



**FLUX** *spektra*

Cartridge Machine

**USER MANUAL**

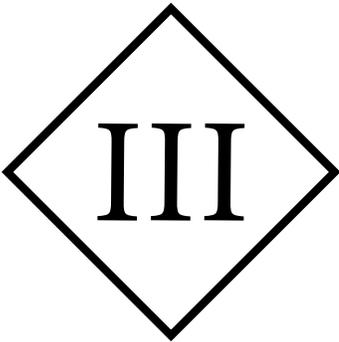


2020

# INDEX

Safety Notice	3
Machine Overview	4
The Grip	5
The Body	6
The PowerBolt	7
Detaching PowerBolt	8
USB-C Connection	9
Connecting your Machine	10
Adjusting Needle Depth	11
Additional Information	12
Troubleshooting	13

**SAFETY NOTICE**



**CLASS III SYMBOL**

A Class III appliance is designed to be supplied from a separated/safety extra-low voltage (SELV) power source. The voltage from a SELV supply is low enough that under normal conditions a person can safely come into contact with it, without risk of electrical shock. The extra safety features built into Class I and Class II appliances are therefore not required. For medical devices, compliance with Class III is not considered sufficient protection, and further more-stringent regulations apply to such equipment.

<b>TECHNICAL DATA</b>	
Operating Voltage:	4-9.5 V DC
Current:	.3 A
Stitch Frequency:	25 - 160 Hz
Stroke:	4 mm
Connection:	USB-C
Drive:	Brushless 9 Watt motor
Operating Mode:	Continuous operation
Ambient Temperature:	+10 to +35 °C
Relative Humidity:	30 to 75%
Dimensions (Ø X L):	35 x 125 mm
Weight:	Approx. 180 g



**BARRIER PROTECTING YOUR MACHINE**

Although the grip is autoclavable, we strongly suggest the use of barrier products to protect your machine. For a visual demonstration of many barrier protection methods, please visit our YouTube channel FK Irons.

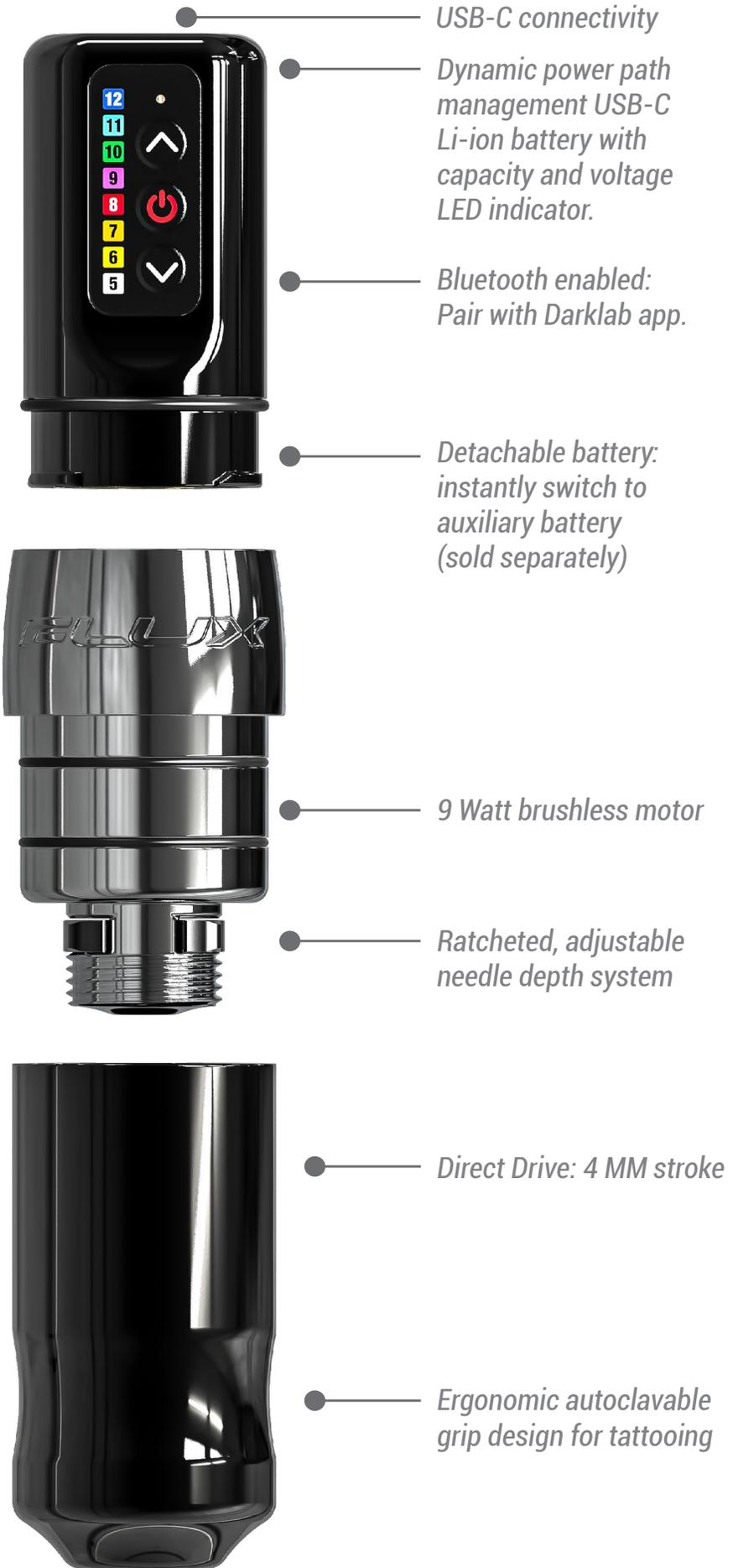
"This machine is not to be used by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge"

MACHINE OVERVIEW

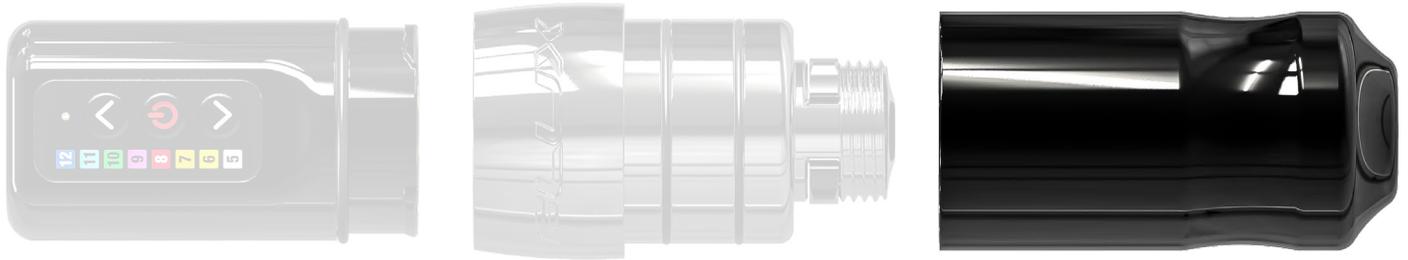
# THE SPEKTRA FLUX

Unleash your Power

The first wireless pen style machine featuring detachable batteries, complete Bluetooth connectivity, and a whole new sense of freedom.



THE GRIP



Spektra Flux Grip



*Autoclavable Ergonomic Grip Design*

*Compatible with most membrane needle cartridges on the market*

# THE GRIP

The Flux grip allows artists ratcheting control over needle depth. The standard Grip has a diameter of 33mm. Other grip

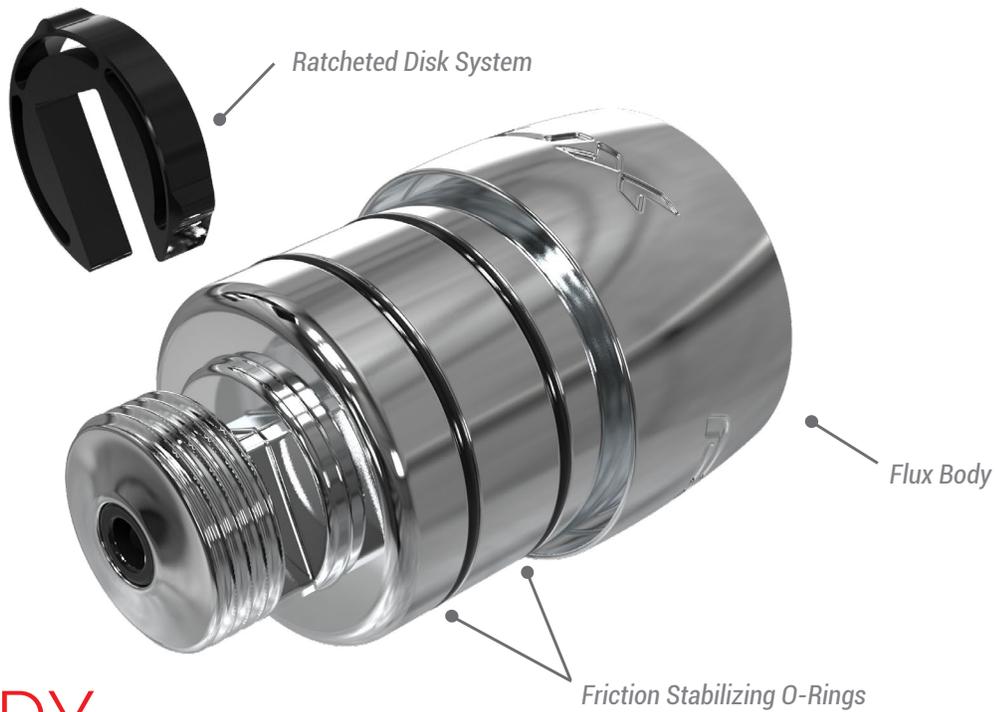
options will be available soon. The Grip is crafted from a solid rod of 6061 T6 aircraft-grade aluminum. This polished and

anodized grip is safe to be sterilized under steam, in an autoclave or sprayed with cold sanitation solutions.

THE BODY



Spektra Flux Body



THE BODY

The Body is the core of the machine. Constructed from a solid rod of 6061 T6 aircraft- grade aluminum, this module should be sanitized by wiping it with cold sterilization solutions only.

**Caution: Avoid getting fluids into the housing**



Body Isometric View

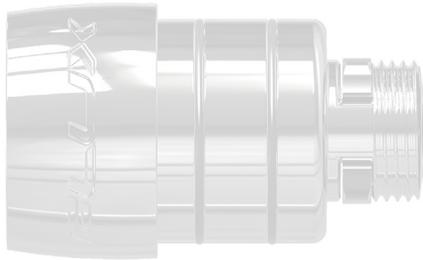


Body Posterior View

THE POWERBOLT



Flux PowerBolt



# THE POWERBOLT

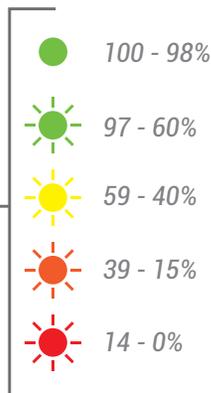
**LED indicator:**

Solid Color = Whole Value

Blinking Color = Half Increment

Ex. Solid green indicates 10V

Flashing green indicates 10.5V



**Battery Level Check:** Press and hold power button till white. A blinking colored light indicates remaining charge.

**Note:** LED flashes while battery charges. Once < 15% is reached, red light will blink alternately with voltage.



LED Indicator

Voltage Up

Power Button

Voltage Down

**Working with modes:** Modes work by pressing and releasing the power button.

**Bluetooth** – Hold the power button until a blue light appears and immediately release the power button. A blue blinking light indicates pairing mode is available for 60 seconds. To deactivate Bluetooth, hold the power button and release when the yellow light flashes.

**Travel Mode (Shutdown)** – Press and hold the power button until the red light flashes. This mode is for when you want to avoid unnecessary discharge and / or comply with travel laws. To reactivate, connect / disconnect to a USB-C port.

**Reset (Factory Settings)** – Should you experience abnormal behavior, hold the power button and the voltage up button at the same time, then quickly release.



USB-C



PowerBolt Top/ Bottom Views

DETACHING THE POWERBOLT



*Twist the PowerBolt as shown and remove.*

*Get a firm grip and turn the body as shown with the Grip.*

# DETACHING THE POWERBOLT

To detach your PowerBolt, ensure you have a firm grip on the Body and Grip. Turn the PowerBolt counter clockwise and pull out.

To attach the PowerBolt, push in while twisting clockwise. Ensure lock mechanism moves freely. PowerBolt must sit correctly to ensure power leads

align correctly. Avoid contact with the PowerBolt leads while recharging or servicing.

USB-C CONNECTION

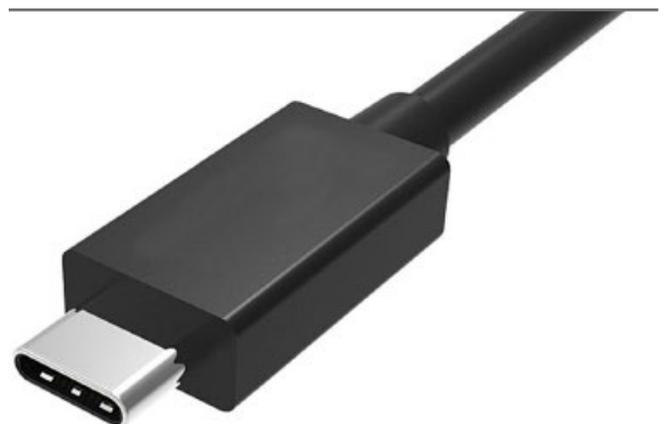


*Fast charging speed: Up to 1.5 A*

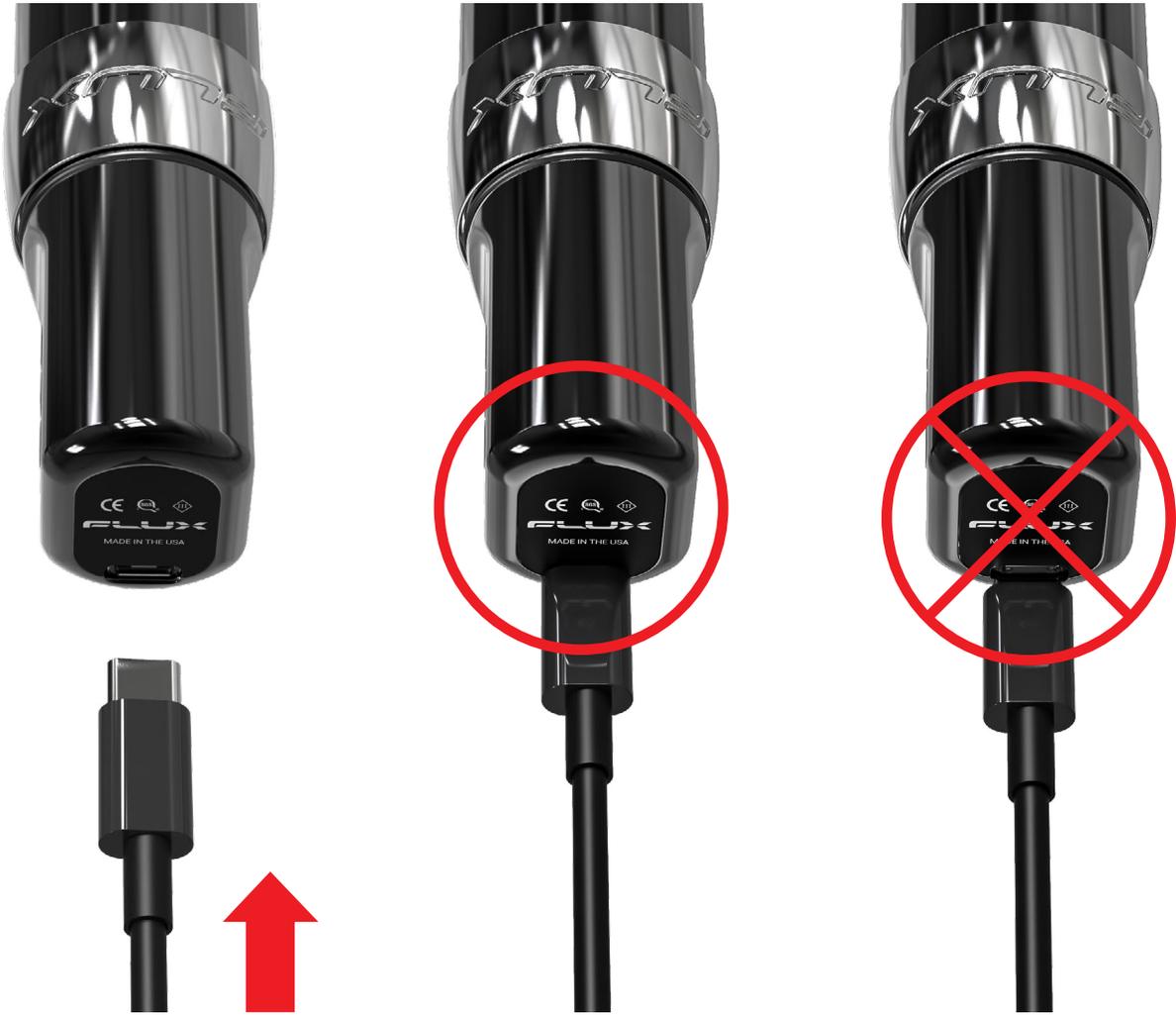
*USB-C Connector*

## USB-C CONNECTION

This connecting terminal is compatible with most USB-C cables on the market. We recommend you use the included cable for recharging the PowerBolt.



CONNECTING YOUR MACHINE



1 Plug the USB-C cord into the PowerBolt connector.

Best connection

Improper connection

HOW TO CONNECT YOUR MACHINE

Insert the provided USB-C cable into the back of the PowerBolt and connect to a Hover or power socket. Make sure the cable is properly seated and is fully inserted into PowerBolt. The PowerBolt is not meant to operate

while plugged in. The USB-C connection is meant only for recharging your PowerBolt. PowerBolt can be recharged whether or not it is connected to the Flux. If connecting to a Hover, the charge speed will be up to 1.5 A.

ADJUSTING NEEDLE DEPTH

# ADJUSTING NEEDLE DEPTH

To adjust needle depth, hold the machine body and PowerBolt while turning the Grip. *A counter clockwise turn decreases depth, while a clockwise turn increases depth (also known as needle hang).*

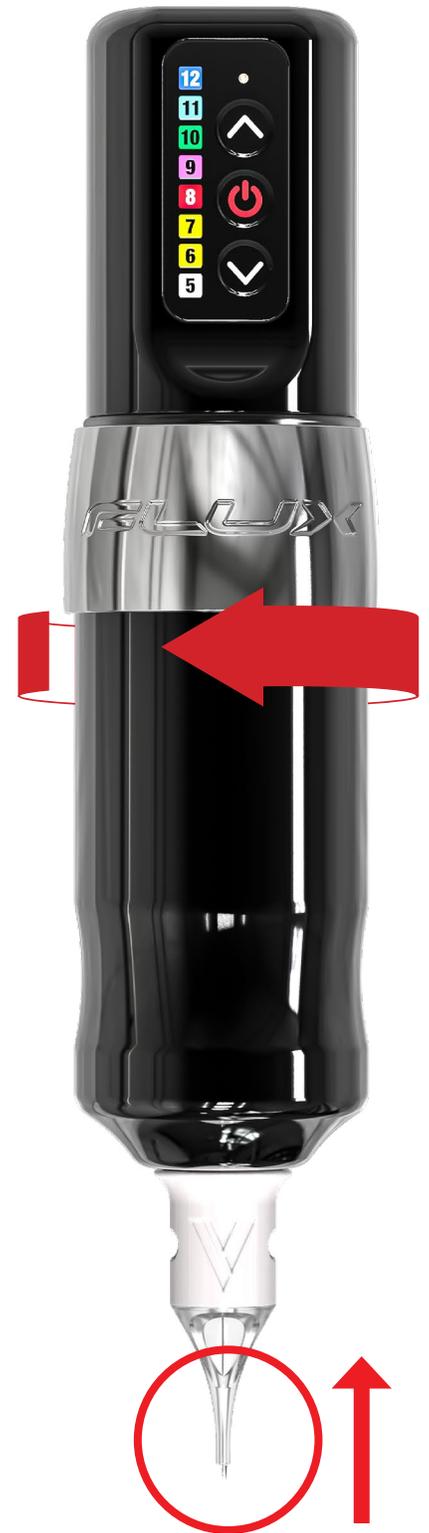
Each time you turn the grip you can feel the tactile feedback of the ratcheting mechanism. Each "click" displaces your needle 0.2mm and allows you to set your needle precisely without involuntarily turning while tattooing.

*Increases needle depth*

*Decreases needle depth*



*Turning the grip as shown increases needle depth.*



*Turning the grip as shown decreases needle depth.*

## ADDITIONAL INFORMATION

### VOLTAGE PARAMETERS

While voltage is a parameter that will vary from artist to artist, this machine has been tested to operate at a minimum voltage of 5 Volts and a maximum voltage of 12 Volts.

Depending on the type of needle configuration or brand you use, feel free to adjust the voltage to obtain the desired performance.

### ACCEPTED NEEDLES

Use only cartridge needles with an internal membrane. This will avoid accidental contamination inside your machine. Fluids such as ink, water or oil will void warranty of the device and may require replacement of internal parts.

### MAINTENANCE

- Flux is sold pre-lubricated from factory and does not require internal lubrication.
- Prevent any type of external elements from entering inside the machine as they will disrupt the motion of the component and contaminate lubrication.
- The grip of the machine is autoclavable. Use only steam autoclaves at temperatures no higher than 270° Fahrenheit or 132.222° Celsius. Add a hint of ointment or PTFE grease around internal opening of grip or on stabilizing friction O-rings for optimal functionality after autoclaving. Refer to page 5 for additional information.
- Machine Body and PowerBolt can be sanitized from the outside with cold sterilization products.
- Never spray the surface directly to prevent fluids from entering the machine. Always use pads or disposable paper towels to apply sterilization products.
- ***DO NOT DISASSEMBLE MACHINE.***

### WARRANTY

- All the housing components (Grip, Machine Body and PowerBolt) are covered by a lifetime warranty.
- Internal parts are subject to wear and the motor itself will be covered by a 1 year warranty from the date of purchase.
- Motor warranty is void if motor shows signs of being dropped, of internal fluids entering the motor, and/or IF motor shows signs of being tampered with in any way.

## ADDITIONAL INFORMATION

### HANDY TIPS

The following tips will help you get the most out of your Spektra Flux and avoid potential issues:

- Always secure your machine. Dropping the machine can cause damage to the magnets, bearings and brushes of the motor.
- Use only cartridges with membranes to avoid contamination.
- Rinse your needle frequently to avoid pigment drying up and slowing down your cartridges. When rinsing your needle, ensure to dip only the tip of the cartridge to avoid back flow of fluids.
- Inspect your needles prior to use.
- Avoid scratching the surface of the embodiments.
- Use only FDA-approved cold sterilization solutions for disinfection.
- Do not lubricate machine unless instructed otherwise.
- Store your machine in a secure place.
- Before first use, charge battery for a minimum of 3 hours.

### TROUBLESHOOTING

#### 1.- Machine manufacturer

FK Irons: 1771 NW 79th Avenue, Doral, Florida 33126

#### 2.- Servicing your machine

Just like any mechanical device subject to use, FK Irons strongly suggests that you service your product at least once a year to ensure that a proper diagnosis of all working parts is conducted. This ensures the optimal condition of all working parts including internal machine clean up and fresh lubrication. Routine servicing will ensure that your machine remains functioning like the very first day. Service is subject to fees.

#### 3.- Warning

Disconnect machine from any power before making any adjustments.

For service inquiries, please contact [service@fkirons.com](mailto:service@fkirons.com).

For additional tips and tutorials, please visit [Youtube.com/fkirons](https://www.youtube.com/fkirons)