NEOTAT® LINEAR SERIES TATTOO MACHINE

MAINTENANCE & INSTRUCTIONS
NeoTat and Vivace Tattoo Machines are designed to operate for many trouble free hours with minimal maintenance. NeoTat and Vivace machines should be kept clean and sanitary at all times.

Regular maintenance means disassembling of the machine at least every 200 hours of use, and thoroughly cleaning and re-lubricating the glide mechanism with a synthetic, USDA approved H1 grade, or better PFTE oil such as Super Lube or Tri Flow.

NeoTat and Vivace machines are designed to run on DC current ONLY, and as a voltage range of between 6 and 15 volts DC. Running the machines on AC current or on a power supply of poor regulation will damage the machine and void its warranty. NeoTat machines normally run at no more than 250 Milliamps of current. If the machine is drawing more than 250 Ma, or seems to slow down, get hot, or start making excessive noise, then it must be disassembled, cleaned and re-lubricated.

The following instructions will show how easy it is to maintain your new machine, so you may enjoy it for many years to come.

Revised in 2013 to include Vivace specific instructions, updates on recommended lubrication procedures and a reminder that while cleaning equipment it is advised that you wear gloves. Throughout this manual, both NeoTat Original and Vivace machines will be referred to as NeoTats, the registered trade name of our company. Thank You.

Please see Manufacturer’s notes on page 12

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NeoTat Linear: Original NeoTat DISASSEMBLY

1: Using the supplied wrench start the disassembly by removing the (3) screws on the back cover of the machine.

2: The Cover will come loose of the housing while remaining connected to the Motor Assembly by two wires.

3: Next, loosen the set screws (2) at the bottom of the machine. Hold the machine as shown, and press the top of the Glide, pushing against the spring action.

4: While doing this, rest the machine on your other hand, allowing the Motor Assembly and Cover to gently drop out of the housing and into your hand.

No need to tug or use force, just press on the Glide a couple of times, if needed, to release the Motor Assembly.
NeoTat Linear: Vivace DISASSEMBLY

1: Using the supplied wrench loosening the set screws (2) on the bottom of the machine.

It may be necessary to push the Glide a few times.

2: Next, hold the machine in your hand and press the top of the Glide, pushing against the spring action, to release the Motor Cartridge.

It may be necessary to push the Glide a few times.

3: While doing this, place your other hand so that it will receive the Motor Cartridge when it slides out of the machine housing.

No need to tug or use force, just press on the Glide a couple of times, if needed, to release the Motor Assembly.
1: While there are a few differences between how we disassemble the machines, basic maintenance is the same.

2: Next step: the Glide, which fits in a channel on the front of the machine case. There is a Spring in the bottom of the Glide, a steel Pin to hold needle bars on the front and a slot on the back, where the Bearing of the Drive Mechanism fits. The Spring keeps some tension on the Bearing, which is why it is necessary to press the Glide in order to allow the motor to slide out of the casing.

3: The Glide was fitted to your machine case. Please keep track of it and the Spring. The Glide is intended to last the lifetime of the machine, but Springs will break and need to be replaced when they do. A spare Spring was included with the wrench and warranty papers that came with your machine.
Now that you have taken your machine apart you know how easy it is to do. (OK, Vivace is a little easier)

Make sure to clean all parts thoroughly before re-assembly.

**DO NOT** immerse the Motor Assembly or Cartridge, nor spray them directly with any cleaning / germicide/or liquid product.

**DO NOT** remove or loosen the Crank Wheel or Bearing on the Motor. **Doing so will void the warranty.**

There are some cleaning products which may discolor anodized aluminum. This is unfortunate, but only cosmetic and does not affect performance or product warranty.

After being disassembled, the anodized aluminum case may be safely processed in an autoclave. **DO NOT** autoclave any other parts of the machine.

After the case and parts are clean it is time to re-lubricate the machine.

**Cleaning Tips:**

**Spring:** Roll the Spring in a paper towel to help remove grease.

**Glide and channel:** Wipe Glide well with paper towels and use cotton buds to clean further. Use also for cleaning the channel.
We recommend:

**Grease** on the Spring and the Bearing on the Motor.

**Oil** on the sides of the Glide and in the channel it sits in.

**Using the grease:** Apply a small blob of grease on the Bearing of the Motor Assembly/Cartridge which fits the recessed slot of the Glide. Don’t over grease.

**Oil the Glide.** Place the Glide, with the Spring in place, in the channel. Apply small drops of oil on each side of the Glide, top and bottom edges.

Push the Glide up and down a few times to distribute the oil.

This may be repeated as needed, without disassembling the machine.

**Time to re-assemble your machine.**

With the Glide and Spring placed in the channel, hold the machine case in your hand so that the front is lower than the back.

*Original NeoTat instructions begin page 8
Vivace instructions begin page 10*

Apply a small amount of grease to the Spring Seat of the Glide, then slide the Spring into place.
NeoTat Linear: Original NeoTat RE-ASSEMBLY

1: Slide the Motor Assembly into the case. Press the Glide to allow the Bearing to drop into place, in the back of the Glide.

2: Place the Cover on the case, tucking the wires inside.

3: Tighten the set screws on the bottom of the case. 
   *Not too tight, just snug.*

4: Replace the back Cover: Start all (3) screws in their holes before tightening any of them. Be careful not to 'cross thread' the screws.

5: Once all three screws have been started you may tighten them, finger tight only.

Your NeoTat machine is now ready to go back to work. Plug it in and run it briefly to observe if it is running smooth and quiet, or if there is any unexpected sound or vibration.

As mentioned earlier, an excess of grease on the Spring will cause a popping sound, but this is easy to address.

Thank You.

Over-tightening can damage the motor.
1: Slide the Motor Cartridge into the case. Press the Glide to allow the Bearing to drop into place, in the back of the Glide.

2: Hand tighten, just snug- not too tight, the (2) set screws on the bottom of the case.

Over-tightening can damage the motor.

Your Vivace machine is now ready to go back to work. Plug it in and run it briefly to observe if it is running smooth and quiet, or if there is any unexpected sound or vibration.

As mentioned earlier, an excess of grease on the Spring will cause a popping sound, but this is easy to address.

Thank You.
NeoTat Linear: Original NeoTat PARTS

1: Original NeoTat Case
2: Glide
3: Spring
4: Motor Assembly
5: Crank Wheel & Bearing
6: Power Connector
7: Cover Plate
8: Clamp
9: Clamp Spring*
10: Thumb Nut
11: Nut Washer

NeoTat Linear: Vivace PARTS

1: Vivace Case
2: Glide
3: Spring
4: Motor Cartridge
5: Crank Wheel & Bearing
6: Power Connector
7: Clamp
8: Clamp Spring*
9: Thumb Nut
10: Nut Washer

*not all machines are equipped with this spring.
A FEW NOTES from the manufacturer- NeoTat Linear Machines have been on the market since 2005. We have had machines returned for service for a few, but repeated problems, so we would like to bring these to your attention.

DO NOT drop the machine, or allow it to fall. While the case is incredibly durable, the shaft of the motor can be, and often is, bent when the Glide hits a hard surface. This requires replacing the Motor Assembly or Motor Cartridge and damage is not covered by warranty.

The electric motors that we use are manufactured for us by a well respected motor company, and are built to high standards. However, they are not water proof. Exposure to liquids of any kind, even ‘over spray’ of cleaning products often results in corrosion of the motor’s case or worse, the parts inside. If you clean and lubricate your machine regularly and find evidence this is occurring, you may be able to avoid or minimize damage by changing the way you clean your tools. Again, damage is not covered by warranty.

When tightening the screws, particularly those on the bottom, do not over-tighten them. Just snug is fine. The motor can be damaged if the screws are tightened too much.

The Glide on your machine was fitted to the case. If it is ever necessary to replace it, the new Glide will work just as well, but may fit slightly looser.

The Crank Wheel and Bearing, on the front of the motor, are the mechanism that determines the stroke length. These parts are not replaceable, removable or interchangeable. Removing the Bearing and or Crank Wheel may upset the balance of the mechanism. Removing these parts constitutes damage and is not covered by our warranty.

Mechanically, NeoTat and Vivace Machines operate in the same way.

Springs- Red and Silver, are interchangeable, however if your machine seems hard to start at low voltages you would probably prefer the silver spring. If you find you are going through springs pretty often (and probably running at 11 volts or higher) try the red ones.

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Thank you for choosing NeoTat and Vivace Tattoo Machines.

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