 1/8" hex turn the Adjuster Screw counter-clockwise until is stops at the base of the Inline Regulator (SEE FIGURE 2.9).<sup>2</sup>

Take the Piston, inspect for damage and clean the 016NBR70 o-ring at the top<sup>1</sup>, re-lubricate it with a light application of Eclipse Grease (SEE FIGURE 2.10). Insert the Piston into the Inline Regulator Top (SEE FIGURE 2.11), then place the Inline Regulator Spring over the Piston (SEE FIGURE 2.12 OVERLEAF).

Ilf any o-rings are damaged then replace them. Extra o-rings are available in parts kits available at www.planeteclipse.com

 $^2$ We recommend a starting position for the Adjuster Screw of 3  $^{1/2}$  - 4 turns in from flush with the bottom of the Inline Regulator.













#### (CONTINUED)

With the top section of the Inline Regulator upside down, screw the top and bottom sections together (SEE FIGURE 2.13).

Re-attach the Inline Regulator to the SLS FRM (SEE FIGURE 2.14), then re-connect the macroline hose to the fitting on the regulator swivel.

Basic cleaning of the SL3 Inline Regulator is complete.







#### ADVANCED SL3 INLINE REGULATOR MAINTENANCE

This procedure is only required if your are fixing a supercharging SL3 Inline Regulator (common symptoms of supercharging are a very high velocity first shot and/or large variances in shot to shot consistency in excess of 30fps).

Place 3/32" hex key through the Adjuster Top (SEE FIGURE 3.1), then insert a 1/8" hex key into the bottom of the Adjuster Screw and carefully turn it counterclockwise until the two parts begin to unscrew freely (SEE FIGURE 3.2). With your fingers fully unscrew the two parts taking care not to lose any of the internal components (SEE FIGURE 3.3).

Inside the Adjuster Screw you will find a Regulator Seal, Purge Valve and Spring (SEE FIGURE 3.4). Inspect and clean the Regulator Seal, turning it over if one side appears excessively worn or damaged or replace if necessary. Inspect and clean the Purge Valve or replace if necessary.

Place the Purge Valve and attached Spring in the central hole in the Regulator Seal (SEE FIGURE 3.5), then insert these parts into the Adjuster Screw.

With the Regulator Seal, Purge Valve and Spring installed back into the Adjuster Screw, replace the Adjuster Top (SEE FIGURE 3.6). Screw the two parts tightly together using 1/8" and 3/32" hex keys (SEE FIGURE 3.2). Refer to the 'Cleaning the SL3 Inline Regulator' section on page 11 to re-assemble the SL3 Inline Regulator.













#### THE ECLIPSE F-PORTAL

WARNING: REMOVE ALL PAINTBALLS & DE-GAS
YOUR MARKER, DISCHARGING ANY STORED GAS IN A
SAFE DIRECTION. REMOVE THE BARREL, LOADER & AIR
SYSTEM TO MAKE THE MARKER EASIER & SAFER TO WORK ON.

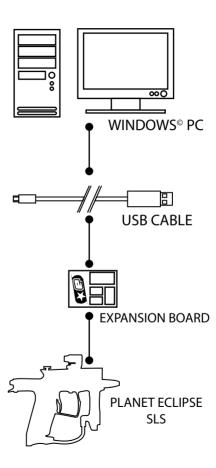
The Eclipse E-Portal allows you to connect the SLS to a PC (subject to meeting the minimum system requirements), where a number of operations can be performed:

**Update the markers firmware** - from time to time new firmware may be released by Planet Eclipse. You can now download and install the latest firmware using the Eclipse E-Portal.

**Alter the electronic parameters** - the Eclipse E-Portal will give you full access to all of the parameters on the SLS circuit board.

**Customise screen graphics** - Customise the boot up screen graphic.

A full .PDF instruction manual and system requirements for the Eclipse E-Portal can be found on the Eclipse E-Portal software disc.



### SLS CUSTOMER SERVICE & SUPPORT

An integral part of the Eclipse SLS experience is the Customer Service and Support that you can expect to receive having successfully registered your marker for Warranty purposes.

Warranty registration can be done either by completing and mailing-in the tear-out Warranty Card in the Ego10 Manual, or by completing and submitting the Online Warranty form in the Support section of www.planeteclipse.com.

Successfully registering your Eclipse SLS marker will not only allow us to inform you of any applicable upgrades or enhancements that become available during the lifetime of your marker, but will also give you direct access to the support team behind Eclipse's world renowned level of Customer Service and Support using the priority email address below:

#### My-sls@planeteclipse.com

Whatever the reason that you want to contact us, whether it is a technical question, a concern about your SLS that you're unsure about, wanting information about how to best set-up your SLS marker or you simply want to send us a picture of you and your SLS, we look forward to hearing from you!



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