



- D) Installation
- Disassemble the Viewloader VLocity by following the directions given in the owner's manual.
 - Remove the battery source.
 - Remove the chip that is currently in the circuit.
 - Match up the chip and the board indents. Insert the chip and carefully push it into place, making sure each prong is inserted into the proper place.
- II) Programming Mode
- Ensure that the loader is turned off.
 - Press and hold the programming button.
 - Turn the loader on.
 - The LED will go ORANGE until the button is released. This indicates programming mode has been engaged.
 - Release the button, and the LED will go BLACK
 - The LED will go RED – the first programming menu color.
 - You are now in programming mode.

- III) Programming Menus
- a. To cycle through the menus, tap the programming button. The LED will change color with respect to the current menu.
 - b. To change a setting press and hold the programming button until the LED flashes. The LED will then flash at a rate of two per second (every 500ms).
 - c. When the desired number of flashes have gone by, release the button and it will save the settings automatically.
 - d. To view your current settings push and hold the programming button for 1 second. After you release the button it will flash the setting back to you.
- IV) Programming Menu Description
- a. RED - The **MODE** selection menu.
 - i. Settings: 1 – 6
 - ii. Default: 1 (Zero-Force/NPPL)
 - b. ORANGE - The **SPEED** selection menu.
 - i. Settings: 1 – 10
 - ii. Default: 5
 - c. GREEN - The **TENSION** selection menu.
 - i. Settings: 1 – 20
 - ii. Default: 10
 - d. RED/GREEN - The **BREAKOUT** selection menu.
 - i. Settings: 1 – 6
 - ii. Default: 1 (OFF)
 - e. ORANGE/RED - The **ANTI-JAM** selection menu.
 - i. Settings: 1 – 6
 - ii. Default: 1 (OFF)
 - f. ORANGE/GREEN - The **ENERGY SAVER** selection menu.
 - i. Settings: 1 – 2
 - ii. Default: 1 (OFF)
- V) Feeding Modes [RED]
- a. Zero-Force/NPPL [RED = 1]
 - i. Feeds at the set speed only if the eyes are **not** blocked.
 - ii. Excellent on battery life.
 - b. Regressive Tension 1 [RED = 2] *NEW*
 - i. Feeds at the set speed when the eyes are **not** blocked.
 - ii. Maintains feed rate until eyes are blocked for TENSION x 100ms.
 - iii. If eyes are still blocked and the tension time has elapsed, the pressure will slowly regress over time (One speed per 100ms) and eventually down to zero.
 - c. Regressive Tension 2 [RED = 3] *NEW*
 - i. Feeds at the set speed when the eyes are **not** blocked.
 - ii. Maintains feed rate until eyes are blocked for TENSION x 100ms.
 - iii. If eyes are still blocked and the tension time has elapsed, the pressure will slowly regress over time (One speed per 100ms), never reaching a speed slower than SPEED = 1.
 - iv.

- d. Ramping [RED = 4] *NEW*
 - i. Speeds vary based on how fast the user is shooting.
 - ii. Increases speed exponentially to ensure consistency.
 - iii. Decreases speed linearly to maintain high rates of fire.
 - e. Reball [RED = 5] *NEW*
 - i. Effectively acts as an agitated loader.
 - ii. Feeds at a constant rate based on the SPEED setting.
 - iii. Feeds forward at the set SPEED for a total of TENSION x 50ms.
 - iv. Feeds reverse at a low SPEED for a total of TENSION x 10ms.
 - f. PSP/Three-shot Burst [RED = 6] *NEW*
 - i. Will feed in three-shot bursts every time there is movement in the stack.
 - ii. When there is no movement and the eyes remain unblocked, the SPEED is decreased to save battery life but maintain feed rates.
 - iii. When the eyes are blocked, the SPEED is decreased to zero.
- VI) Breakout Mode [RED/GREEN]
- a. To DISABLE set to 1
 - b. Settings 2-6 yield different shot delays.
 - c. Each setting number represents a 3 shot delay increase (setting 2 is a 3 shot delay, setting 3 is a 6 shot delay, etc..)
 - d. Breakout mode will run the loader at its **fastest** speed for **30 seconds**.
 - e. While in breakout mode the LED will flash ORANGE/GREEN.
- VII) Anti-Jam Mode [ORANGE/RED] *NEW*
- a. To DISABLE set to 1
 - b. Settings 2-6 yield different time delays.
 - c. Each setting number represents a 1 second delay increase (setting 2 is a 1 second delay, setting 3 is a 2 second delay, etc)
 - d. Anti-jam mode is activated when the loader is feeding, but there is no paint successfully fed for a duration of time (specified by the settings).
 - e. While a jam is being cleared the LED will flash RED/GREEN.
- VIII) Energy Saver Mode [ORANGE/GREEN] *NEW*
- a. To DISABLE set to 1
 - b. If enabled, energy saver mode will determine when 25% (or less) of the battery life is left, and then will revert to Zero-Force/NPPL mode automatically.
 - c. This will preserve the last portion of the battery life in game so that the loader is not rendered useless due to batteries.
 - d. The loader will revert back to saved settings once it is powered off.
- IX) Low Battery Indicator
- a. When the hopper is low on batteries (less than 25% left), the LED will become RED during normal operation.
- X) Gangstar Spin
- a. When the loader is on, the user has the ability to manually control the motors movement. By pushing and holding the programming button, the user is able to force the motor to go forward, despite the status of the eyes.

If the user taps the programming button, the motor will go in reverse for approximately $\frac{1}{2}$ of a rotation, despite the status of the eyes.