

TECHNICAL SPECS

Welcome to the Swashdrive™ Gen 8 DCX Tattoo Machine another Fresh & Original Swashdrive™ Innovation. We at Swashdrive Developments have been pioneering and refining different technology in Tattoo machines forward since 1993. The Gen 8 machine is a further refinement of our well known swashplate machines, We figured out and found GIVE really does matter !

PLEASE NOTE The RCA Gen 8 version has the RCA plug turned up out of the box, ensure not to snag the RED wire on the frame when re-positioning RCA plug to preferred position. Once plug is in position, avoid any floating movement with the plug, must be tight, as contact is part of the circuit !

Running the Gen 8 & making Adjustments

The Gen 8 is infinitely adjustable having 3 controlled variables ;

- **Volts** = **Speed of the machine in cycles per second**
- **Give** = **Soft to hard adjustment of give Button (hit)**
- **Stroke** = **A combination of Volts & Give**

There are so many different ways to set up the Gen 8; outlining, shading & even the lightest wash. It comes out of the box setup with at mid give. Try an initial setup with a shading mag with softest give setting running @ 6 – 8 Volts or slower). The action of the Gen 8 is able to stroke more than the Swashplate stroke depending on needle bar weight and RPM (Volts) As volts are increased the anvil will stroke more depending on give setting & needle bar weight. For more information on settings etc please visit

www.swashdrivetattoo.com

Give Adjustment

Adjust give by pushing the opposite side of swashplate to increase width on give adjust side, then slide the adjust forward for a harder hit or backwards for softer hit. Each adjustment notch has a significant change in its hitting force. We recommend starting in the middle of adjustment.

This is a whole new technology in swashplate tattoo machinery, we are pioneering the way forward, and so we cannot say for shore were is the best setting for you, please do your own experimenting.



Lubrication

The speed oil supplied with machine is for the swashplate bearing only, do not under any circumstances apply to the electric motor, it will destroy it. Apply a 1 or 2 drops to the swashplate bearing every 60 to 100 hrs of use. The method to do this by attaching the needle applicator to the bottle, then carefully inserting the needle into the bearing under the inner seal lip and apply a small squeeze, adding to much of this oil will make the bearing click and by not applying any oil will eventually destroy the bearing.

Armature up Spring

has been added to the Gen 8 machine so in spool down the needles with stop in the up position to stop any needle snagging.

Needle bar tensioner

Comes standard with the Gen 8 machines and so eliminates the use of rubber bands. This part will retro fit on all Swashdrive machines Gen 4 and up and can be purchased as after market part.

Power supplies

We recommend to use Only Quality **dual knob lab** DC power supplies to power this machine. Although this machine will run on most single knob supplies, **NOTE** poor quality supplies will reduce life of the electric motor considerably ! PWM controllers are not recommended, (Low inductance motor SURGING may occur).

Calculation for machine speed

6.0Volts = 3000rpm which is = 50 Hz (50 Cycles Per Second)

9.0Volts = 6000 rpm which is = 100 Hz (100CPS)

12Volts = 9000rpm which is = 150Hz (150 CPS)

Setting power supply

Turn Volts to Zero first, then turn current (Amps) to full, vary speed of machine by altering/ increasing voltage only. This is important for the machine on start up as the power supply will deliver full amps at start-up then settle to what the machine needs to operate at desired voltage. Please do not exceed **12 Volt Max** . 12 volts is equal to 150 Hz (CPS). use of higher speeds are at your own peril. Do not exceed) 0.55 Amps @ 12 volts, this is 100 % duty cycle for the motor, the Gen 8 machine should run at 10 to 50% duty cycle, (0.04 to 0.28Amp).

Tube Chucking System

The tube chucking lock works to accommodate tubes from the standard 8.0mm and so needles may be loaded into tube before insertion into machine chuck. it has been designed so very light tightening of the nut is required for very strong tube clamping ! Note No more than ½ turn tension should be put on the tube clamp, do not use tools to tighten, **hand tighten only !**

Do not allow the following to happen, it may invalidate your warranty

1. **Do not use the speed oil or any lube on the electric motor**, this will cause motor failure and invalidate any Warranty.
2. **Do not use sprays directly on machine especially in around swashplate area, use iso clean wipes !**
3. **Do not** place machine into **Autoclave or immerse into an Ultra-sonic.**
4. **Do not run** machine with **un-tested power supplies.**
5. **Do not run** the machine above **12Volts DC.**
6. **Do not over tighten the wing nut on the tube clamp**, test how well it works by just tightening it by taking up the slack then another 1/2 turn **MAX** and its held tight !
7. **Do not exceed 0.9 Amps load @ 12V on electric motor, (10.0 Watt motor)**
8. **Do not disassemble machine**

Warranty The Swashdrive™ Gen 8 Tattoo machine has a **Six month warranty** from date of purchase. To which Swashdrive™ Developments will repair the manufacturing fault of the machine free of charge. However We do not cover return postage costs. Failure to the above do not list may invalidate your warranty. Proof/ Purchase invoice of date of purchase must be provided for any warranty claim.

Disclaimer Swashdrive™ Developments **warrantees** the manufacturing quality of the Swashdrive™ Gen 8 Tattoo machine. But under no circumstances is Swashdrive™ Developments in any way liable for any injury, infection or quality of any tattoo of any person that Swashdrive™ Gen 8 machine is used on. That is the sole responsibility & liability of the Artist / Owner of this Swashdrive™ GEN 8 Tattoo machine. **Updated information on the Gen 8 Tattoo machine may be found at**
www.swashdrivetattoo.com

