

The Tattoo Artist's  
**BLACK BOOK**

*A GUIDE FOR STUDENTS*



*BY RICHARD LEMAY*

# **The Body Modification Black Book**

**A Guide for Students of Body Modification**

By: Richard LeMay  
m\_hattertattoos@hotmail.com

I have decided to distribute this publication free of cost for the better learning of my fellow artists. I have worked on this book for two years with no monetary gain and ask that you may distribute this as much as you like as long as the information is not changed. This book is to help you and many others, please respect that idea and my hard work. Don't change the information. You may feel free to contact me for further information on tattooing via my email ( [m\\_hattertattoos@hotmail.com](mailto:m_hattertattoos@hotmail.com) ) or you may find me from time to time on my favorite tattoo forum, ( <http://www.ink-trails.com> ) For the record, I don't want to hear any crap about misspelled words, your getting this free and I don't care about grammar.

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I would like to thank everyone that made it possible for me to write this book,

I would like to thank Casey, (my loving fiancé), for putting up with long nights. I would like to thank my current apprentice Rustina Taylor for helping edit and for all her hard work, because I can't spell at all. Airik Moore, my second artist, thanks bro for running the shop while I'm occupied or just plain beat. I want to thank the half of my family that supported my decision to be a tattoo artist, and thank the other half that supported me in other ways. I also want to thank every friend and client I, and the Shop have. I could not have been what I wanted if not for you guys. I also want to give a big shout to all the moderators and members of [www.ink-trails.com](http://www.ink-trails.com) for dealing with me at my most stressed, you are a great bunch, and a wonderful site.

Last, I would like to dedicate this book to my son Psyron Gauge LeMay who is due in three months. Thanks for giving me something to work for.

# Introduction



Welcome to my world. My name is Rich LeMay and I am a "Tattoo Artist." I have been tattooing for longer than I have the ability to remember, and its all I have ever wanted to do. I have fought all my life to be a tattoo artist despite the bulk of the world telling me it was a pipe dream. I immersed myself in a world like no other. A battle field of the boundaries set by society which told me that I would be less of a person if I followed my true calling. I have worked my way from being all but homeless at the age of sixteen to operating several studios over the years and now own a respected tattoo studio (Madd Hatter Tattoos in Spencer, WV) at twenty-eight. My own trials and tribulations to see how far I was willing to leap from the edge of what is considered normal life was for the sake of being a tattoo artist. Not many tattoo artists really know what they have or the true level of dedication it deserves. It has been a long and arduous path which I would do again if it were twice as difficult. Tattooing has, for me, been the root that every piece of happiness in my life has grown from. I can only wish you the same fortune I have had.

As I reach the point in my life where I can finally say with pride that I am a tattoo artist (not that I just do tattoos for a living) I see the ideas and true nature of the art fading out and turning into something else. The tattoo

industry has become just that, an industry of profit not art. The true ideals of the artistry are fading away as the true tattoo artist becomes a dying breed giving into the next generation. My belief is that tattooing is the last true form of art left in the world. People no longer work to be professional painters unless they are painting a house. There are no more great poets, or play writes that walk among us. Now the last true form of self expression is turning into a drive through industry which is based of everyone thinking that being a tattoo artist makes you the same ranks as a rock star. I have happily written this publication to share with you the opinions and facts I have learned over the years to help instill the next generation of artists with a guide of technical knowledge and the true meaning of what it is to be an artist. I can only hope that the next generation of tattoo professionals treats this industry with the strength and integrity that it deserves. Through proper dedication and sacrifice you will find a joy that cannot be explained by a profession of any other type. You must understand that becoming a true tattoo artist requires all of you; your whole way of life has to be discipline and dedication to what you want to become. There are no part time tattoo artists; you do not stop being a tattoo artist when you go home at night. Your artistry and the quality of who you are as an artist is judged by three things alone, your dedication, your personality, and your technical knowledge of the lifestyle you lead. I hope it will bring you the happiness and peace it has brought me. The last true form of art is left in your hands, treat it right.

# Chapter 1



## History and Basic Information

Tattooing the skin is the oldest profession in the world. The Japanese, Aztecs, Mayans, Aborigines, and the Africans all had tattoos. The oldest recorded human to date is referred to as the ice man. He was found under what was left of an iceberg near the Austrian border in Italy. Carbon dating places the ice man around 5,300 years old. This was a cultural surprise because he had a few tattoos. Before his discovery, it was popular belief that the oldest culture to tattoo was Egyptians over 3,000 years ago. So the ice man out dates the Egyptians by 2,300 years. The ice man had a small cross

behind one knee and above his kidneys there were a few tattooed lines about 15 cm long. The first sign of tattooing in the west was brought to us from Tahiti by a man named Captain Cook in 1771. The Tahitian word for tattooing was "Tatau" which was adopted because it's the sound of the traditional tattooing. Initially the traditional tattoos were applied by a stick with a comb like head attached to the end. They used another stick to tap the first; this achieved a stabbing motion. This ancient type of tattooing is rapidly gaining popularity once more. While receiving a tattoo you would not honor your experience if you showed any sense of pain or discomfort and the practice usually was a ceremony that lasted for days often resulting in shock for the patron.

The tattoo machine we all know and love today is nothing more than a modified version of the first electric engraver. In the US we first started seeing tattoos regularly on sailors that had been to distant lands. They brought them back as permanent souvenirs. In the 1800's and 1900's sailors navigated there voyages by the stars and constellations. The "Nautical Star" that you see on every teenager trying to fit in with the crowd is one of the oldest tattooed symbols. It symbolizes the North Star and means that the one adorning such a tattoo is looking for there way. Many military men are known to put this design on there trigger finger to help guide there shot in combat.

30 years ago tattoos were just for bikers and prostitutes, at least this is the common idea. 15 years ago they were just for rock stars. In today's society more people have a tattoo than not. I read a quote once from a famous musician that said "If you want to be different, then don't get a tattoo." If you walk into a room of ten strangers then nine of you will have a tattoo. Now, as time progresses I find myself tattooing doctors, lawyer, teachers, you name it. Once I gave the city I live in a discount because most of the sheriff's department came in to have there shields tattooed in one weekend. It's funny to me that all of these people have tattoos yet you still are heckled by strangers for having them. I have my own theory on this subject. I think that people have this psychological need to hate something. In this day and age of political correctness, I think that tattoo hating is just the last excepted form of racism. It's the only time you can discriminate against some one for the color of there skin and not have a crowd of people say, "Dude, that's not cool!"

The history of the tattoo artist is another story. There are many famous tattoo artists but only a few of them are respected. There is an unspoken code among tattoo artist. This code is based on respect, loyalty and secrecy. In fact it is a fear of mine to be shunned in the tattoo community for writing this publication. Thankfully my willingness to teach out weighs my need for popularity. There are a few different types of tattoo artists. First you have the scratchers. Scratchers are your buddy's friend that tattoos out of his or

her garage. They are called scratchers because that's what they do. They buy a tattoo kit from some hack company or online and pay ridiculous prices while thinking they got a great deal or they buy from some online auction. There are only a few companies that sell to the public and they mark up prices so a hundred dollar tattoo machine goes for about four hundred, and a fifty dollar machine goes for about four hundred, while out of date machines that should be disposed of go for about , oh..... four hundred. You get the idea. These companies are part of the problem. They will sell anyone a tattoo rig just because they can take their money. They don't think about the fact that they are selling people (that have no clue what they are doing) the ability to give their loved ones hepatitis.

Scratchers like to think they are tattoo artists because they saw some famous chick on TV tattooing. They think they can watch a few re-runs of tattoo shows and presto, instant VanGough. The truth is yes, scratchers will give you a tattoo for twenty bucks or for a case of beer. While they might have a small idea of how to draw a pot leaf, or the Tasmanian devil, they also have no idea how to not give you hepatitis or some other disease that you can pass to your wife or your children. Sure you can save a few bucks. But you will end up having to pay five times as much to have it covered by a real shop. While you have no idea how many people before you have had that same needle under their skin. So, basically, they're called Scratchers because they carve a wound in your leg, or wherever, in the shape of a "yin-yang", just for you to get the pleasure of having a yin-yang shaped infection. You cannot tattoo on self education alone unless you have at least ten years experience. You need a proper education. Unfortunately, many artists think that tattooing for a few years gives them the right to teach, so be careful who you get an apprenticeship from. Another teacher to watch out for is the guy that tells you the old ways are the best. Like anything technology improves with time, you have to learn and change with your environment. If you stop learning, you become out dated. By this same logic, modern medicine would still be using leeches to cure every thing.

Next you have the apprentice. These guys work hard before they even start. It took me a few years to talk someone into giving me a shot. Most artists will not teach. So you have to fight tooth and nail to actually get someone just to say yes. A real apprenticeship takes about two years, give or take a few months. These guys work hard. They get to do everything the artist doesn't want to do. Usually, you will work for six months just taking notes and learning sterilization procedures before you ever get to touch a machine. Then one magical day arrives and you get to play with the machine, by taking it apart and cleaning it every day for another six months. Every one fails to realize that tattooing is 90% sterilization and technical knowledge while only 10% artwork. You have to know how to clean a surface, and how to know



you're not going to give your next client something that will kill them. Basically, for the first year you will answer phones, study, clean and mop floors, study, Clean windows and counters, study, sterilize equipment, and study some more. You always hear about tattoo artists treating there apprentices like shit. Making them mop the floor with a toothbrush and do many vile jobs. Although I won't do this, it doesn't mean it will not happen. The art of tattooing is one of patience and respect. You have to learn patience and earn respect before you can do anything.

Really the idea is similar to the military. We strip away everything you think you know and teach you the right way. It is a hard and long process that must be done in order for you to be a real artist. The worst part of the whole process is not only do you not get a pay check, but most shops charge you for the education. Apprenticeships can be upwards of ten thousand or more. Me personally, I don't charge but I don't pay either. The way I see it is the student earns their way by doing all the cleaning and the shit work they have to do to learn anyway. I get labor, and they get an education. The only difficult part of finding a free apprenticeship like this is that some hack shops will take you in and use you for free labor. Either they won't teach you much and wait for you to get mad and quit, or they will fire you before they think you are going to start asking for money. So as hard as it is to get an apprenticeship, please don't go to the worst shop in town just because they are the first ones to say yes. If it's a crappy tattoo shop then you'll just learn how to do crappy tattoos.

Once you complete your apprenticeship you will be one of two things, a tattoo artist or a tattooist. There is a big difference. A tattooist is a person that has had a formal education in the area of tattooing, but is very limited in what they can do. This is the stage where you will be caught up with the idea that doing tattoos is the same as being a rock star. Many tattooists will never pass this step. Always know your limitations. Only do what you know you can do and nothing more. If you try a portrait and fail you will loose all reputation you may have, and this is a word of mouth business. A tattooist is a tattoo technician. Some one that knows, understands, and practices proper technique in the area of tattooing, but can only do what a client brings in. For example, if someone wants an image no matter how complicated, then a tattooist can perform that procedure, and make the piece look exactly like what's on the paper. There is nothing wrong with being a tattooist. It's a strong level of professionalism. But you have to know your limitations. Stick with what you can do, turn down what you can't.

A Tattoo Artist is some one who has had the technical training in the area of tattooing, and can do everything a tattooist can do. Although the tattoo artist can take an idea, or a basic thought, twist it, look at it in a three dimensional view, and make it a piece of living art. In this stage you think you

are a professional, the real deal. Think of it this way. A tattooist would be a person who can draw cartoons and not color over the lines. Where a tattoo artist paints the "Mona Lisa" and never had any lines to begin with. To be a tattoo artist you must realize that your art is not on paper. It is not, nor will it ever be flat. You have to make it curve and bend to fit your client. It has to fit their body just as much as it fits their personality. To be a Tattoo artist you can not just do small pieces. You have to work hard and learn and practice. You have to earn the trust of your patrons so you can stretch your legs artistically. As an artist you will have more ideas than you can pronounce, but you must not push your ideas on your patrons. Only suggest them and let your patron decide.

If you take an idea and push it on your client then in the end they will end up getting work they don't really want. Every custom piece you should present as two or three ideas, all from completely different points of view and different styles. Your goal needs to be not to tell them what to get, but to present them with enough ideas that they can be just as much a part of the process as you. Most people when they want a piece of art not flash (standard tattoo designs) they have no vision of what they want. They come to you for the vision. They come to you so you can make it real. Sometimes it's hard to remember they are not an artist like you. Suggest, not decide for them. The fact is that the difference of a tattooist and a tattoo artist is a state of mind and creativity. Many of the world's best tattoo artists spent years as tattooists before they progress. You have to crawl before you can walk, and you can not rush into this change. It occurs with time. This is where you need to stop concerning yourself with studying flash and learning what real art is about. I strongly suggest taking up traditional painting. Study Rembrandt, DaVinci, and Monet. They are the backbone to real art.

The Next type I would like to talk about is the pretend Tattoo artist. What I call "Candy Artists". We live in a day and age where everything under the sun that can sell in a commercial is put on TV. Now days we see Tattoo "shows" on television. This, I think, and most real Artist will agree, is making fun of an industry we have worked hard to get our foot into. These shows do nothing but teach the wrong way to do everything. They are a learning tool of what not to do. These shows are based on ratings and nothing else. Don't think that what you see on TV is in anyway what a real shop is like. Thanks to these shows every kid in America is making his or her own home-made machine and screwing up his or her friends. Now everyone thinks they are a tattoo artist. If you see a TV show with people shooting each other do you shoot your friends? Then why tattoo on them?

These shows are hurting tattooed America more than they could ever help. The only thing good they are doing is showing more people tattoos that might not otherwise see them, thus removing some of the stigma surrounding

tattooing. What are the negative effects? Everyone wants to give any one a tattoo; instead they just pass out free hepatitis. People come into real tattoo shops for the first time expecting to find what they see on TV and feel overwhelmed when they need to be relaxed and think about what they are getting. These Shows tell the public incorrect tattoo aftercare, which will cause them to ruin their hard earned tattoos. Adults are letting their twelve and thirteen year old kids get tattoos that they will later regret because they saw it on TV. Tattooing is the last true traditional, untouched, and un-corporate form of art that the world has left and it is being destroyed. The Tattoo artist is a dying breed now. People want to tattoo so they can get on TV. Tattoo artists will not be rich. We do it for the art, if you want to do it for the money then go home, because the real artists are laughing at you.

Something no one seems to understand is that these shows are scripted, just like old reruns of "Matlock". A certain artist went on one of these shows to be a guest artist and they tapped him saying hello six times. It is a show. This is not "MacGyver". He cannot make a CD player out of a pocket knife, a piece of wire, a coconut, and a toothpick. Just like someone holding a tattoo machine on TV is not an artist. If you actually go to them to get tattooed then you should know a few things. I personally have a friend that got a tattoo by them. At any other shop in the world the highest price for a four letter word with no color and letters one inch by one inch tall should be ranging from fifty to seventy-five dollars. My friend paid two-hundred and fifty dollars. Now you tell me where there priorities lay. I actually use these shows as a teaching tool. Every time one comes on, my apprentices have to watch it and make a list of all the things they do wrong. Not just the small stuff, but the things that my local health department would shut me down for. Here are a few of many.

More times then I can count, these "tattooers" have been in the middle of a tattoo with bloody gloves on, have grabbed a bottle of pigment, "ink," and refilled there ink cap. This means that they just put blood on the ink supply that everyone uses. If that person had a disease then everyone that will have a tattoo from that bottle will have the same disease, and bottles last a long time. Another one is they never remember to clean the clip cord, (the wire that gives power to the machine). This means that again they are spreading disease. They also ware black latex gloves because they look cool. Black gloves means you can't see blood, or holes in the gloves. They don't know if they are giving them selves a disease. The last I will mention of many, many more, Is speed stick deodorant. They use speed stick deodorant to apply there carbon pattern to there clients skin. This means that any disease that a person might have is absorbed into this stick and applied with the pattern on the next client. With the stroke of a single deodorant stick you can give someone six or more different diseases at a time! Not only are they spreading

disease, but there doing so in mass quantities. This is the land of television. Your watching some one get a tattoo by moneygrubbers and there getting away with things no one else is doing, but your also watching them give disease to all these people that could very well pass it on to there children. Just say no to fake, joke, money-grubbing "tattooers", that wouldn't even give you the time of day for two hundred dollars.

After all the glimmer and the spot light of being a tattoo artist fades and you age into your profession you will be on your way to becoming the most sought after type of artist, a Tattoo Master. If a true tattoo artist can paint the "Mona Lisa", then the master can paint the "Last Supper" blind, and on the head of a nail. Eventually the idea of being a tattoo artist will become dull, and the rock star point of view will make you laugh at the thought that you use to see it this way. Doing tattoos, being a professional artist will make you a popular person sure. After time the life a "Tattoo Guy" will grow old, the bars will get boring and all the friends you've made are just asking for free work. Then you will see the only thing that matters when you go home at night is your own feeling of pride and accomplishment. If you don't take true pride in what you do, then in the end you got nothing.

To be a true master is almost a state of Zen, a feeling of nirvana, perfect. When we first think about tattoos we want to be the one everyone talks to at the party. We want to stand out in the crowd, and we want everyone to know our name. This is a fool's wish. The only way to achieve such "greatness" is to change your entire life to surround your art. To truly be good at what you want to do is dedication and sacrifice. There are a few rules that if you can not do then you need to turn around and find a new career. No drugs or alcohol. This doesn't mean that while you're working, I mean ever. Drugs and alcohol will make your hands shake. You take more to get them to stop shaking; you don't take them you shake worse. You have to be clear minded. You have to be level headed. You cannot work if you are not at the top of your game. Think of your studio as your church. A sacred ground meant for greatness. If you come in with a hang over you will not have the patience or the clear mind needed to perform to the best of your ability.

I drug test all of my students. They know that one time of use means all of their hard work is over. They will loose their chance, gone forever. You think Tattoo Artist then you think, Drugs, Biker, Sex, and Rock and Roll. This is all wrong. Drugs ruin your mind, and your body. You cannot perform under the influence. You cannot take them at home because you think about them while your working and they still affect your steadiness. Drugs and alcohol cause you to loose motor function. What good is a tattoo artist with shaky hands? Wannabe be a biker, Find another lifestyle, Tattooing is not for you. One bike accident and you will damage your hands. Ask anyone that rides and they will tell you that the first thing you do out of instinct during an accident

is to put your hands out. Years of work and dedication will be out the window.

So you want sex, sorry. If you chase every piece of ass that walks in, it will be your reputation. Your clients will stop coming around because they no longer feel comfortable in your shop. They will not be comfortable taking off clothes that have to be removed for certain locations. If you see something more private of a person's body then you need to have no reaction you cannot seem prying or attracted. You have to remain modest, and never ask anyone to remove clothes that don't have to be removed. If they can't trust you, then you have no clients. It would be similar to the best basketball player in the world not having a ball or basket. Ok, so you want to use being a tattoo artist to bring company home from the bar? What kind of people go to the bars, or clubs? Your clients do. They see you drinking, or taking home someone, your reputation is a drunk and promiscuous. They see you drinking; they will not come to you. You're a Drunk! Even if you only have one or two beers, you're a drunk in their eyes. Do you want tattooed by a drunk? You take home people from the bar for sex. Every time you have sex with someone you are having sex with every person they have slept with in the last ten years. This day and age you can get anything, anytime. If you get Hepatitis, HIV, Gonorrhea, Syphilis, or any other type of STD, you will not be allowed to tattoo. You will be putting your patron's lives in danger.

You are dealing with open wounds all day. You are performing a medical procedure on the very people you depend on to feed your family and practice your art on. All gone, all down the drain, just because you wanted to go get laid. Rock and Roll, sorry. If you are working on a portrait and you're listening to heavy metal, then by nature your portrait will look sinister. You must play music accordingly to how you want your work to be done. If you're tattooing something evil then metal all the way. If you are doing a memorial piece or a portrait of someone's daughter then tone the music down and relax. Your hand will move to the music you hear. There is nothing you can do about that, it is our natural reaction. You will be nothing more than a tattooist at best. Reach a higher level, be something great. It takes hard work and dedication. It takes sacrifice, and respect. Not just respect for the ones you are working on, but respect in your self more than anything else. Follow the rules or go home. You're just cheating yourself if you don't. I have been tattooing for thirteen years and I'm still another ten or fifteen years away from a master level.

# Chapter 2



## Tattoo Meanings

Over the years tattoos have become little more than decaling the human skin. Most people get a tattoo and spent there whole life never knowing the true meaning. Others are confused on the meanings of tattoos and get something that might have a completely different definition. Tattooing has been a part of every culture known to date, and each culture has its own meanings for different images. Here is a list of tattoo images that have meanings you may be surprised of. There are so many images to choose from, I am forced to pick but a few of thousands. When you offer a tattoo to a client, or choosing one for yourself, you should always research the true meaning.

**Apple-** An apple seems like a tattoo a teacher would get, but it really is a symbol recognizing the easily tempted nature of man. It is a symbol that is brought to us by the story of Adam and Eve in the Christian Bible. The story is the down fall of man was brought on by the eating of the forbidden fruit.

**Arm Band-** Arm band tattoo just seem like a nice decoration for any one, but they are a symbol of slavery and imprisonment. The tribal arm bands you see today are reminiscent of the identification markings between African tribes,

while barbed wire is a symbol of spending time in prison or being a slave.

**Birds-** Birds are colorful animals that fly everywhere they go, most would say they are a symbol of freedom. They are in fact a symbol sailor used to signify coming home due to the migratory patterns of most birds. The best depiction of this is the swallow or sparrow. Often you will see sparrow and swallows tattooed holding or with stars. This is a symbol of finding your way in the dark, since most sailors spent months at sea and the night was the most dangerous time to sail due to not being able to see any obstructions in the water.

**The Cat-** A tattoo of a cat can be for a female that loves her pet, and a symbol of attention. For the Egyptians the cat was a symbol of death. Though to be a sacred animal, the cat was believed to be able to cross from the land of the living to the land of the dead. Many past cultures see the cat as a messenger from the dead to the living.

**Daggers-** A dagger can symbolize many things such as revenge or getting stabbed in the back, but the true meaning of a dagger is from the Japanese culture. When a Samurai warrior failed his king on a task too small to commit Hari-Kari (honorable suicide) they would be required to remove the tip of a finger to show sympathy for the failure, thus making a dagger a sign of loyalty.

**Dragon-** The American dragon is a symbol of strength, but the Japanese dragon is a symbol of wisdom and intelligence, often depicted with a tiger along side it to symbolize wisdom and beauty.

**Eye-** The tattooed image of an eye would seem to be a symbol of awareness, though it can be, it was first tattooed on prisoners by other prisoners on their backs against their will. The meaning of which is to show that the tattooed prisoner was an informant and also symbolized they have been sexually assaulted by another prisoner.

**Fairy-** The fairy is a mystical creature most use as a symbol of their childhood. The oldest meaning behind a fairy tattoo is that fairies would often grant wishes to the ones that could catch them making all the captors dreams come true while causing more problems than they helped. The Irish later referred to them as leprechauns.

**Fans-** Most think that a tattoo of an oriental fan is a sign of beauty due to the geisha that never leaves hers behind, but in fact it is a tool to ward off evil

spirits.

**Fish-** Fish tattoos are often viewed as a sign of fertility, this is not entirely wrong. The Celtic Salmon of wisdom might say other wise though. In the Japanese culture, the Koi fish is a symbol of strength and beauty. The Koi was a plain fish till the Japanese breed them to be bright colors, and the legend of the Koi is that every Japanese dragon started as a Koi fish that had to jump over a rainbow to change into a dragon.

**Flags- Flags** today are a symbol of patriotism, getting an American flag tattoo supports your country. In the past, other cultures would get a flag tattooed of a rival country to show disrespect and that the country the flag belonged to was an enemy.

**Fleur de Lis-** The Fleur de Lis might be the same symbol we use for the boy scouts, but it really is a sign of the French Monarchy, and so represents liberty.

**Ganesh-** Ganesh is the Hindu god that has a head of the elephant. The meaning of her as a tattoo is that of Protection and righteousness.

**Gecko Lizard-** The gecko lizard is a sign of regrowth and survival instinct do to its ability to loose its tail and later re-grow it in order to distract an enemy to save its own life.

**Grapes-** Grapes are a symbol of the Greek goddess of wine named Dionysus. When you see someone sporting a grape vine up there leg thinking it means growth, they are really telling you they are a drunk.

**Griffin-** A griffin is a mythological animal passed on from the Middle Eastern religion called Zoroastrianism, but was later used by the Christian church as a symbol of the two sides of Christ.

**The Eye of Horus-** Horus was an Egyptian god whose symbol is the left eye. Horus is the god of war and protection. Any one thought to have the symbol tattoo was believed to be protected by Horus himself during combat.

**The Eye of Rah-** Rah is the Egyptian god of the sun symbolized by the right eye or opposite the eye of Horus. The symbol of Rah means you warship life or creation of life.

**Kokopelli-** The Kokopelli is thought by most cultures to be a messenger of



music do to its depiction of an Indian man playing a flute. What they don't tell you is the most of the actual depictions of the Kokopelli is adorned with very large male genitalia. It's actually an Indian sign of fertility.

**Lotus Flower**- The lotus flower is often mistaken for a sign of beauty. The lotus flower is a very pretty flower that grows in murky and muddy water; it is a sign of spiritual purity through advertisement.

**Nautical Star**- The "Nautical Star" that you see on every teenager is one of the oldest tattooed symbols. It symbolizes the North Star and means that the one adorning such a tattoo is looking for their way.

**Spider Web**- Some say the spider web on the elbow is a symbol of taking a life. The true meaning of the spider web tattoo is more for the bikers, it's a symbol of crashing a motor cycle in hopes that the spider webs will catch them the next time to keep the rider out of harm, figuratively that is.

Those are some of the image meanings I thought you would be surprised about. There are just so many images to name, I can't even think of a fourth of them. Here are some more standard tattoo meanings for images we see every day. Hopefully you will get a few ideas of be able to use this to better assist your clients on finding the tattoo for them.

**Anchor**- Safety, hope and salvation, planting ones own roots such as having a family.

**Angel** - Protection, guardians, keepers of dreams

**Bat** - Longevity, happiness, mystery

**Bear**- Good nature, good luck, also ignorance

**Bull** - Fertility, power and strength

**Butterfly** - Spiritual immortality, temporary element of life

**Centaur** - Knowledge and nature, spirit of womanhood

**Chain** - If broken it means freedom. If intact-slavery

**Clown** - Laughter, tears, uncertainties

**Clover** - Good luck or a sign of Irish nationality; Feminine power

**Cross** - Sacrifice, love and salvation, Christian Symbol for faith

**Crow** - Revival, Gods messenger, Return From the dead

**Devil** - Mischievousness, urgent desire for sex

**Dog** - Man's best friend, loyalty, trustworthiness

**Dove** - Universal symbol of peace

**Dragonfly** - Affinity with the Spiritual Life. Illusion

**Feather** - Creativity, rebirth and spiritual elevation

**Frog** - Positive symbol of pregnancy, Also a symbol of change in ones own life

**Hawk** - Self-discipline

**Heart** - Love, provided it is neither bloody nor torn into pieces

**Horse** - Friend to man, kingship

**Leaf** - Joy, rebirth

**Lion** - Might, awareness, immortality, bravery

**Mermaid** - Temptation, seduction, materialism

**Monkey** - Wisdom, knowledge, or evil powers

**Moon** - Varied rhythms of life

**Phoenix** - Rebirth, Rising from ones own ashes

**Reaper** - Death or one has faced death

**Rose** - Fertility, pagan sign for womanhood

**Scarab** - Strength and rebirth

**Skull** - Courage, Death, Poison

**Snake** - Temptation, Adaptive ness, knowledge, and wisdom

**Spider** - Creativity

**Sun** - Sacredness of life. Warmth, nurturing

**Sword** - Represents justice, honor, energy

**Tiger** - Fierceness, strength and power

**Turtle** - Fertility, long life

**Unicorn** - Chastity and purity; unattainable

**Wolf** - On the hunt, One's own wild side

**YinYang** - Harmony and totality versus Evil and chaos, also is a symbol of balance

## Chapter 3



### Lifestyle

The problem is that thanks to television and most tattoo magazines everyone thinks that being a tattoo artist is like being a rock star without the guitars. Sorry to tell you the truth, but here it is. There will always be the biker tattoo shops that give ink for blow jobs. It's sad but true. These guys are a joke to the industry. These are the guys that everyone is laughing at and making fun of, often to their face. These are the same people that tattoo for drugs, or are only concerned with their bank account. Yes you can make a lot of money tattooing. If you cut corners on supplies and equipment, and you rob every client that walks in your door. If you do that then your clients will only walk in and back out once in their life. There are too many real artists out there these days that will take your clients and treat them right.

What does it take to be a real tattoo artist? It takes dedication. This means no drugs or alcohol. This means bed by ten every night. Bars, clubs, and strip joints all off limits. You have to be able to push yourself to a higher level. As you progress, everyone will praise your work and tell you how great you are. You have to be able to say, "I'm not where I want to be yet." You

can't give up. You aren't allowed to say, "I know well enough." There is no good enough. This is hard work. You will ruin relationships. Marriages will come and go. You have a slim and none chance of finding a significant other that will understand what you do. Most will just get jealous and fight with you, or just leave. You will see the worst of people and you have to look for the best. You will want to quit. After all the stress, and frustration, you still have to say no to drugs and alcohol. You have to dedicate your mind, your heart, soul, and your body to the one thing you want most. Professional athletes don't have shit on us.

Sounds shitty, why would anyone ever want this job? Tattooing is the greatest job on earth. You get to do things that most people would die just watching. You get to leave your mark on life. Tattooing is true life after death. Every person you tattoo on will remember who you are if you treat them right. They will tell your story to their grandchildren after you are long gone. Your artwork will live, walk, and talk to hundreds of people long after your death. This isn't a painting. It's not paper. You're marking someone's skin in a way that they will carry a piece of you with them for the rest of their life, and they thank you for it. You get to build something and watch it grow larger than life. Unlike a building, it can never be torn down, unlike music, it can never be forgotten. You will truly help people. These days in a world with so much pain and so many problems, we all need help coping. Tattooing is addictive more so than any drug. The reason is that it makes it all better. When you're getting tattooed the world fades away. Your major problems seem dull in comparison. The ones that get work on a regular basis are what we call collectors.

To a collector you are their family. You get to know them so well that you will become friends with many of your clients. Several of my clients have asked to attend my upcoming wedding, and I will be honored if they attend. You will truly make an impact on the lives of everyone you touch. Through conversation and hard work, tattooing to a collector is better than any therapy they could ever have. Done the right way, and for the right reasons, you will be a part of something that is so much bigger than you. Tattoo conventions are gatherings where hundreds of people flock to show off their work and to get new work. When you walk through the door, it feels like a paradise. Herds of people that think and feel just the way you do and all of them welcoming you like a long lost relative. So what does the hard work do, you get to be something that only five or ten percent of the world will ever be, whole. You find your place in life and truly belong somewhere. Once achieved, you can never have that taken away from you.

The ones that just tattoo for money, fame, or just to be the cool kid will never know the true meaning of the term "Tattoo Artist". This to me translates to respect, loyalty, and appreciated by many. All the while getting

to do exactly what you really want to do with your life. You won't get rich, but if done right you will be able to support your family and not have to do anything else but tattoo for the rest of your life if you so choose. Here are the rules and code of a true tattoo artist. Following these rules is the difference between a Scratcher and an artist.

## **Tattoo Artist Code**

**No drugs or alcohol**, keep a clear head.

**If you want a mate, keep a good relationship**. You can't think level headed if you're fighting with your significant other.

**Live your reputation:** No bars, No clubs, what people see of you is who you are to them. Be a part of your community.

**You must show respect at all times**. Be polite to everyone, answer questions no matter how childish they may seem. Help a stranger at least once a day. Respect your self. Dress well, not grungy. Clean clothes, well kept hair. You can still look like a tattoo artist but don't smell as bad as they expect you to. You are trying to be a medical professional.

**Take care of you hands!** They are your biggest tools. No fighting, No Skate Boarding, No wounds of any kind. A cut on your fingers is an open door for you to get a disease. Taking care of your hands can save your life.

**Get sleep and eat well**. You need eight hours of sleep every night before you work. You have to be rested. Anyone that has tattooed can tell you that it is physically demanding work. It's hard on your hands, your back and you mind. Be healthy.

**Know when to stop**. This is a field of great perfection. It takes dedication, and sacrifice. It's not for everyone. If you can't do it then have enough respect for the ones that work there whole life to be able to. Don't just do some of the things. Don't pick and choose. All or none.

**Never steal someone else's work**. Tattoo artist, not tattoo copyist

**Never talk bad about another artist or shop**. Better to be presumed a

fool then to open your mouth and prove it. If someone's work is bad, then their work will show that, you don't need to help.

**Do custom work once.** If you design a piece for someone then give it to them and them alone. People that pay for custom work doesn't want to see it on their buddy down the road. That's treating your patrons poorly.

**Never over charge.** Just because you think someone will pay more does not give you the right to charge that much. Not everyone knows what a tattoo is worth. Don't prey on the uninformed.

**Never lie to your patron.** If you've been tattooing for a year don't tell them ten. They will respect you more for the truth, and never come back for a lie.

**Never cut corners.** Remember, the next one in the chair could be your wife, child, mother, or you. Be clean and safe.

**Take a Zen moment.** Never rush, take your time and do your best. It does not matter how many people are in line, you can only tattoo one at a time. Before every tattoo take a minute before you start to center yourself and calm down. If you smoke cigarettes, then smoke. If you meditate then do that. Just take the time.

**Never get personally involved with a client.** If you try to sleep with your clients then you will get that reputation and others will view you as a joke.

**Never show attention to someone's body if exposed.** Your job as an artist is to make the client comfortable not to flirt or satisfy your sexual wants.

# Chapter 4



## The bad Guys

Now that you have an idea of what it takes, let's start learning. The most important thing you have to know is sterilization. What kills germs, and what doesn't? Tattooing is 90% sterilization and technical ability while only 10% art. The health department doesn't want you to know this but they really don't care if you can't draw a stick figure. As long as you're screwing up people and not spreading disease they could care less. These are the basic Diseases and Bacteria you have to guard against in the area of tattooing and piercing both.

- **Hepatitis**
- **Human immunodeficiency virus (HIV)**
- **Chlamydia**
- **Staphylococcus aureus (Staff Infection)**
- **MRSA**

There are many more diseases and bacteria's you will be dealing with.



These are just the most common. If you can guard against these, then everything else will be taken care of as well. Something I would like to point out is that bacterial infections do not come from tattoo shops. You always hear about some chick saying her tattoo from such and such shop got infected so they suck. No! They might suck, but they did not give you an infection. Bacteria grows on the skin naturally. Everyone has it. If you take a person and remove every bit of hair, skin, meat, blood, and bone you will have an exact replica standing in front of you made out of bacteria. This is right after they get out of the shower. I know, Sexy huh? The point is that a bacterial infection is the massing together of bacteria. The difference between bacteria and a virus is you can cure bacteria, and only treat viruses. Diseases are viruses. Ok, so what does that mean? Well, it means that the chick with the infected tattoo did not take care of her tattoo. When you don't treat a wound, bacteria will grow. Washing it kills them. If the bacteria has been there long enough for her tattoo to get infected then she has not been taking care of it. Now she's trying to blame some poor shop for her being lazy. In the thirteen years I have tattooed, I have only seen three infected tattoos in person. The first was an allergic reaction to the metal the needle was made from, (this is very rare.), and the other two were from neglect of the client. Tattoo shops don't give out bacterial infections. Tattoo shops need to worry about diseases. If you got a tattoo and now you have Hepatitis, then go to the health department and register a complaint. Just remember that it can take any where from six to twelve months for a virus like Hep or HIV to show up on a test, and you have a better chance of being hit by an airplane while walking on the sidewalk then you do of getting a disease from a properly ran tattoo shop. So how do we get such a good record.....? It's what we do.

You always hear about these diseases but no one really knows what they do or how they are really spread. All blood born pathogens are spread by two ways, Direct and Indirect contact. Direct contact means that contact is blood to blood or seamen to blood. An example of direct contact is unprotected sex. I can't tell you how many times I have heard people say you can't get Hepatitis from a blow job, it kills me. Fighting is also form of direct contact. You hit someone and cut your hand open while wounding them, you mix blood. Contrary to popular belief anal and oral sex can pass disease just as easily as intercourse. Another form of direct contact would be if you got someone's blood in your eyes. This means if you see someone spraying blood at a car accident the best thing you can do to help is call 911, not rush over and swim in his pr her blood. Not very chivalrous, but at least you get to live a healthy life.

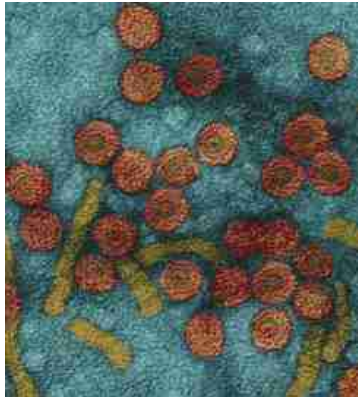
A good example of this in a tattoo shop is the spray water bottle. Most artist spray a tattoo with water to clear away blood and excess ink during the process. This is very wrong. I even catch myself doing it every once in a while.

The force from the water leaving the bottle will push the blood and it's contaminates into the air. If you're standing in the path of it, or if you have an open window while a breeze is blowing, you will blow this stuff right in your eyes and mouth. It's scary how easy it is to contract a disease. The worst form of direct contact in a tattoo shop is a failure with a glove. We as artists wear latex gloves to guard against contamination. Every one gets loose cuticles on there fingers. The little piece of skin at the top of your fingernail that gets sore and sometimes bleeds is called a cuticle. If a glove has a small hole in it and blood makes contact with that little, tiny sore, you have been infected.

Now here is some food for thought. Anyone who has had a tattoo in the last ten years has seen the artist use ten pounds of "A+D" ointment or "Vaseline" during the tattoo process. They use this to seal the tattoo while they are working on it. Not only is it completely unnecessary, but it's dangerous. If you remember high school health class, they always tell you to never use oil based lubricants with condoms. Why? Oil breaks down the composition of latex. This means that the condom won't work anymore. Latex gloves are no exception. The ointments are oil based and the gloves are latex. That means that those guys are tearing down the only thing that separates you and them. Ok, so you say as a client, "Hey, I don't have anything!" Good. But how sure are you of them being clean if they have tattooed for years? Well maybe they change gloves often enough for it not to have time to break down. Wrong! Latex is no longer a disease barrier after three minutes of oil exposure. After three minutes, you might as well have unprotected sex with the old biker guy that just did your tattoo. If you see this then leave, don't play Russian roulette for the sake of a new barbwire armband. Many artist also use Nitrile or Vinyl gloves, so there ok right? No, Nitrile and vinyl do last longer with oil exposure, but they only last twenty minutes at best. So either way oil based is bad.

Next we have Indirect Contact. Indirect contact is contamination through a middle man. Say I have a cut, and then mop the floor. Blood is a common thing to mop up in a tattoo shop, although it's in small amounts and usually mixed with pigment or water from over spray. The blood on the floor is contaminated and gets on the mop. I mop and it gets in my cut, presto; Hepatitis. Another example is a contaminated (dirty) needle being stuck in an uncontaminated person. So if someone uses an old tattoo needle or you accidentally stick yourself and pass a disease you have indirect contact. Another form of indirect contact is if a tattoo artist runs out of pigment (ink) during a tattoo. If they just grab the bottle with a bloody glove and refill the cap then that blood is on the outside of that bottle. It won't take long for it to work its way inside, contaminating the entire bottle. Even if it doesn't, they still have to hold it to pour the pigment for the next client. Most shops only

have two or three artists. This means they usually share pigments to save on money. The average bottle of pigment will last for a hundred or more tattoos. That means from that one small action, more than a hundred people will have a disease. Indirect contact is the most common contamination method in a tattoo shop. The hot spots to watch are the sinks, the tattoo chairs, and the counter tops at the work stations. If these are not cleaned well enough then you have contamination. Now you know how disease is spread. The action of spreading is called Cross-Contamination. This means that you have a contaminate introduced in a non-contaminated area. So the person that grabs the pigment bottle with bloody gloves on TV is nationally making himself or herself into a hazard for everyone to see.

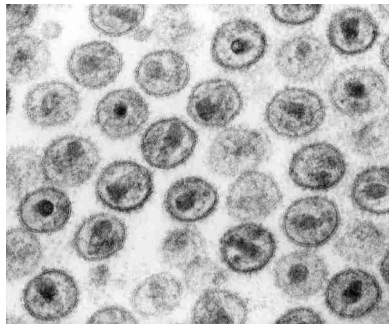


## Hepatitis

Hepatitis is a viral disease that affects the liver. It is mainly characterized by the presence of inflammatory cells in the liver. Acute Hepatitis is when it last for six months and chronic is when it last for much longer. Any Infection of the liver or inflammation of the liver is known as hepatitis, but the ones we need to be worried about are specific viruses that affect the liver differently. Some of the symptoms of liver failure are muscle and joint aches, fever, vomiting, loss of appetite, dark urine, yellowing of the eyes and skin, otherwise known as "jaundice" , and abdominal pain just to name a few. Jaundice is usually a later effect that indicates massive liver damage. We turn yellow because our bodies cannot flush away the waste we need to expel. Basically Hepatitis causes us to drown in our own bile. Hep A is usually transmitted through contaminated food. There is a vaccine that can prevent Hep A for life. Hep A can pass like the flu. Hep B is transmitted through sex, tattoos, piercings, and breastfeeding. Hepatitis B can be treated but not cured, although there is also vaccine. Hepatitis B is responsible for

500,000 to 1,200,000 deaths worldwide per year.

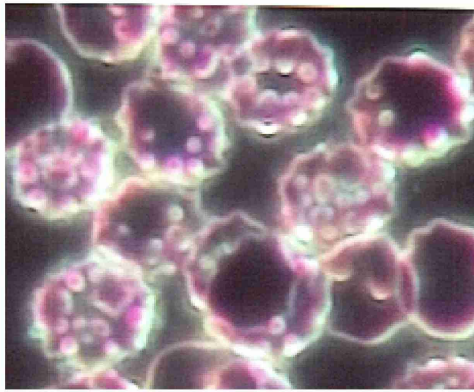
Hepatitis C used to be known as "Non-A Non-B Hepatitis". It can be transmitted through blood, sex, and can also cross the placenta infecting an unborn child. Hepatitis C usually leads to chronic Hepatitis ending in liver failure, known as "Cirrhosis" of the liver. There is some treatment, but not cure. Hepatitis D can only grow if you have Hep B already. It's basically the stage of B that kills you. Hep E is similar to Hep A but more common among pregnant women. Hep F is hypothetical, basically there were thought to be a few cases in the 90's but no one ever proved it, and the newest form is Hep G which was just found this year and not much is known about it. The scary part of viruses is that each time someone contracts one, it changes slightly. If so many people contract it then each time it changes into something new, and worse. Take the time to clean and sterilize properly, the life you save might be yours.



## **Human Immunodeficiency Virus (HIV)**

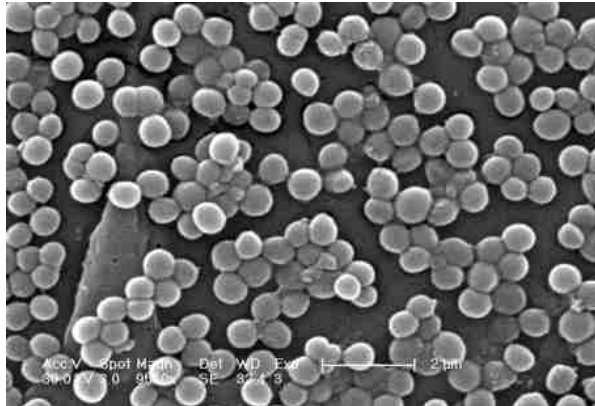
HIV infection happens with cross-contamination of blood, breast milk, or semen. Basically HIV attacks your immune system. This means that you don't die of HIV, you die of the flu or a splinter in your toe. As of 2006, The World Health Organization estimates that HIV and AIDS have killed over twenty five million men, women, and children since it was first identified on December 1st 1981. It is the most destructive illness in the history of the world. In 2005 alone it killed 570,000 children. A person with HIV can remain healthy for many years, spreading the disease without ever knowing it. There are virtually no symptoms until one develops AIDS (Acquired Immunodeficiency Syndrome). The transmission of HIV is most common through unprotected sex. Though it is highly possible to contract the disease through needle sharing, a noted college did a statistical survey of two-hundred known needle sticks in a medical environment. Out of two-hundred contaminated needle sticks across the U.S. in 2004, only three of the victims contracted the disease. With mother to child transmission can occur in utero during the last few weeks of pregnancy or at childbirth. Without treatment,

transmission from mother to child is only a twenty five percent possibility, but with delivery through cesarean section and drug treatment the risks can be reduced as low as one percent. Unfortunately, breast feeding has its own chances of infection. The lowest form of HIV transmission is through the field of tattooing and piercing. To date, there have been no known cases transmitted through body modification. HIV and AIDS have no cure. There are minor treatments with breakthroughs everyday. Please, as an artist, do your job and help continue the fact that the lowest area of transmission is the body modification industry.



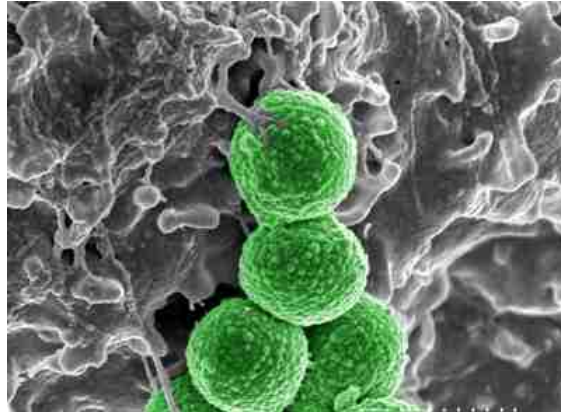
## **Chlamydia**

There are initially three types of Chlamydia: Trachomatis, Muridarum, and Suis. Trachomatis is the only one of concern in regards to body modification. Chlamydia Trachomatis causes eye and genital disease, and is one of the most common sexually transmitted diseases. A little fewer than three million cases of Chlamydia occur in the US each year. Most women that have contracted the disease will show no symptoms or even know they contracted it. Chlamydia is curable with the proper antibiotics, however, if not caught it is the number one cause of preventable blindness in the world. Some of the symptoms of this form of Chlamydia include Pelvic Inflammatory Disease (PID) which means infection to the uterus, fallopian tubes, and ovaries. If not treated, PID can lead to scarring of the reproductive organs, difficulty getting pregnant, and difficulties during pregnancy such as, entopic or a tubal pregnancy. One of the major drawbacks to this infection is that women with Chlamydia are more that five times more likely to be infected with HIV. Some of the more noticeable symptoms are abdominal pain, painful urination, painful intercourse, vaginal bleeding, fever, and a thick white cervical discharge. Men are much more likely to show symptoms of Chlamydia such as, painful urination, sore or swollen testacies, fever, and a clear milky discharge from the penis. If not properly treated, for men, it may cause permanent sterility in as soon as 6 weeks.



## **Staphylococcus aureus (Staff Infection)**

Staphylococcus Aureus is more commonly referred to as a "Staph Infection". Staph is a common bacterium that lives on the skin and inside the nose of almost every person in the world. This is the bacterium that is responsible for such things as Impetigo, Cellulitis, Pneumonia, Septicemia, Pimples and Toxic Shock Syndrome (TSS). Staph is the leading cause of bacterial infection to small wounds or abrasions. This is something that can be avoided very easily among the tattoo industry; Anti-Bacterial Soap. Once Staph is introduced to a sight, usually the best Medication recommended is a mild antibiotic prescription. However, if not treated Staph infections can get much worse and lead to rapid weight loss and muscle depletion, sometimes taking up to half a year till full recovery. Staphylococcus itself led to another strain of the bacteria in the late 1990's called Methicillin Resistant Staphylococcus Aureus (MRSA)



## **Methicillin Resistant Staphylococcus Aureus (MRSA)**

MRSA is a stronger strain of Staph that gets its name through a resistance to most of the commonly known antibiotics. Due to its production of cretin enzymes that attack the antibodies themselves, the antibiotics are rendered completely useless. Until the 1990's MRSA was a rare thing, but in the 90's there was a massive epidemic of MRSA, mostly in hospital environments. This particular strain has to be treated with antibiotics such as Glycopeptides. There are many problems with these antibiotics, there are no pills. So if you find yourself the victim of MRSA, then you can expect a vacation to the hospital for a few days and an IV cocktail of antibiotics. The reason I wanted to bring up MRSA is because last year (2006) there were a handful of cases also in the tattoo community. This "Artist" did not know how to properly take apart and clean his tattoo machine so he just didn't clean it. There were a handful of MRSA cases, all with new tattoos. The Center for Disease Control paid him a visit and matched the strain they all had to his machine. Needless to say he won't be tattooing for a long time. This is a clear example of how much pain and suffering you can cause from simply cutting corners. You must perform your job to the best of your ability, but if your ability isn't enough then go flip burgers. Statistics show that in 2005 MRSA killed more individuals than HIV and AIDS combined. There are 20 known antibiotics in medical use, 5 of which have a standing chance against MRSA. If you miss one single dose, then the MRSA will have a resistance to that antibiotic; this leaves you with less choice. If you are allergic to penicillin, then you can only use two antibiotics to start with.

# Chapter 5



## Tattoo Sterilization

Sterilization means by definition, that you make any object, including surfaces, free of germs or bacteria. Technically this is impossible. There are so many germs out there that as soon as something touches the air it is contaminated. Something only remains sterile if you never remove it from a sterilized packaging; even then it's only good for about three months. If you autoclave sterilize something and leave it alone, after a period of time it becomes un-sterile again. What this means for you as an aspiring tattoo artist is that you're going to have germs; you just have to make sure the really bad ones are gone. The major germs and viruses that we have to guard against are Hepatitis, HIV, and MRSA. If you can kill these guys then the others are already dead. Let's start with where to find these bad guys. Your hands are the number one place to defend the most. No one realizes just how easy it is to infect yourself. How many times a day do you touch your face and not think about it? Do you always remember to wash your hands before you eat? Do you think about your hands when getting a piece of gum? If you don't wash your hands enough then you open a piece of chewing gum, and mindlessly throw it in your mouth, you're done. That's all it takes. Wash your hands properly. Wash with anti-bacterial soap. Always wash all the way to your elbow, and rinse from the elbow to the tips of your fingers. What good is washing your hands if you hold your hands up and all that bacteria rolls right back down your arms.

Hep is the quickest guy to get. Almost anything you touch in the studio can possibly have Hep on it. You do a tattoo and your client needs to use the restroom. He gets up and walks through the lobby to the restroom and closes the door. What you don't see is he had his hands on his tattoos. People always



touch their tattoo, no matter how many times you tell them not to. He touched the door frame for the tattoo room, the handle and door to the restroom; the sink handle, the toilet when he flushes, and maybe the counter on his way back out. All of those places now have Hep. Now, while you're tattooing you're using a spray bottle of water right? You spray the tattoo and it gets on your pants and the floor. Now it's on the sole of your shoe. You walk through the shop, touch the same door frame and the same knob to the restroom, then you touch yourself to do your business. You wash your hands so they are clean but when you turn off the water you put it right back on from when he touched the sink first. Now you have Hepatitis on the floor, all over the shop, the tattoo chair, the door frame, the restroom handle, the toilet, the door knob, the sink, your shoes, your hands, your privates, and your face because everyone touches their face. Damn that spread quick. Now your significant other has Hep because they kiss you and then they kissed your kid goodnight, now they have it too.

What the hell do I do now? Well it's your job to make sure that everything is safe. Rubbing alcohol will not kill Hepatitis or HIV. The only thing alcohol will kill is bacteria, not viruses. Rubbing alcohol is not the answer. There are a few chemical solutions you can buy from a tattoo supply company. They all have different names but they are called germicidal solutions. Usually these chemicals are pretty expensive as well. About all of them come in one gallon jugs and are concentrated. To get them to work right you have to measure just right and then when you spray them on, they have to sit for up to twenty minutes to be affective. This sounds like a lot of crap to me. The best and the cheapest thing you can use is good, old fashioned bleach and water. Bleach and water are good for surfaces. Never use them on skin and never try to sterilize needles, only surfaces. You can use bleach and water to clean a tattoo machine, but you have to clean the bleach back off because it causes oxidation, which makes metal rust.

The bleach you need to use is chlorine bleach, not the scented bleach because often it's too pungent of a smell. What is bleach? Chlorine is basically table salt. Bleach is salt water that has been changed by a chemical reaction started with electricity. Bleach is technically a solution of sodium (salt) hydroxide mixed with water in a 5.25% mix. Chlorine is also used to treat swimming pools and the water you drink everyday. It's used because it's a disinfectant. This means it kills the bad guys. When chlorine reacts to water it actually produces a mild hydrochloric acid. This is why straight bleach on your cloths before you wash them will eat a hole. When you clean any body fluids with bleach you want to dilute it with water. A dilution of 1:100 will do the trick but the more bleach the better. I tend to use a twenty percent dilution ( 20% bleach and 80% water). 1:100 means that for every quart of water you want about two tablespoons of bleach. It's usually a safe bet to

clean your area then spray the surfaces with a mist for full coverage, letting the bleach and water soak for a few minutes. Then dry the area. If you don't dry the area you will get a nice white coating on everything. Bleach does have a very strong smell so you want to be careful and make sure the area is well ventilated. Bleach and water of the same dilution will be fine for mop water as well. Using the bleach method you can guard against Hepatitis, MRSA, and HIV effectively. Also, if you use the large plastic spray bottles from say Wal-mart, you will need to replace them about every two months or so. The bleach causes the spring in the handle to rust can eventually break.

The floor is a large concern in a tattoo shop. If you don't get the floor clean then you will track disease everywhere you go. Another thing to think about is that every client sees your floor and that's the first thing they judge the cleanliness of your shop by. The first thing you want to do is sterilize your floor. A lot of products are on the market for cleaning floors, but the best thing I have found for killing germs and disease is just bleach and water. Bleach and water does a great job, however it will not make your floor look all nice and pretty. In the tattoo industry we use a lot of pigments that are very strong and very similar to ink so it will stain the floor very easy. We also use a purple carbon copy paper to transfer the design to the human skin; this carbon gets on everything and is a devil to get back off. I have tried almost every name brand product out there, even down to raw acetone. Nothing seems to get the pigment and the purple carbon up except for one product, tile cleaner. You want to use the tile cleaner that foams up when you spray it. My best guess is that it gets down in the cracks and the pigment and carbon float out on top of the chemical. It's funny how it works. A small drop of pigment will make a colorful puddle more than a foot wide. After you spray just let it soak a minute or so and mop away the nasty. Again this is a pungent chemical and you should always open the windows or make sure you can get plenty of fresh air while you work. Make sure to mop well under all counters and around all sinks. Get every spot you can. Any time you use a new chemical always do a test spot. Some chemicals like acetone might eat a hole in your tattoo chair, so test first.

Your tattoo station should be a small desk so you can move it easily for cleaning. I personally use an upright tool chest, the kind with a cabinet under it, for my pigments and supplies. These tool chests are on wheels and move very easily for cleaning. Every tattoo station should have its own room and its own sink. The sink is one of the dirtiest places in a tattoo shop. You need to keep it clean because this is also where will wash your hands the most. An easy way to get around the knob thing is, go down to your local hardware store and get a hands free sink valve. There are a few different types. The more expensive ones are foot or knee switches that turn the water on for you.

I personally use the kind that's a metal bar that attaches to your faucet by screwing on where the screen goes. These are great because you never have to touch the knobs. You set the water as you wish and when you are ready to wash your hands you simply move the bar to one side or the other as you wash your hands. When you take your hands out of the sink the bar returns to its place blocking off the water flow. These kits cost about ten to fifteen dollars. Remember to keep your sink clean with the bleach water at all times. After every tattoo cleaning the sink should be part of your process.

Let's take a look at your tattoo station. The best thing to use is a small desk with a smooth surface. You want the surface light in color so you can see any type of pigment or blood. Wood is a bad idea because the blood and pigment will soak into it and you will not be able to keep it clean. You want plenty of lighting. An upright floor lamp at the corner you will be working from and a desk top lamp should do the trick. The best way to be sterile is by removing as many things from the table as you can. The spray bottles you will be using should be plastic and you should have one for bleach and water, alcohol, witch hazel, saline, water, glycerin, and green soap mixed with water. Each will serve a later purpose. Above your work station you should have a towel bar, like for the bathroom. It should also be light in color; I think the square chrome is the best. This is for you to hang your spray bottles by their triggers. Your sharps container should be on the floor under your station away from where anyone might get accidentally stuck. The less you have on your work station the more sterile your environment will be. You should have a separate stand or table for your pigment bottles at least five feet away from your work station to avoid cross contamination. Wall shelving would also work for this. All of these surfaces should be cleaned on a regular basis. You should remove all of the pigment bottles and clean under them as well. Some artists like to use what is called an ultrasonic cleaner. This is a device that's uses vibration and a soapy solution to clean tubes and clamps. The vibration shakes loose any biological matter like blood from the tubes and clamps. In the past I have seen a few artists use these to wash the ink out of the tube during a tattoo. This is a very bad practice; you cannot properly sanitize this machine. Only use an ultrasonic cleaner prior to autoclaving, and always keep it away from your station. Make sure to read all instructions of any piece of equipment you plan to use.

Your tattoo chair should also be light in color. The best chairs are the ones made specifically for the use of tattooing. There are a few companies out there but they can get pricy and it's hard to find one that's not black. Due to this reason I personally use a barber chair for the upright tattoos such as arms, and a full size massage table for the lay downs like legs and backs. All chairs should be cleaned on opening, after every tattoo, and again right before closing. Make sure to get in all the little places, in between the

cushions, and all the metal hardware like foot pedals and handles. Any stools, or arm rests that may be used should be treated with the same care. This leads us to instrument care. There are a lot of tools that are involved with tattooing. Obviously, you have a machine, which will have its own cleaning section in this book. You will also have to clean your bottles, foot switch, power supply, and clip cord after every tattoo. Forgetting a single one of these could lead to a lot of problems for everyone. Anything that is used in a tattoo needs to be cleaned or thrown away. Any ink pens that you may use on a person for drawing must be used once and thrown away. Packs of pens are like two dollars, don't be cheap. Never use reusable towels. Always use standard paper towels while tattooing. Some of them have printed designs on them, while some artists will tell you the ones with designs will bleed color into your tattoo. I have never had a problem with this and I've used them for years. There's just something funny about tattooing a skull on some huge biker guy, using paper towels with bunnies and duckies on them. All stencils need to be used once and thrown away, and all razors need to be used once and thrown away.

Something I've always found funny is that all sharps (sharpened medical equipment such as needles or scalpels) should be thrown in the red sharps disposal container, but the health department makes you throw disposable razors in the trash. Something else is tubes. A tattooing tube is made of metal. It fits on the machine and has a grip attached to it that's mostly metal but sometimes plastic. The idea is that it holds the needle while we tattoo. Everyone is so concerned with a tattoo shop using new needles but no one ever thinks about the tubes. They come into as much contact with blood as a needle. Most shops use these metal tubes and re-clean them for further use. They are expensive (about six bucks a pop) so they reuse them anywhere from one-thousand to fifteen-hundred times before replacing them. That's not a comforting thought. Most shops also reuse their needle bars. A tattoo needle is really two parts, the needle bar that fits onto the machine and a needle head that penetrates the skin. Most shops use the needles, cut off the heads and solder new heads on the old bars. Again, the needle bar comes in just as much contact with blood as the needle head and tube does.

An autoclave is a machine that uses heat and pressure to kill germs. Everything that's put into an autoclave should be in a bag or pouch that's made especially for the use of autoclaving. This bag or pouch has an indicator strip on it that changes color when sterilization has been reached. Always read the color change area for what color it was, and what color it should be. There are a few different types. A dry heat oven that does not use pressure, a chem-clave named for its use of a pre-made sterilizing chemical, and an

autoclave uses heat and pressure while on a timer. Most hospitals have a six week course to learn how to properly use one of these while tattoo shops are only required to read the instructions. You have to pre-clean the tube making sure that all biological matter is gone, and know how to properly run the autoclave before you have sterilization. This means that you have to trust someone that works in a tattoo shop with your life. I just don't see this happening. There are new advancements to the industry everyday. For the last few years they have made a disposable tube that's plastic. It comes pre-sterilized and pre-packaged. You open it, you use it, and you throw it away. Not only is it safer, but you don't have to waste hours a week cleaning tubes. Most artists bitch and say they can't use them, or it doesn't feel the same. I have used hundreds of them honest, they work just fine. Although metal tubes do seem to be a little better for grey wash. They are not as heavy so your hand will not wear out as quickly and are about a dollar each. The same company makes pre-sterilized and pre packaged needles cheaper than the cost of making your own. So if you don't use those then you just like wasting your own time. Very few shops make their own needles any more. Well that's pretty much the basics to sterilization. Always do research and learn as much as you can about your environment as well as the dangers it may have virally. What little bit I went over is nothing compared to what you need to know.

## Chapter 6



### Clients and Competition

The next thing you need to know is about your clients. First, above all else, cover your ass. If you're tattooing then you need a good waiver sheet. If you go to your local health department, in the "Environmental Services" office you can request a copy of the body piercing and tattoo studio health regulations. Another thing I would like to add; is keep good records. In the end, if something happens, it will save your ass. Also, be nice to your sanitarian. Keep your records filed in order by name or month. Nothing is more aggravating then having to look for a consent form. Don't be scared of the health department, they are good people trying to help everyone. The packet is totally free and it has lots of good information inside about sterilization. It also has a list of everything you need to open a studio, including all of the proper paper work. In this packet you will find a generic version of a liability form (consent form). Use this as a guide to make your own, don't just copy it. You need to put your name and information on it or it will not hold up in court. If you're tattooing out of your house then you are wasting your time because it's illegal anyway. This form releases all liability from them suing you. Although you should know that this does not clear you with the health department from being legally responsible on there end. Always get your client to sign the release form before you ever touch them. Now say you work in a shop and some one walks in for a tattoo. The fact is that most people walk in to ask questions. Your job is to answer them to the best of your ability. You can't be a smart ass, and you can't ignore them. They came in so that means they want to talk to someone. You can not just think

that if they want to talk to you then they will ask. You will lose business. The truth is almost no one knows what they want when they come in for a tattoo. So you have to pry a little and find out what they are looking for, and why they want the tattoo. The "what" will give you an idea of design, and the "why" will tell you what style.

Some one comes in and says they want a set of angel wings and a halo for their friend that died, and then you know they are not looking for something dark and sinister. This part is common since. Don't try to talk a school teacher into a skull and biker logo. Use your eyes, see what kind of person they are and go from there. If you try to talk some gothic kid into a set of roses, they are going to laugh and walk out. The hardest thing for me to teach a student is common sense. Always be polite even if they ask three hundred stupid questions, if they like your work then they will be back. Number two, never tell a client "no", they will leave. You can suggest your input but remember it's their tattoo. Some of the best artists I know go months without work just because they are assholes. You have to sell your self before you can sell your product. Let's face it, as much of this industry that's art it's still a business, you want to pay your bills at least to keep the shop open, and without clients you don't get to pay anything or tattoo. So be nice god damn it!

Almost every person that walks in to get a tattoo is nervous, even the guys that have a lot of them. You have to be charismatic, and make them laugh as much as possible to make them more comfortable. A client and artist relationship is like a client and shrinks relationship. You have to have a good one or each of you is wasting the others time. The more someone comes back the more you will get to know them and what they want, but until then you have to fish a little. One of the best ice breakers is "What can I help you with." It's simple and to the point. If they are looking for a design they will ask, if they have a question they will ask. As far as setting a price, one of the best ways to do this is by asking them how much they want to spend. Don't be shy about money. When they tell you how much then you can say "I can do this for that much." Keep the price as low as possible; don't tax some one just because they drive a nice car or have an expensive cell phone. You can always get some one good once, or you can treat them right and make them a client for life and then they'll bring all there friends.

Try not to push flash. Use flash as a tool for ideas. If you push flash you will never learn, you just get to be a copy machine and they get to see their tattoo twice a week on someone else. Be original, stretch your legs as an artist and do custom work. Never claim other artists work. If you think you're the only one who gets the magazines and has every page of cherry creek flash then you're kidding yourself. I have six guys a week come in and try to push old flash on me as their work. I make fun of them and usually send them

packing. Remember the term is "Artist" not copyist. Another cool thing is use your computer when ever you can. A lot of paint programs have a new tool called a background eraser. You scan in an image, erase the background, and then take a picture of your client. Bring up the picture and copy/paste the tattoo on their picture so you and the client can see what the tattoo will look like before a needle ever hits them. A lot of the time this will help you get an idea of what there wanting and how big, while you look like the most advanced artist in the world. Take the time to get to know your clients; don't rush them out the door. Tattooing is not a race. Take your time and make them feel like they are your only client. It will pay off in the end. You get a payday and you get to do more custom work because you earn their trust much faster.

Here are some rules to follow when it comes to clients. 1. Never do the same piece twice unless two people want a friendship tattoo. Respect your art and the rest will come. 2. Never tattoo anyone under sixteen. I don't care if there parent wants to sign for them. A fifteen year old never knows what they want, so you're just going to give them something they will regret and anyone under sixteen will not take the time to do what is necessary for the proper healing of the tattoo. It's your work, why do something that you know will get destroyed. 3. Never tattoo a diabetic or a hemophiliac. The diabetic will not heal right, and they are ten times more likely to get an infection than anyone else. If you want to ruin your reputation then go right ahead. While a hemophiliac will bleed out and only about twenty-five percent of the pigment will stay in them. If you guarantee your work then you will be doing touch-ups for the rest of your life. 4. NEVER tattoo anyone drunk or under the influence of any drug. If they are under the influence then legally they aren't of sound mind to sign consent. If you tattoo on them, then when they sober, if they regret it, they can sue your pants off for tattooing them against there will, and they will win. Besides, have you ever seen a drunk hold still? Try drawing on something that's running around the room. Oh ya, and it's illegal to tattoo anyone drunk or under the influence. That's about it for the clients. Just remember, the only rule that has always been true with every client is: if you do one right they will tell five friends, if you screw one up then they will tell twenty.





## **The Shit Talking Game**

People love to talk trash. This is the very reason you never want to talk bad about another shop or artist. Most clients go to the shop that happens to have an opening that day. To them it really does not matter who tattoos them. Since most client travel between shops a lot of them like to play games with the tattoo artists. Tattoo artist have a known history of trash talking the competition, every one knows and will play on this. Some will say that “Such and such said he will do the same tattoo for less.” Don’t make any comment about there quality of work. Every artist thinks they are the best. The client is trying to get you all worked up so you give them a tattoo cheaper out of spite. I hate to tell you this but almost every time they never even talk to the other artist. If the other guy is willing to price cut then let them. Just tell the client that your price is whatever and direct them to your portfolio so they can make their own decision. If you don’t like the other artist’s work then just say “I have seen some of their work I agree with and some I don’t.” If you stick to your guns then in the end you earn more respect. There is nothing wrong with dropping off a few bucks to give someone a deal, but if you cut a price in half then the client thinks that you are a push over, unsure of your own ability, or hurting for money. In this case, they will go around and tell everyone that you are going under.

A large amount of the time you will hear that some clients are going to scratchers that work out there house. Don’t give them a lecture or say something mean spirited. Just say “I hope they are using disposable equipment because most home artists can’t afford an autoclave.” and also tell them to look at a portfolio before any work is done. Usually the threat of disease and poor work will be enough to scare them away. Really you should get as much information as you can and report them to the health department, but no one wants to be a narc. For the most part, I just leave them alone until it becomes a public safety issue. If someone tells me they got Hep form a home made tattoo then you bet your ass I’m going to have them file a complaint. Another way to think about it is that you get to cover all the crappy work they are pumping out so you get to tattoo more. Just

make sure they are not a safety issue.

Other tattoo shops play games as well. The tattoo industry is the most cut throat profession in the world. I have had other shops threaten my life and my shop, and have gone as far as physical confrontation because they think that someone trash talking has merit. Many shops think that violence and talking trash affect your business. It does to a degree, but if they are talking smack to all these people and you let your work speak for its self then they come out looking like jackasses. If a shop talks smack and tells everyone how horrible you are or that your shop is unclean then it just shows that they are afraid of you being better than them. Don't play their games. Be above that and just tell the client or whom ever to compare the work for themselves. Never go to another shop in anger unless you are looking for a confrontation. If another shop says something that you just cannot let go then call them and ask why they said whatever. Most of the time you'll find it's the client stirring the pot. If another shop ever threatens you with violence or comes to your shop looking for violence then call the police. That's their job, and the other guy will have more problems then you will from them running their mouth. Be above the game, keep out of it. Don't fall into the shit talking trap. Once you start it's done and that's your reputation. Let them do their work and you do yours, if someone starts talking smack then just say "I guess they should come see my shop in person; it's obvious they haven't yet." Here is a little secret about the competition that no one seems to understand. There is no competition. You will always have your clients and they will always have theirs. You don't need to fight over it. People will always want to get tattooed. I live in a fairly small town that at the moment has eight shops, yes eight in a small town. We all do just fine despite the shit talking game.

# Chapter 7

## Tools of the Trade



## Ink or Not to Ink

What makes a tattoo tick? Let's look at pigments. Tattoo pigments use to be made from natural chemical and dies. A lot of the older inks were harmful to humans, but we used them anyway. The pigments changed over the last few years into healthier chemicals made for human skin. To understand where pigments are now we have to know where they came from first. Jail house black was the ink that you see in all the old prison tattoos, the ones that turned green over the years. A lot of guys I know still swear by it but they are mostly scratchers. In prison you have very limited supplies from the outside world so they had to use what they could get their hands on. Vaseline was always on hand. The old way of making black was the prisoner would take a piece of cloth or string and push it in the middle of the vasoline jar, making a kind of candle. Then they would light the candle and let it burn for days. This cooked the vasoline into a black sludge. After a few days they would scrape off as much of the black powder from the sides and some of the sludge, they would mix this with baby oil and presto, ink. You had to do it a few times to get the amount of baby oil just right but it didn't take long to figure out.

After a few people did this in jail a handful of people adopted the method back in the day. Tattoo pigments were never really ink. They were made of harsh chemicals suspended in a carrier solution. The new pigments

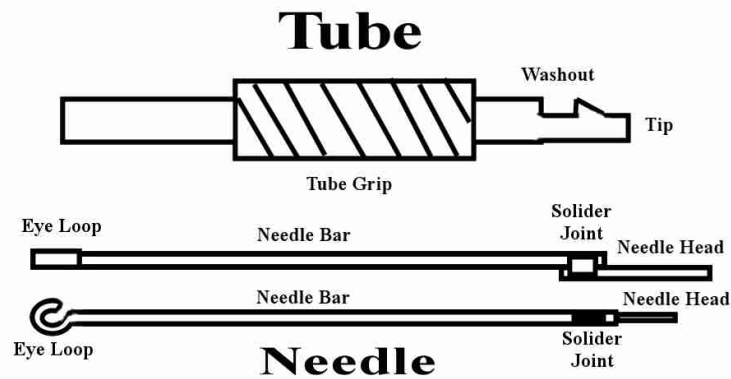
are the same principal but not as harsh. Among vegetable dyes they also used chemicals like metal salts. A few companies just recently stopped this practice. Oddly enough, tattoo pigments are not regulated by the Food and Drug Administration, so really they can get away with anything they want to. Some of the blacks use to be made from iron oxide, but are mostly still based on soot and carbon. Most companies now use Logwood; this is a heartwood extract from a tree found in Central America and the West Indies. Yellow use to be made from Iron ferric oxides (rust) and when it's dehydrated will turned red. Orange was made from Disazodiarylid, and flesh tone was Iron Oxide mixed with Clay, the same procedure was used for brown, only more rust. Green was made from a Chromium Oxide called Casalis, and blue from a combination of copper carbonate, calcium copper silicate and cobalt, which is a highly poisonous metal. Sounds nice huh? Surprisingly there are some companies that still use chemicals like this in there pigment so make sure to read everything very carefully. Use of chemicals like cobalt and iron oxides can lead to allergic reactions not to mention the fact that you're putting under your skin chemical that factories require haz-mat suits to handle.

These days the best pigments are plastic base with a glycerin carrier solution. This makes them water soluble so they are easy to clean up, mix well with water for shading dilution, and are hypo-allergenic. This is why you rarely hear about allergic reactions to pigment anymore. Obviously I cannot tell you what brand I use because that would be product placement. However I can give you some tips. There is no one best company to use. In my opinion the best pigment is a combination of many companies. It takes years of trial and error to find a brand of what color works best for you. I can tell you that the plastic are the brightest and the traditional Japanese blacks shade and grey wash the best. That's not favoritism. That's just anything two-thousand years old must work right. Your best bet is that if is cost too little it's cheap, and if it costs too much it's not worth it.

There are a few new types of pigments that I would also like to tell you about. Backlight pigments are rapidly becoming popular in the tattoo world. It first started by a few scratchers cracking open high-lighters and tattooing with the highly toxic gel, don't do this (hence the HIGHLY TOXIC part). Some pigment companies either got tired of reported infections or saw a chance for a profit and created black light pigment. I like to think it was the wanting to stop the infections but Probably not the case. Technically made pigment by some tattoo supply companies are the only tattoo pigments that are FDA approved. When purchasing this type of pigment you need to look for the FDA approval stamp. The reason black light or UV reactive pigment really works is because the FDA approved versions are made from very small acrylic beads. These beads glow under a black light giving the pigment its illuminated characteristics. They make some of the pigment in a clear which has to be

applied under a backlight so the artist can see what they're doing. The advantage of this pigment is that once it heals you cannot see any trace of the tattoo unless the artist scars the skin. Under a UV light the clear pigment has the standard chartreuse glow. During the healing process it just looks like a red abrasion in the shape of a dragon or whatever you may get. The UV pigments that are in color you can see during any light. But when they are under a UV light are glowing bright. The down side of the color UV pigment is that only a few colors will be UV reactive so a larger selection of colors will include about seven, though this may improve with time. Another down side to this pigment is that while in regular light the newly healed tattoo looks about ten years old. They get their dull nature from the fact that they are acrylic beads under your skin so the layer of flesh that covers them makes them dull. It's the same idea as putting a really bright picture under a piece of tracing paper to look at it. They maintain being the more costly pigment at more than triple the price of regular pigment and they are a devil to apply properly. So even if applied under a UV light, be prepared to do a lot of touch-ups.

Some other interesting types of pigment that have just recently touched the market are designed for tattoo removal. There are now certain companies that produce pigments that are removing friendly. A new pigment that is made of special beads can be broken down by laser treatment in one application. To remove a tattoo with laser treatment you have to have many sessions over the same area to remove a tattoo. The laser produces high intensity ultra violet light to burn and fade the pigment, kind of like speeding up the effects caused by time and the sun. These particular beads are like microscopic paintballs. The laser damages the shell causing it to release the pigment which your body can destroy. Another one of the new designer pigment creations are the time release pigments. They are made of biodegradable pellets similar to medical grade internal stitches which can be manufactured in different strengths. So now you can get a tattoo in which you choose if it lasts for six months, one year, or two years. These are broken down by your body at a slow but controlled rate of your choosing. The most interesting still is a new chemical solution made to remove existing tattoo pigments. Tattoo pigment stay liquid in the skin, they never harden. That's why you cannot feel a tattoo unless scarred. This chemical is a clear liquid that forces the old pigment to harden. This causes your body to force it out of the skin. You go over the old tattoo, the pigment hardens, and as it heals it comes right out like gravel in road rash or a splinter in your finger. Sometimes you'll have to touch up to get any pigment that you may have missed. The great part is that the cost of this chemical is about the same as standard pigment. With this new creation, any studio can offer tattoo removal without massive equipment and training. Now that's cool.



## Needles and Tubes

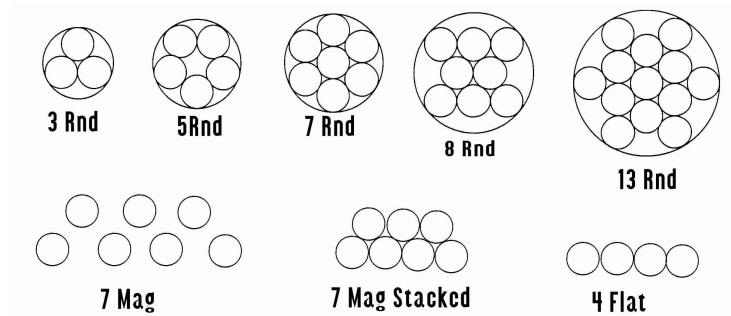
Needles come in many shapes and sizes, and each does something different. Tattoo needles are really two pieces, a needle head and a needle bar. The needle head is the part that sits down at the end of your tube and punctures the skin, while the needle bar is a needle shaft that has a circle bent into it called a needle loop or eye loop. This is where the needle attaches to the machine. A common misconception of a tattoo needle is that they are hollow like a hypodermic needle from a shot. This is not true. Tattooing needles are solid, like a safety pin only smaller. A needle grouping is the number of needles in the head. So if I said that a needle is a three then it is three small needles soldered together to make one, in a triangle shape. There are many different groupings, each with a purpose. The more needles are attached to the head the bigger the dot is. So a five pattern needle is a bigger dot than a three pattern needle or a single Needle. How a tattoo really works is the needle moves in and out of the tube, like a sewing machine. When it moves in, it gets ink on it, and when it moves out it punctures then skin. When done correctly a tattoo needle only goes two millimeters deep, that's about the thickness of a dime. The skin is elastic so it stretches. The needle with pigment punctures the skin and the skin squeezes the needle removing the pigment leaving it underneath. Think of a butter knife with peanut butter on it. You wipe the knife off with your finger, nothing on the knife, and peanut butter on your hand. Basically every line in a tattoo is really just a row of small dots really close together making a line. In art this is called "Pointillism". So if you want a bigger line you use a bigger needle group.

## Pins

In the tattooing industry, the individual needles are referred to as pins. There are a few different types of pins, and each configuration again, does something different. The needles used in tattoo originated from bug pins, sewing machine needles, and beading needles. Each of these of these types have different tips and sharpness. The most common metal used for tattooing is 304 stainless steel wire with a diameter of .33mm to .36mm and an average length of 30mm, each type can be polished or left course. 304 grade stainless steel is normally preferred due to its stronger resistance to corrosion. The polished pins are a little smoother so they don't over work the skin as bad. The course pins are fairly new; the idea is that leaving the needles a little course will help put the pigment under the skin. I have not used this myself, but I have heard many good reports. You can also find pins made from carbon, these I do not recommend. The carbon is hard to work with and almost impossible to autoclave without specific carbon friendly autoclaving equipment. Running carbon needles in a standard autoclave will result in tarnishing or even rusting.

The difference in the needle tips play a major roll in what function the needle grouping has to offer. The distance in angle of the cut for each pin varies from company to company, but the average angle length of the point is about .9mm to 1.2mm for shading and 1.7mm to 1.9mm for lining. For the sewing needle, the heel is (assuming it's a .9mm point length) .9mm. this means that it will have a completely tapered point. The taper or heel, is where the angle to a point begins to decline from the shaft diameter. The Bug pin is a half taper, if its point is .9mm then the heel would be about .6mm leaving a somewhat rounded point but still sharp at the tip. The beading needle will have a .3mm heel giving it the steepest slope of the three. All three have many ups and downs. Shorter point lengths will be better suited for color and fill work, while a longer point length will be better suited for lining. A small point will enter the exact diameter of the pin into the skin resulting in more fill. A longer point length will produce a smaller fill because it will only go about half way up the point length into the skin. I personally prefer bug pin for my portrait work. They help to achieve a smoother shade, while I prefer the sewing type for lining. The sewing type, seem to give me a cleaner outline. The major disadvantage to the sewing type is that the point is thinner so it's easier to damage if accidentally struck against the ink cap. This is referred to as hooking because it actually makes the needle tip bend in the shape of a hook. If a needle is hooked then it will cause tremendous damage to the skin. This is why many artists preach to dip into your pigment

without the machine running, sort of a safe guard. These are just a few examples of pin sizes; there are many different types available from many different supply companies.



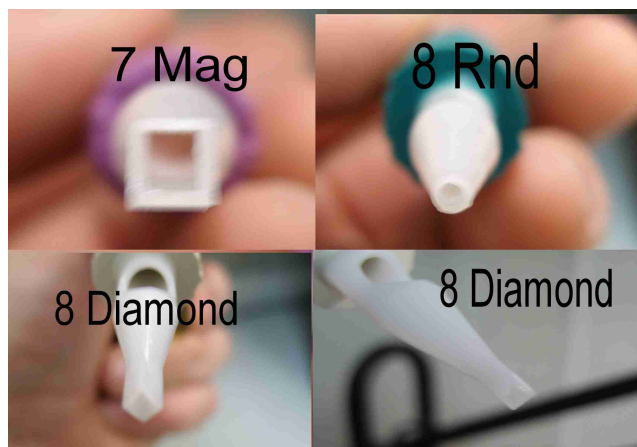
## Needle Configurations

The standard sizes for needle groupings are rounds, flats, stacked mags and standard mags that are also known as weaved mags. With rounds the individual needles are soldered together in a round shape, this makes a smooth line, and is also fair to shade with larger rounds such as a 14 round. Flats are soldered one beside the other in a flat pattern. This is strictly a shading tool. It also requires some practice. If you go too slow or at the wrong angle you may just cut the client like an electric scalpel instead of tattooing them. Mags are some of my favorite configurations. They are oscillating needles. This means that if you stack up four soda cans on a bottom row and then three on the top like your making a pyramid, this is the shape they are in. they only come in two rows but get very large. They are the best for coloring and grey shading in my opinion. The difference between a weaved mag and a stacked mag is that a mag is soldered with all of the needles flat then using a single edge razor, every other one is lifted then re soldered onto place. A stacked mag is where two rows are soldered then the rows are soldered one on top of the other. This means that stacked mags are a little smaller looking because the pins are closer together. They do a great job with solid coverage and they don't tear up the client as long as you show moderation. They require a little practice also before you really see what they can do. I use them exclusively for my portrait work with the exception of a 5round or three round for detail such as an individual hair or the inside of an eye.

The standard sizes rounds come in are singles, threes, fives, eights, and fourteens. Flats go from 4 to 24, usually in even numbers. Mags go from seven to thirteen pin, usually in odd numbers. These are the standard sizes though not the only ones, Different companies make all different sizes, so there will



always be larger sizes in the quest for the ultimate cure for penis envy. However it has been my experience that eight rounds are the best for lining. The make the smoothest line with the least effort. You do want to use a five or a three for really small or thin lined tattoos, and singles are only good for things like single strands of hair on a portrait. That's unless you like going over line five times to get them thick enough to see. I personally never use flats, just never liked how they felt. Seven mags are passed down from the gods for color and grey wash. A seven mag is probably the most versatile needle out there. Most of the times I can go two weeks and never need anything but eight rounds and seven mags. Rounds also have another option, loose or tight. Loose means the needles are spread a little more apart, this is good for shading. Tights are a little closer for finer lines. I stick with regular and do both lining and shading with them. The way loose or tight is done during production is with a needle jiggling tool. You would solder the needles in the back grouped together to make the standard grouping, then use a single edge razor blade to separate the pins for a loose, and use a tightening tool on the needle jig to get them closer together to get a tight. The taper on the needle point allows for more room, they can be pushed together, then once in position, re-solder to hold the pattern.



## Tubes

An advantage of the plastic tubes is that the grips are poorly glued on, this is good. Every one's hands are different. You can twist the grip on the tube until the glue breaks and move it up or down so you can hold the machine more comfortably. They hold strong enough that they won't go anywhere once you moved them. Some of the disposable tubes are made with a grip and tube out of one piece, these are not comfortable to use. The hard grips hurt your hand after a while. You should look for the ones with the different color grips per each size. Just like anything, the tubes come in all different sizes and shapes as well as metal or plastic. Make sure to order the corresponding tube for the needles you will be using. Lining tubes come in round and diamond tipped. Diamonds are great because you have no needle

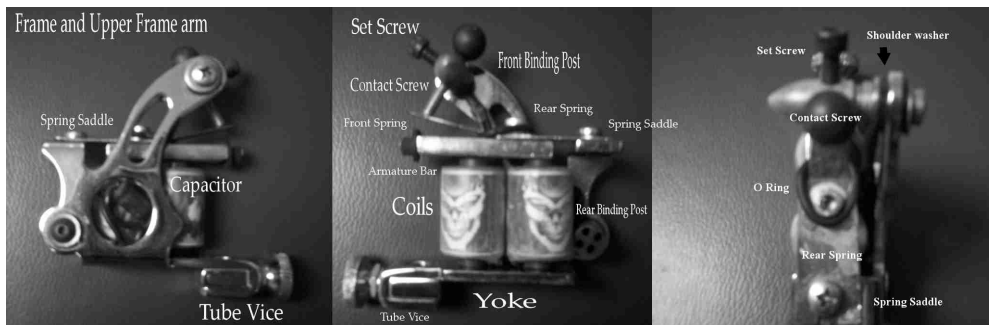
play. The bottom of the tube where the needle will ride is a v-shaped hole, allowing the needle to sit right where it needs to be. Another artist a few years ago taught me the right and left side of the diamond tip can be used as a sight when running your needle flush. These points guide you when you can no longer see the needle do to excess pigment. If you order an eight round tube and try to use a three it will jump everywhere and your lines will look like a three year old did them with a crayon. You can order an eight diamond and comfortably use three's, fives, eights and fourteen rounds without them wandering away. Some of the larger mag tubes have an open top all the way back to allow for needle insertion. With larger mags the needle head is bigger than the diameter of the tube so I guess it was a quick fix. The grip is just as important as your tube. There are many shapes and sizes of grips as well. I got use to using the standard size which is 1/2 inch. They make grips up to two inches in diameter. The bigger the grip the less control you have but the more comfortable it is in my opinion, but every one is different. The smaller the grip the more your hand gets tired, but you have more control. So you need to find a balance that works for you. If you're not sure of what size to use then stick with standard till you get use to things.

I do not recommend metal tubes unless you are in a shop environment and have a tested auto-clave available for every day use. Metal tubes are configured in the same way with the tips and sizes. The only difference in the metal tubes other than weight and killing your client is that some of them come in three pieces. The tube shaft, a tip, and a grip are all separate. The screws of the grip hold the tip on the tube shaft. The reason some do this is so you can buy a large stock of shafts and order what tips you need, this does make it easier for cleaning. Did I mention the disposables just throw away? In all fairness to metal tubes, they do seem to be better for grey wash and realism tattoos. Really, I'm kind of torn on the issue and often use both depending on what I am doing for the day.

To properly clean a tube you need to take it apart as much as you can. Then you have to soak it in an ultrasonic machine. This is a machine that uses sound and vibration to loosen any particles of blood and pigment. You don't need this if you use disposable. After an hour of soaking you clean the inside of the tube with a metal set of pipe cleaners that are made just for tattooing. You can buy them from any supply catalog for about five bucks. Make sure to clean the inside of the tip very well. Then you use a plastic nail brush to clean the outside. Make sure to hold the brush so the bristles are down. If you don't then soap will get in your eyes, remember they are not sterilized at this point yet. When you use the pipe cleaners and the brush you need to use undiluted green soap. Get a small cup of it so you don't contaminate the whole jug. As you clean them one at a time, rinse them off well and place them on a paper towel to air dry. By the time you get done, only a few should still be wet.

Place them in a properly sized sterilization pouch and seal it by removing the strip on the adhesive and folding the lip closed like an envelope. After all of your tubes are in the pouches date and initial the pouches then set them aside for autoclaving. Piercing clamps are cleaned the exact same way. I can't stress enough that if the dirty water gets in your gloves you have a seventy five percent chance of getting a disease, and disposables are, you guessed it, thrown away.

The biggest down side of metal tubes is that they are almost impossible to properly clean. The needle head will wear on the end of the tip leaving small scratches and grooves in the metal. These are perfect housings for bacteria. Even after autoclaving you can still have disease if any biological matter is left in the tube. The three piece tubes have a seam in them where the tip attaches to the tube. Both pieces are held together by the metal grip. This seam is not water tight. To properly clean these tubes you have to take them apart all the way which almost no artist does. If you don't then while you tattoo, water or pigment with blood and disease will get in this seam and give I nice healthy coating of nasty under the grip. There is no way a brush can get under the grip to clean it. Even after autoclaving if biological matter exists on under the tube then the client is contaminated as soon as you dip the tube in your water.

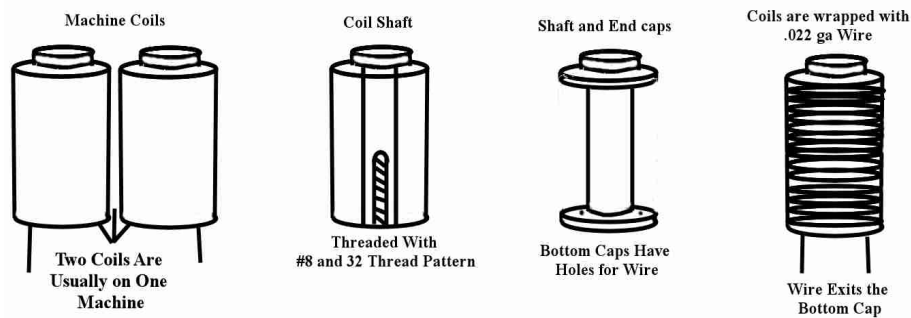


## The Tattoo Machine

I would like to touch on the subject of home made tattoo machines. A home made tattoo machine is a very nasty thing. They are made from a pen shaft and an electric motor. Do not ever let anyone tattoo on you with a home made tattoo machine. You can not properly sterilize a home made tattoo machine. Holding something under a lighter or boiling it does not work. Letting some Scratcher dig on you is suicide. I am strongly opposed to tattooing out of you're house, but if you have to you can buy a tattoo machine online for about fifty bucks. Don't be a jackass, and don't listen to the guys that use to tattoo in jail for smokes.

Another thing I would like to clear up is that a tattoo machine is never or has it ever been a gun. The term tattoo gun is a Scratcher term and shows you know little about the subject. The tattoo machine is amazingly simple. It's nothing more than a switch and as complicated as a door bell. The idea is that electricity flows through the coils causing them to become magnetized. This makes the armature bar pull forward to the coil surfaces breaking contact with the contact screw. This turns off the circuit so there is no longer electricity flowing through the coils. Now there is no magnetism to hold the armature bar and the spring pulls it back into contact with the screw completing the circuit and causing it to start all over again.

This is where the tattoo machine gets its movement and the signature hum that you hear is really just the armature bar hitting the coil heads and contact screw. There are a few different types of machines. Cast iron, copper, brass, stainless steel, and aluminum are what the frames are usually made of and each does something different. There are many different shapes and colors as well as many different companies that make them. Tattoo machines are one of the dirtiest parts of any shop, so handle with gloves and wash your hands.



## Coils

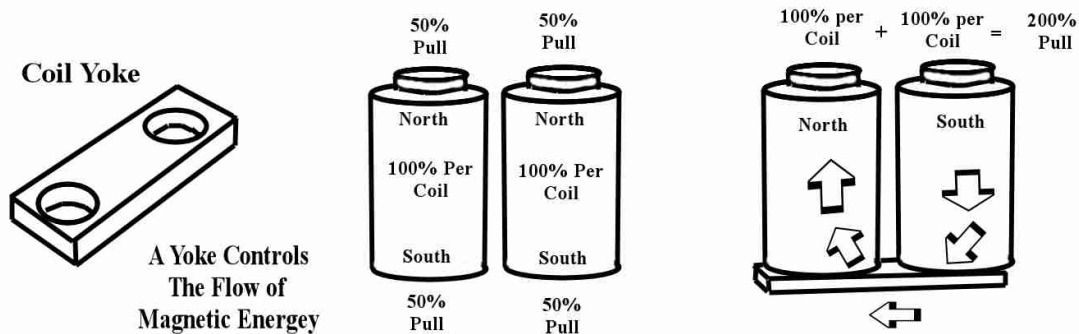
To understand a tattoo machine better let's break it down to nothing. The first things you need to look at are the coils. The tattoo machines heart is the coils. They are nothing more than electro-magnetic coils. A steel shaft wrapped with usually .022 gauge copper wire that has a thin nylon coating on them. The electricity flowing through the wire around the coils pulls the particles of the metal shaft into alignment causing a magnetic field. The steel shaft is solid with the exception of a screw hole in the bottom center to allow it to be fixed to the frame. Most of the time any machine parts will have an 8-32 thread pattern. This is so more parts are interchangeable. On the outside

of the wire is a piece of heat shrink tubing to keep all of the wire nice and tight, topped off with a round piece of cardboard or plastic to hold its shape in both ends attached by a ring clip. In between the wire and the shaft is a thin piece of Teflon tape or cloth to separate the wire from the shaft. Coils come in different configurations measured by how many times the wire wraps around the shaft. One wrap counts as one full wrapping of the wire down, the second wrap is one full wrapping of the wire up, and so on. Do not count up once and down once as one wrap or you will have a coil the size of a baseball. The wire has to be going the same direction or the coils will not work. You can wrap in any direction you like as long as they are both going the same direction. If the two coils are opposing, then this will interfere with the flow of the electricity in one direction which is needed to get the magnetism. If you wrap your own coils then always go from the bottom and end at the bottom. This is why you will always find coils wrapped in counts of even numbers, if it starts at the bottom it has to end at the bottom for the sake of wiring properly. If you decide to be brave and wrap your own coils you can make a jig instead of wrapping by hand. Trust me, wrapping by hand takes for ever. Fix your coils of new wire on a screw at the edge of a work bench. Thread a screw into your coil shaft and put it in a multi-speed electric drill. Make two small holes in the bottom of your round covering disk.

The bottom of the shaft is the side with the treaded hole. Feed the wire through one of the holes leaving at least three inches of wire sticking out for later soldering. Then slowly wind as many wraps as you want while pinching the wire between your fingers to keep tension. Remember to go slow, you will make mistakes and have to back up to correct them. The wires have to be perfectly straight, and can not have any frayed spots or kinks. If it's not perfect then they will not work. Also make sure the wraps are even, you do not want to coil to look "pregnant". It needs to have a nice smooth shape to allow the least resistance for the electricity. The amount of magnetism created by the machine is dependant on the amount of electricity cycling through the coil wires. This means that more electricity controls the strength of the machine and has no relevant change on the speed at which the machine functions. Depending on what the configuration and material of the coils are, each machine will have to use a different amount of electricity to get the same exact amount of magnetic pull.

The most common configuration is a ten wrap set of coils. This is what I recommend for new artists. Coils come in eight, ten, twelve, fourteen, and sixteen wrap. But like needles they will always make bigger. Eight wrap coils are much too weak. You have to turn your power supply up really high and then they get hot at the heavy work load. I have even seen a screw head burn through a pair of gloves while still on my hand. Ten wraps are standard, great for lining and shading. Twelve and fourteen are good for shading with large

mags but have a little too much power for lining. You might end up just cutting your client. Any coil bigger than a twelve is equal to a low grade chainsaw, so stay away. Another little trick that was taught to me at a convention involves the screw hole in the coil shaft. When you thread the screw into the shaft there will be a small gap of air inside. If you put a bit of steel wool in the hole before you attach the coils to the frame it will fill that space and give you just a little more bang for your buck. Coil shafts can be made from steel, brass, copper, and iron. There is little difference between the different metals as far as magnetic pull is concerned. My only advice on this subject is to not use aluminum. It's a little too light and will not magnetize nearly as well. Steel coil shafts are the most common.



## Machine Yoke

A Machine Yoke is the part of the machine that the coils bolt to. Some machines have thicker frames to accommodate this and some have a separate piece of metal that fits between the frame and coils. The idea is a thick piece of metal to connect the power of the coils. Think of the coil heads power as a percentage. You have two coils, each with a north and a south. Think as if each coil is a stick magnet. It has the capacity to pull one-hundred percent of its power, so north is fifty percent and south is fifty percent. This means that each coil has a north and a south so with the two coils combined you have a two hundred percent possibility of power. The tops of the coils are where your armature bar is attracted to so without a Yoke you can only achieve one hundred percent of power, fifty percent from each coil. With a yoke, you turn your coils that are basically stick magnets into a single horseshoe magnet. This connects the two and makes a single much stronger magnet. For the best performance you want the frame base and the machine yoke combined to be the same thickness as the coil shaft.

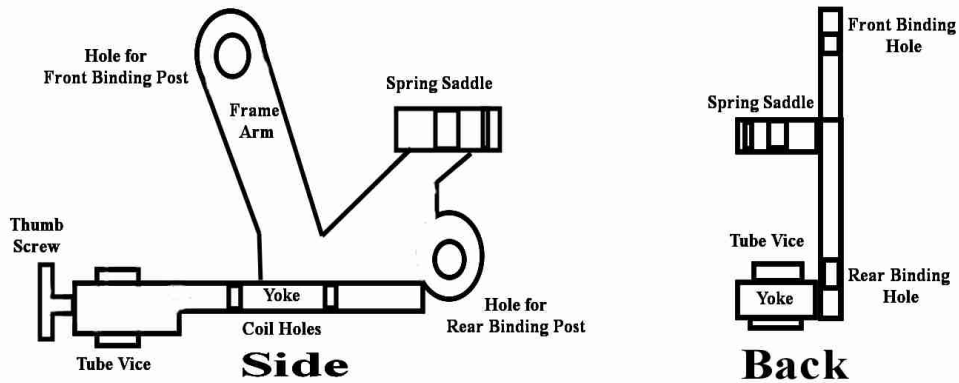
Magnetism is a really cool part of physics. What makes a metal object magnetic is nickel, or the alignment of the particles of the nickel. This is why

stainless steel (316 LVM steel) is not attracted to magnets, it has a low volume of nickel. Most people assume that metals like gold and surgical steel have no nickel but the only metals that have no nickel are platinum, palladium, and titanium. Low nickel metal is the result of annealed metal. Annealing is the controlled heating and cooling of metal to make it more flexible. During this process most of the nickel content is removed from the metal. Magnetism is achieved one way, by lining up the particles of a piece of metal so they all go in one direction. You can take a strong magnet and rub it on a piece of metal in one direction so the pull of the magnet lines up the particles of metal in the not magnetized piece. This will make an ordinary piece of metal lightly magnetized. The more you do this the more it's magnetized.

Electro-magnetic coils like the ones found in a tattoo machine are pieces of metal wrapped in wire all going the same direction. As the electric current circulates through the wire the particles of the metal are forced to follow the path of electricity causing them to line up in the same direction. This electric current forces the metal shaft to become magnetic. The north and the south of the magnet are determined by the direction of the flowing electricity. The beginning of the current or where the current came from is the south and the north is the other end or where it's going. This is why the polarity of an electromagnet will change if you reverse the connection of the power source and why a tattoo machine will work no matter which way you attach the clip cord. No matter the polarity it's still magnetic.

The magnetic energy is flowing from one coil through the Yoke and frame to the other coil. Now one top coil head will be the north and the other the south. Like a horseshoe magnet the top heads only are magnetic so much more force can pull on the armature bar making a stronger stroke. Now each head has a one-hundred percent pull and a combined effort of two hundred percent. This is why only the heads are magnetic and not the sides with the screws on them. This makes for a much more powerful machine. Machines with an actual yoke or a thicker base plate will always be stronger than a thin framed machine without a yoke. Also the strength of the stroke or magnetic pull will be affected by the type of metal the machine is made of. Copper is much more conductive than aluminum so the copper machine will have a stronger pull.



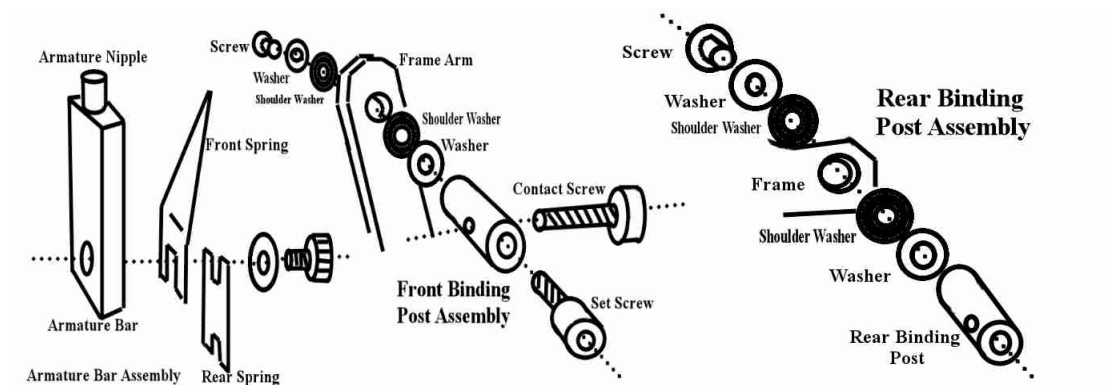


## Frames

Machine frames are made out of cast iron, copper, brass, bronze, stainless steel, and aluminum. Each weighs differently and each has a different level of electrical conductivity which affects the strength of your machine. The weight of your machine will come from the frame so you need to decide what kind of machine you will be running. Cast iron frames are molten metal poured into a cast for the shape. Cast iron machines are made of one piece while machines that the side arm is attached with screws are called bolt on frames. Most machines frames are made from a piece of metal cut into shape then welded together and ground smooth. Cast frames can be made of any type of metal but the most common cast are iron. Cast frames are very heavy. Heavy machines can be good because they make really smooth lines. The weight of the machine help to hold it steady, but your hand will tire out really fast. So they are great for little tattoos or for a lining session, but for the long haul you may want to consider stainless or copper which are much lighter so you will have a longer dexterity. Weight of the machine will affect many things like hand cramps and back pain while tattooing. If your back is constantly hurting during a tattoo then switch to a lighter frame. Brass is right in the center of cast and stainless. Aluminum in my opinion is the worst thing to make a machine out of. It is so light that you can't really hold it steady because you feel every vibration, and they sound like your going to cut off the arm of your client, they are really loud. The less Metal on a machine frame the better. Less weight equals more tattooing. If you can find a barebones cast frame without all the dragons and yin-yang's on it them you might have a good machine. I use a copper machine most of the time due to its light weight and strong conductivity. Why is conductivity important? When you have a stronger electronic signal then you have a stronger stroke (the motion of the needle). This means smooth lines and flawless shading.

Tattoo supply companies make frames with all kinds of designs on them like dragons and skulls but this makes the machine heavy and run not so smoothly. They look cool but are otherwise useless. The extra weight will

damage your hand in the long run. What you need to be looking for when you pick out a machine is weight, balance, and quality. If you buy a fifty dollar machine you are going to get a fifty dollar machine. For a good machine average cost is about two to three hundred dollars and average weight is between seven and eight ounces. Lighter machines weigh about six ounces and most cast machines are over ten. This doesn't sound like a lot but after an hour or more, it's a mile. The downside to copper and brass is unlike stainless, besides regular cleaning you have to polish away all of the tarnish about twice a month. They get black pretty quick. Another thing you may have noticed about machine frames is that they all have different tube vices (the part that locks in the tube). All of them are pretty effective so none is really better than another. If it uses a piece of metal that screws down on the tube then it's called a tube vice. If it's a curved part of the frame with a separate piece of metal pulling up then it's a guillotine, and a frame cut in two that squeezes is a quick lock.



## The Armature Bar and Spring Assembly

The rest of the machine is pretty simple. Above the coils you have the armature bar. This is a rectangular piece of metal that has a screw hole in one side and a small shaft sticking out of the other. The small shaft is called an armature nipple. This is where you put the grommet and then the needle loop attaching the needle to the machine. The armature bar is the piece that the coil heads magnetically attract making the oscillating motion. A cool trick I have used for years is to take the bottom of your armature bar and apply two layers of masking tape. Trim the masking tape with a razor to the exact

size to the armature bar. Never use more than two layers because the machine will lose its magnetic pull and weaken the stroke. The application of the masking tape does three things. It quiets down the machine because it acts like a damper between the armature bar and the coils heads. It protects the armature bar against unnecessary wear, and it also acts like another shock absorber smoothing out the performance of your machine. It's amazing what a difference it makes. Most commonly the armature bars sold on the market are made from cold rolled steel and are nickel plated.

Some have been made of many materials but this seems to have little effect on the performance of a machine. Most commonly, armature bars weigh about thirteen grams and are 1 3/8 inches long, 3/8 of an inch wide and 1/16 or an inch thick. The armature nipple or armature pin is around 1/8 of an inch thick and 1/4 to 3/16 of an inch long. Armature bars are also threaded with an 8-32 thread pattern. There are a few different shapes of armature bars out there. The most standard is a rectangle shape. Though many shapes have been experimented with over the years they have all come to one conclusion. A lighter bar is faster and a heavier bar is slower. The addition of weight means that the gap closing time is longer, more weight to move. Faster is better for lining where slower movement is better for shading. Basically, the job of the armature bar is to hold the needle loop and establish the speed of the machine, not to be confused with strength.



## Springs

Attached to the armature bar and the frame are the springs. The back spring is the spring that attaches the armature bar to the frame. The front spring is attached to the armature bar but on top of the back spring, and is the point of contact for the contact screw. This is the one that sticks upward. The back spring is usually on the armature bar first, then the front spring, washer, and last the screw head. Some artists do prefer to place the front spring on the armature bar first then the back spring. Just keep in mind that placing the front spring on the armature bar first will lower your spring

assembly the width of the spring its' self. The front spring combined with the armature bar will establish the speed at which the machine will run. The back spring will determine the strength in which the machine will hit and basically determine the efficiency at which the front spring functions. There are many different gauges of springs, and what you use will determine how your machine works. I can't just say "use this" because it's something you will have to determine by what works best for you. A stiffer or hard front spring will only stay closed (the amount of time it touches the contact screw) for a short time while a lighter or softer front spring will stay closed longer. The softer more flexible front spring has bowing effect when it hits the contacts screw. As it hits it will flex to a certain point, then it has to flex the exact same amount before disengaging from the contact screw. This causes a longer closed time. So you can see that a stiffer spring has less flex therefore less time closed.

The average measurement of the front spring is 1 ½ inches tall, ½ inch wide, and is tapered from ½ inch up the spring to the tip. So the taper will be 1 inch long leaving a spring base of ½ inch. The taper makes the front spring more flexible allowing for the proper closed time, it also acts like a buffer allowing the smoother operation of the machine. The front spring screw hole should be drilled at 5/16 on an inch from the bottom and centered. Most front springs will come flat from the supplier so you will have to but a bend in it yourself. There are two methods of though on this subject. The first is called rolling. This is where you bend the spring using just your fingers. Rolling leaves no clear line of angle so it is impossible to get the proper angel of bend every time. The second method is creasing. This is strongly recommended. The easiest way of doing this is by taking a pair of pliers and grabbing the back by the fork (where the screw goes). Make sure your grip is a little toward the tip, or in front of the fork. Level the pliers to the back and slightly bend upward. The crease should be exactly ½ of an inch forward leaving 1 inch bent. You want a bend of 15 degrees for the best performance. You can measure the degree with a simple protractor. The back spring is measured ½ inch wide, 1 ½ inch tall, and will have two holes measured at 5/16 and 1 1/16 of an inch from the bottom. The back spring will have no taper. Once the back spring is attached to the armature bar and the spring saddle on the frame, you will have to bend the back spring to give a 4mm air gap from the bottom of the armature bar to the top of the front coil. This must be 4mm without anything touching the front spring; it should stand at 4mm on its own. Sometimes there isn't enough room for the armature bar to move away from the coils heads. This can be fixed by putting a thin washer between the spring saddle and the back spring. This will provide a better backpressure for the stroke of the machine.

The measured distance of the back spring once on the machine is

actually the distance from the armature bar to the spring saddle; this is because this is the only section of spring that will be flexible do to the rest being tightened down to the machine. Really, to get the best operation of a tattoo machine, the armature bar, front spring and back spring should be view as one component simple because the three part working together is the basic function of the machine, and all three parts have to work in unison. Some examples of voltage versus spring gauge in my opinion.

Front Spring	Rear Spring	Coil to A Bar gap	Voltage	Use
.013 shading	.015	3mm	6.5	Portrait
.014 shading	.016	2.4mm	5.6	Grey
.016 shading	.016	2mm	5	Color
.022 (standard)	.019 (standard)	3.mm	5.4	Darker lining
.019	.019	2mm	5	Softer lining

When putting this assembly together, remember that the easiest way to make sure its set right is to look inside the tube hole back at the armature nipple, kind of like a gun sight. The armature nipple should be the full length of the hole. If you see more of the armature bar then you need to move the armature bar closer to the spring saddle or the back spring closer to the spring saddle. Sometimes you need to adjust both to get it just right. Make sure that your armature bar is directly over top of your coils head as well, if it's a little to the right or left the needle bar will rub the side of the tube causing the needle to shake. You can also make an armature adjustment tool by cutting a slot wide enough for the armature nipple in the end of an old or unused tube. Then slide the cut tube into the vice, all the way to the armature bar till the armature nipple fits in the slot.



## O Ring

The circular piece of rubber that is on the armature bar is called an o ring. This is a needed piece although a lot of artist removes it. The o ring pulls back on the front spring making it push up with a little more force. It also works as another shock absorber cutting down on the feed back as the front spring hit's the contact screw. When new from the factory the o ring is under the front spring and stretched back to the screw holding the armature bar, front spring, and back spring together. This is fine, but I find that it works just a little smoother if you go the opposite direction and stretch it to the back of the armature bar. Figure out which works best for you, either of the two will work just fine. After many debates with collogues, I have determined two things. First, many artist don't use o rings. Second, I personally think they are important for the proper tuning and operation of the machine. So, I guess this is a matter of opinion. Find what works best for you.

## The Rest of the Machine

The front binding post is the entire assembly that holds your contact screw, and the rear binding post is opposite the spring saddle. One side of your clip cord will go into the little hole in the spring saddle, while the other fits into the rear binding post. The contact screw is the long screw that sticks out the top of the machine. Contact screws are most commonly made from silver, steel, and brass. Silver provides the best solution. Brass and steel are harder metals so they will provide more wear and tear over the term of operation. They will spark a lot more than sliver; this causes the contact screw to eat through the front spring requiring more replacement. Sliver is by far my personal choice. Less spark, less damage, and smoother operation of the machine. What the contact screw does is tune the machine by threading it in or out, closing the distance the armature bar needs to travel. This alters the speed of the machine. The set screw holds the contact screw in place

once adjusted. Set screws are made from brass, steel, copper, and plastic. When threaded tightly it applies pressure to the side of the contact screw locking it in place. I strongly recommend plastic because it will not damage the threads on the contact screw. This is very important if you are using a silver contact screw because the threads will be softer and easier to damage.

Another thing you will notice is a small capacitor wired between the rear binding post and the front binding post. The job of this capacitor is to absorb loose energy with the intent on making your machine run more smoothly. Basically it's a filter. Most of the time this will be a 35v x 47mf capacitor, but you can change the rating to better fit your machine. This is something you'll just have to play around with to see what fits best for you. What is a capacitor? A capacitor is made from is a ceramic cylinder with a wire coming out at each end or side by side. A smaller capacitor will make the machine run faster because it cannot store as much energy. Think of it like a glass of water, you pour the water in till it overflows, now use a smaller cup. Capacitors are measured in microfarads which is what the "uf" stands for. Most commonly 47uf 35v or 47uf 63v are used for liners and 100uf 35v or 100uf 25v are used for shaders.

Now, the most complicated part of a machine for students to understand is the shoulder washers. Shoulder washers are plastic washers that separate the electrical wiring from the frame. The frame of a tattoo machine is its own ground, so the wire harness should never touch the frame. If you turn on your machine and the armature bar goes down and stays down then you have something touching your frame. Here is an easy way to remember where they go. The only parts of the machine that should touch the frame are the coil shafts and your back spring at the spring saddle. Everywhere else should have a pair of shoulder washers (both binding posts). There are two places, so that means four plastic washers, one on each side of the frame. The front binding post should be set screw, contact screw housing, washer, solder lug, shoulder washer, frame, shoulder washer, washer, and screw. The rear binding post should be similar with the rear binding post, washer, solder lug bent to hold rubber bands, shoulder washer, frame, shoulder washer, washer, and screw. The grommet is a small piece of rubber that sits between the needle loop and the nipple. Its purpose is to hold the needle in place on the machine and act as a shock absorber to smooth out the way the machine feels.

## **Machine Cleaning**

For machine cleaning the entire machine should be disassembled. You want to rubber band the coils together. If you move them too much you will weaken the coil wires until they break. Lay every part of the machine on a

paper towel then spray with your bleach and water mix. Let them soak for about a minute to ensure and viruses are killed. After soaking, clean every part of the machine with a paper towel and rubbing alcohol. Make sure to get all of the bleach off because it will make your machine rust. Remove any rust or rough surfaces with a high grit sandpaper such as 2000 grit. Use the same sand paper to polish your coil heads and tip of your contact screw. I personally prefer a buffing wheel, like you find on a grinder. If any screw or washers have any rust on them, then you need to replace them. Apply new masking tape on the armature bar, if you choose. Then reassemble your machine. Be careful not to force any of the screws, you don't want to strip them or scar up the metal. Always use the proper tools, if you try to force something or rig up something that doesn't belong there, you will damage something.

## **Machine Tuning**

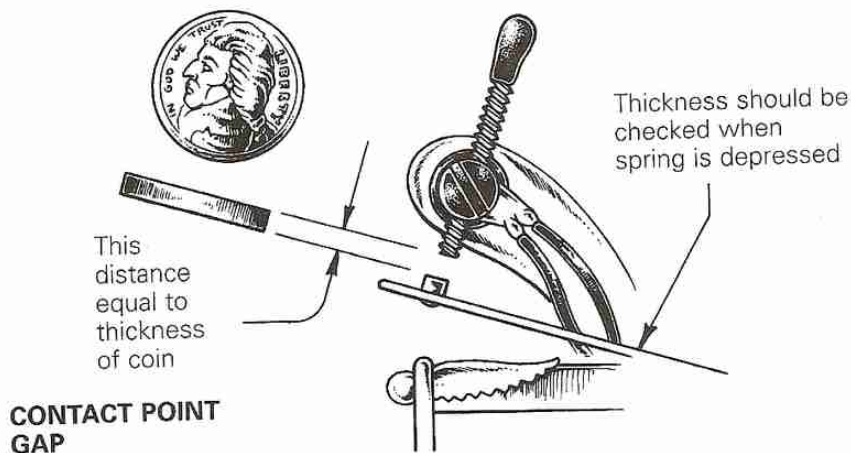
Machine tuning is hands down the most important thing you will need to know about machines themselves. I can't tell you how many times I have heard someone say, "I don't need to know how to tune a machine. I just use it out of the box and its fine." This kills me. If you are going to operate any kind of tool you need to know how to do so properly. The theory behind tuning your machine is to get the machine running as smooth as possible. The less vibration the easier operation will be. If you want a smooth straight line then the machine has to be in tune. When tuning a machine, many factors come into play. Your grommet on the armature nipple needs to be in good shape and your o ring on the front spring also needs to be in good condition. Another thing not everyone looks at is the quality of the contact screw. If it's dirty or has carbon build-up it will not get a nice smooth connection. Contact screws can be made from brass, steel, copper, and silver. Copper is fair, stainless and brass will work, but in my personal opinion silver is the better choice. Brass and steel are a very hard metal and they also spark a little. Over time they will burn a hole all the way through the tip of a front spring. If the machine is out of tune it will burn a hole much faster. Silver is a softer metal so front springs will last a very long time. Silver is also less incline to spark so you have less problems with plastic machine covers. The only thing I don't like about silver and brass is that they tarnish. Because silver is a very soft metal you have to be careful not to tighten you're set screw to hard, it can eat the threads right off of the contact screw.

You also want to take a look at the hole in the frame that your front binding post screws into. Almost all machines have a longer hole than needed. The reason for this is more adjustment. With the machine sitting on its yoke, if you barely loosen the screw you can move the entire front binding post



assembly up or down to adjust for lining or shading. Moving the front binding post upward is better for color and shading, down is better for lining, and the center is universal. I just run the binding post in the center. Either way you set this option, the tip of your contact screw should be dead center in line with the hole for your tube vice. The best way to check the alignment is to hold the machine like a pistol that you're about to fire. Hold the machine so that you can see the contact screw tip closer to you. While holding the machine at this angle, move your head a little to one side to see if the machine is level. If not pivot the "contact screw" up or down till it is level. You can check to see if the armature bar is also in the center position by doing the same thing only looking in the tube hole with the armature bar away from you. The more in line the armature bar and the tip of the contact screw are to the center of the machine then the less resistance you have while the needle bar is in motion. This will make for a steadier stroke.

I have already talked a little about the stroke but what exactly is it? The stroke of your machine is the distance traveled by your armature bar while in motion. The duty cycle of the machine is the length of time that the front spring stays in contact with the contact screw. The duty cycle is measured in percentages. If your duty cycle is 50% then the time the front spring touches the contact screw and time it does not touch the contact screw while open is the same. If the duty cycle of the machine is 40% then the front spring is in contact with the contact screw 40% of the time and away from the contact screw 60% of the time. Studies have shown that optimum duty cycle is around 55%. This can be measured by using an electronic multimeter that has a duty cycle setting on it. You attach one lead to the clip cord post in the spring saddle and the other lead to the contact screw. Some newer power supplies come equipped with a duty cycle reader. The stroke strength is hand measured by taking your thumb while the machine is off and pressing on the armature bar nipple. You want to push the armature bar all the way to the coils. If you apply pressure to the front spring then it will bend and you will not get an accurate measurement. The old way of machine tuning is a little less technical. If you've been around tattooing you may have hear of the old nickel and dime trick. A nickel is about two millimeters thick and a dime is about one and a half millimeters thick. The nickel and dime trick means that if you can just fit a nickel in that space then you're good for lining, and a dime if good for shading. This is not always the case.



I believe this image is from the A to Z guide to Tattooing from Spaulding. I found it online at [HTTP:// www. Forum.Ink-Trails.com](http://www.Forum.Ink-Trails.com) (You Guys are Awesome)

The idea is that if your lining, then you need to be a little deeper so you're black is darker, while shading your working the skin a little more so you don't want as much depth to avoid scarring. Definitely sounds like a good idea, but all this does it set the stroke a little different and it does not smooth out the action of the machine. Like a few close held ideas about tattooing, this was cool for the sixties but not by today's standards. Most tattoo artist use two machines in the course of one tattoo. You set one machine up for shading and one for lining. Doing this means you don't have to switch needles and tubes. You just use one for each. Since this is a guide for beginners, most apprentices can only afford one machine at first (speaking as a veteran artist I find it's easier to do this anyway) you can also set one machine up universally to do both. I set a few machines up to do different things and different styles but any artist can tell you they have one machine that they like more than any other.

## **Liner or Shader**

To set a machine up for lining you want to adjust the front binding post all the way down, as far from the top of the frame arm as possible. Make sure to pivot the contact screw tip to the dead center of the tube vice; unless you choose to use a cutback. For a liner, if the machine is sitting on the yoke and you are looking at the frame side, the contact screw will be at about six o'clock, where a shader will be about four o'clock. Some machines are made specifically to accommodate these angles, and some are universal. If your front spring isn't touching the contact screw just right then loosen it and move it up till it fully touches the screw tip. To properly tune your machine you

need to put a grommet on the armature nipple. Black is the best color because you can see it best as it moves. Barely loosen your set screw. Make sure it's still tight enough so that you have to use a little bit of pressure to turn the contact screw. If it's too loose then when you turn on the machine the contact screw will unscrew its self and you'll have to start over every time you let go of it. Now, hold the machine sideways so your looking at the coils and the armature bar is standing straight up and down. You want your power supply to be about three volts and apply more as needed. Turn on the machine. If it doesn't move then make sure you contact screw is touching the front spring. If it doesn't move then turn up your power supply slowly till it starts. If it still doesn't move then check your machine assembly, something is wrong. If you hold the machine so you can clearly see the grommet moving you may notice and oscillation in the movement. This means that you machine will be running but you will be able to see another pattern of movement. The movement is comparable to watching a bike tire move. Even though it's moving forward it looks like its going back and forth. This part is hard to explain but if you watch the grommet and slowly turn the contact screw you will see what I'm talking about.

That oscillation means your machine is out of tune. It's kind of like tuning a guitar for those of you that play; you have to remove the vibration. You have to adjust the contact screw until even though the machine is running you have to get this secondary movement to stop completely, which is almost impossible to do using the contact screw. You will have to get as close as you can and fine tune the machine using very slight adjustments with the power supply. You're not done yet. The next thing you do is barley touch your thumb nails to the armature nipple. You touch the part that sticks up while the grommet is on it and running. This is to test the stroke to see if it's hitting hard enough. Barely come into contact with the grommet, just enough to feel it hit you but without slowing it down. You want the stroke to feel smooth and just strong enough to not slow down the needle. It does not need to be a chainsaw. The softer you can get it to run without slowing the better your tattoo will be. If the stroke is too weak then turn up the power supply slowly till it feels just right. If it is to hard then turn it down. After you adjust the power supply then you need to tune using the contact screw again. It takes both the power supply strength and the contact screw adjustment to tune your machine. They both have to work together. Your power supply controls the strength of your stroke or "power" while the contact screw controls the smoothness of the machine. Once you are close to tuning your machine with the contact screw you can use your power supply to gently and slowly fine tune the machine to remove all secondary motion. It will take some time to get this just right, so you want to practice un-tuning your machine and putting it back in tune. Once you put a needle and tube along with the rubber bands

on the machine you will have to adjust the contact screw just a little. Once you're happy with the adjustment then gently tighten your set screw to hold the setting. Remember not to tighten it too tight because you may eat the threads off of the contact screw. Now you have a liner. Once set, every time you pick the machine up and load it with a needle and tube it will be ready to go till you move the adjustment or drop the machine. Try not to drop it; you can bend the upper frame arm really easy.

To set up a shadier repeat the exact same process only adjust the front binding post all the way to the top of the frame arm or four o'clock. If you want a universal machine the set it to the center or five o'clock. That's it; you now know how to tune a machine. Another helpful tip that I know I mentioned once before is to apply two pieces of masking tape to the underside of your armature bar. Stick them on and trim them to fit with a razor making sure not to cut your o ring. This quiets your machine, smoothes out the action even more, and reduces long term wear and tear on your armature bar and coils heads. Your machine will sound better which will please you and your clients as well as make your parts last longer. Make sure to change the tape about every week if you use it on a regular basis.

## **Other Supplies**

During a tattoo you will be using a few other supplies. Green soap is the most common chemical of tattooing. If you hear someone talk about the smell of a tattoo, that's it. You can order green soap from any tattoo supply company but I have never found it in a medical supply store. Green soap is an anti-bacterial soap that comes in a gallon jug and is very concentrated. Go down to your local "buy everything store", in the back of the health and beauty section you will find hand sized plastic spray bottles. You need five or six of these. Your green soap, bleach and water mix, rubbing alcohol, witch hazel, glycerin, and water should all be in these bottles. Make sure to label them properly with a magic marker. When you fill the green soap you want a mix of 25% green soap, and 75% percent water. Make sure to shake it well so it's properly mixed. All of the other chemicals need to be full concentration. Another thing that will be used a lot is the sheets of carbon copy paper you will use to make your stencils. They make a machine called a thermo fax that lets you scan in the images then it prints you line work stencil for you. I think these are a huge waste of time and money. If you just order the sheets and copy the pattern by hand then you have already drawn the image once before you ever tattoo it. And never use speed stick or any other for of deodorant to transfer your pattern unless you use one stick per client. There are a few companies that make a spray on tattoo stencil chemical and they are not that expensive. In the long run its worth what little you may spend to get it. If you have to use speed stick then go to the travel section of your local store and

buy the little sizes that are fifty cents each. This way you can use one per client and then throw it away.

Another thing you will need is rubber bands for the machine. You want them to be about an inch long when they are lying on the table, not too big or too small. Disposable razors are another item that you need, as well as small plastic drinking cups. The kind that is only about two or three inches tall, I think they are 3 ounces. Make sure to get the plastic not paper, after time the paper will leak. Plastic baggies are to fit over the spray bottles and your machine. You need the non-locking kind. Small paper plates and petroleum jelly are for the pigment. Set up will be the only time you will have to use petroleum jelly while tattooing. Wax paper will be what you set everything on. The last thing I want you to remember is that rubbing alcohol has no place during a tattoo. Rubbing alcohol is used to clean surfaces not skin, it will dry out the tattoo causing it to heal two and three times slower.

# Chapter 8

## Tattooing Basics



### Tattooing Stenciling

After you figure out what image you're going to be tattooing, the first step is stenciling your pattern. You need your image in the center of a full piece of paper. If you use just a small piece then you will have carbon transfer all over you and it will stay for about a week. Your studio needs either a copy machine or a scanner and printer for your computer. You can get a nice office copier/scanner at any office supply store for about a hundred bucks. Copy the image or scan it to the computer and print it centered. If it is a darker image then lighten the copy using the copy machine controls or if you scanned it in your paint program make it black and white before you print it. You can't stencil the pattern if you can't see the lines. Now, whatever size you print out is the size the tattoo will be. You may have to enlarge or shrink the pattern to get it right and sometimes this means you'll be printing it a few times. After you find the size you want throw the rest away, you don't want to get them mixed up. If it's a complicated pattern you may want to keep one copy to look at while you are tattooing.

The transfer paper is made of a purple carbon copy surgical grade chemical. When you tattoo this will be pushed under the skin, but don't worry. If you see a little purple once the tattoo is done it will fade away in a day or so. It is made so the body destroys it. One sheet of transfer paper has a few extra pages attached to it that are not purple. You can leave these or tear them off. The extra pages are for a thermal fax machine. The only page

of the transfer sheet you need to worry about is the purple one. On one side the page is dull and the other is shiny. Take your pattern and lay it down on top of the transfer sheet. The transfer sheet is laying dull side up, and then you lay your pattern face up on top of the sheet. Always use a pencil for this. If your pattern is printed or copied with black ink then you will always be able to see what you have already traced because a pencil line on black ink looks shiny.

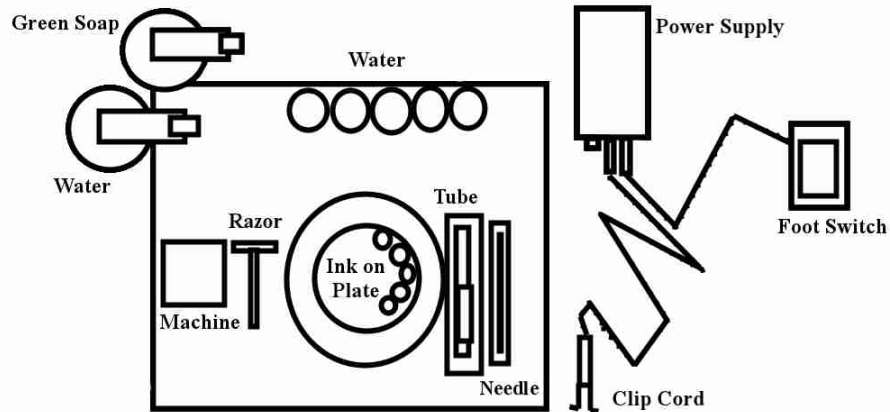
Now you're ready to make your pattern. All you do is trace the outline of the picture. Just go over what is already printed on the page. Be careful because anywhere you write will be part of the pattern. What this does is the pressure from the pencil makes the purple on the sheet stick to the back of the regular paper. Only trace what is going to be black outline. If something is solid black like a tribal then just outline it. You know it's going to be black so why waste the time to fill it in. If it's a more complex pattern that has a few large black areas then you can draw an "x" inside that area to be a reminder of that section being black. Keep it simple, the outline of the tattoo is one of the most important parts, so don't confuse the pattern by tracing a lot of things you don't need to. Once you've traced what you think is everything you want to look at the back of the paper to see how you did. You can spend all day flipping the paper looking for what you missed or you can just hold the paper with the pattern up toward the ceiling lights looking at the purple lines. This way you can see through the paper and any lines that you missed will stick out like a sore thumb. Once you've looked over your pattern look it over again. Check every line twice, if it's not on the pattern it will not be on the skin. Now you want to cut out the pattern using scissors. Hold the page so your looking at the purple lines then cut out the pattern as close as you can leaving about a half of an inch border of paper around the entire pattern.

This gives you room to handle it and room to make sure you don't cut away any of the lines. Now you have a pattern. Remember not to touch the purple; it goes on the skin so it has to be sterile. When you put the pattern on your workstation, during set up, make sure to lay it down purple side up so it doesn't get dirty. Also make sure that you don't lay it in water that may be on the table. If it gets wet then it's ruined and you have to start all over, but the bright side is that you now have a solid purple piece of paper in the shape of your pattern. Always practice before you do anything to a person. Practice making patterns and applying them to your self. We will get more into pattern application in the skin prep section of tattooing.

## **EEW-GOO**

Over the years there have been many different types of transfer solution. I discovered the formula for in my opinion the best for of stencil solution I have ever used to find out that a few others have come to the same conclusion. So I guess it's no secret anymore. I call it Eew-goo. It's made by taking original speed stick deodorant and putting it in a glass container such as a cup. Then place it in a clean microwave to melt it. This should only take about 30 seconds, and be careful. This stuff will be the temperature of the sun. Then pour the melted sped stick into a small pump spray container filling up 1/3 of the container. Next pour in concentrated green soap filling another 1/3 of the container, and then rubbing alcohol in the rest. Apply the top and shake well. The speed stick will hold the stencil on the skin, the green soap makes it anti bacterial and the rubbing alcohol keeps it from turning back to a solid. If your mixture turns back to a solid, or to a thick sludge then you need more alcohol. This stuff is crazy. It keeps the pattern on more than any other chemical, you can wipe as much as you like and even use water to clean the design off during the tattoo before the outline is completed. It also is fast drying. Once a pattern is applied to the skin, if its not straight, you'll have to spray it back down to remove the stencil. Alcohol, green soap, water, nothing but the chemical it's self will remove it once on the skin. If the stencil is still on the skin after the tattoo is done, then you are using a little too much speed stick and it's holding a little too well. I have placed a pattern on my skin to see how long it would stay, without tattooing, just using it as a temporary tattoo, it has stayed for more than seven days clear enough for me to tattoo the pattern. Make sure to use a spray bottle so there in less chance for cross contamination.





## The Tattoo Set-up

The set up of a tattoo should be very ritualistic. Every thing you do should be the same every time you tattoo. This way you always know where everything is and where everything is not. If something is missing you know exactly what. Here is the best way I have figured out over the years; feel free to come up with what is most comfortable for you. This is a list of what you need for every tattoo.

1. Wax Paper
2. (2) hand sized plastic spray bottles
3. Three non-locking plastic baggies
4. One disposable razor
5. One wooden tongue depressor (Popsicle stick)
6. Tubes according to what needle grouping you will be using
7. Needles according to type of tattoo, sterilized and unopened
8. One new roll of paper towels
9. Ink caps
10. Pigment
11. Pattern transfer chemical
12. One container of petroleum jelly
13. Two one inch rubber bands
14. Small plastic cups filled with water, same number as pigments used
15. Tattoo machine power supply with clip cord and foot switch
16. Tattoo machine
17. One box of latex gloves
18. Tattoo pattern
19. One small in sizes paper plate
20. Suitable work area with proper lighting



The first step of the tattoo process is to sterilize your work area. This means that you want to spray down all of your workstation surface and the chair your client will be sitting in with your bleach and water mixture. Spray the table then the chair. The reason you want to do this in order is because you don't have time to let the bleach water sit on the table. That way the table top is soaking for an extra few seconds while you spray the bleach water on the chair. You wipe the bleach off the table and let the chair soak while you set up. After you wipe down the table top you then lightly spray water on the corner of the work station you plan to use. You always want to operate from one corner or the other so you have room to move your client around. If you work from the center then you will hit the table or they will get in the way as you tattoo. Rip off a sheet of wax paper about a foot or so in length. Lay down the wax paper in the water lined up with the corner of the table. The water you sprayed will hold down the wax paper and keep it from moving as you tattoo.

Ink caps are small plastic caps that you use to put the pigment in while you tattoo, kind of like what a painter calls their pallet. Most generally ink caps come in two sizes. #9 and #16 ink caps are the common sizes that you will use. The nines are the small ink caps, while the sixteen's the large. Count out the colors you will need to apply the tattoo and use that many ink caps. For the most part you want to use small ink caps until you see just how far the pigment goes. If your doing a small tattoo and fill all large caps then you will be throwing away a lot of un-used pigment. Never try to put the pigment back in the bottle. This will cause massive cross contamination. The supply companies sell trays for the ink caps to fit into called ink cap holders. These look cool but you do not want to use them. Most are plastic which you can't autoclave, and the metal ones are too bulky to autoclave and package. A small paper plate works much better, and you get to throw it away when you're done. Remember sterile is good but nothing beats new.

After you determine how many ink caps you plan to use and what sizes

the you take a wooden tongue depressor (popsicle stick) and get a healthy but controllable glob of petroleum jelly on the end of it. We use a depressor because it's long so it's easy to get what you need from the jar and it's sterile because it's new and disposable. Use the depressor to apply the jelly to the paper plate; you want to sculpt it in shape using the depressor. If you look at the small paper plate you will notice that there is a ring in the center. It stops just before the edge starts to rise up to make the lip and outside edge of the plate. You want to apply the jelly in shape to that inside ring leaving the center of the plate clean. The reason for this is so while you are tattooing and dip your pigment you have a place to set your hand. If you are dipping for pigment and set your hand on the outside edge of the plate it will flip and throw pigment on you and your client. Place the ink caps on the paper plate in a curved line following the curve of the inside edge of the plate. Make sure you space them out a little. You don't want red to get in your white and all your whites be pink. Another little trick of mine is to put just a small amount of jelly on the bottom of the plate so when you put it on the wax paper it doesn't move while you tattoo. Place the paper plate in the center of the wax paper so the curve of the ink caps is facing away from you. This is so your hand can use the resting point and fit nicely on the plate as you dip. Place the plate on the wax paper before you fill the ink caps, trust me when I say that dropping the plate once is enough to make you never what to do that again. Filling the ink caps is one of the last things you will do because the longer your pigments sit they will dry out and get hard. Next you want to lay the needles and tubes on the right hand side of the plate so they are out of the way at first. Then the machine and disposable razor go on the left with the extra baggie under them. Your machine should be pretuned before you set up so you don't have to mess with it while the client is watching. You may have to make minor adjustments but you don't want to spend ten minutes tuning in front of the client because it may cause them to be nervous or think that the machine is failing. Next you want to make sure your spray bottles are full. The spray bottle with green soap should be 25% "green soap" and 75% water. Should you ever run out of green soap you can use regular antibacterial soap mixed with water in the same amounts. Antibacterial soap should only be used as a back up because it dries out the skin much faster than green soap, making the tattoo have difficulty healing.



Never use a pump action bottle. The way they work is they pump the liquid out when depressed and as they rise they draw in air. This means that they can draw in blood and viruses as well contaminating the whole container. Only use plastic spray bottles. The other spray bottle should be straight water. You need three plastic non-locking baggies for the tattoo set up. Two of those baggies go on the spray bottles. Hold one up so you can see the corners of the baggie. You want to use your finger nails to rip off a small piece of the corner, just enough to leave a pin hole. Place the baggie over the spray bottle and stretch the hole over the spout. The small hole will stretch and fit over the nozzle tightly as to hold the baggie on the bottle. This way you're not fighting the baggie during the tattoo and it stays in place. Don't just tear a hole in it and expect it to stay where it needs to, because it won't. It also creates a seal around the nozzle so you don't get pigment on the spray bottle. Do this to both bottles and set them on the left hand corner of the wax paper. Place the water closest to you and the green soap on the other side of the water. You will use the water the most so you want it closer.



Now you want to count the ink caps and fill up the small plastic cups of water in the same number. You want to get the water in the cups as close to the top as you can without spilling them so you can dip your tube in without

having to fight to get it in the water. If you only fill the cups half of the way it's a pain to get the pigment to wash out your tube. The purpose of the cups is to wash out the pigment as you change color. This is why you want one for each cap. You should line up the cups along the top edge of the wax paper so you can get to them with ease but they are still out of the way. If you spill one during a tattoo you will have to set up all over again because it will spread blood and pigment every where. Your spray bottles should be cattie-corner to the upper left corner of the wax paper, in front of the bottles should be your transfer solution or single use speed stick making a triangle shape. Your power supply should be out of the way but still close enough to get to should you need to make any adjustments. Make sure that the clip cord will not knock over anything on the table.

Now you're ready to pour the pigment into the ink caps. You want black first, then continue going from darkest to lightest color. This will be the order you will have to tattoo in so it's best to set up in this manor. While you pour the pigments you want to hold the bottle with one hand in the middle and apply your index finger and middle finger, one on each side of the spout. Sometimes the pigment will dry in the spout so you may have to unscrew the top and pour it out. If this occurs, set the bottle aside for the spout to be cleaned with hot water and a straightened paper clip after the tattoo is done. Should you run out of any pigment during the course of the tattoo then you should remove your old gloves, wash your hands, and then replace new gloves before you touch the bottle to avoid cross-contamination. When pouring the pigment always hold the bottle two inches above the ink cap. You want to drip not squeeze. If you squeeze then pigment will spray every where. Dripping breaks the stream of pigment so you don't cross-contaminate. This is more important when you are filling an already used ink cap. If you contaminate a pigment bottle then every person getting a tattoo with that pigment will be compromised. So drip two inches above the ink cap. The last thing you will do while setting up for a tattoo is to set the pattern in the center of the paper plate making sure you don't set it in pigment over-spill of water. It will ruin your pattern.

As you can see I am very specific when it comes to set up. The way I set up a tattoo is for a left handed person so you may want to find your own way but make sure you don't leave anything out. Once the client is seated, scrambling around looking for something does not look very professional. Either way you set up your tattoo, make sure it's how you set up every time and make sure that everything is nice and neat. The better everything looks the more professional you look. The more professional you look the more your client will be relaxed and trusting your best judgment. Plus if they come in and see the same set up every time they will see that you are very clean and very consistent. After the tattoo set up is the time you need to take your Zen

moment. Before every tattoo you need to take a moment for yourself. Reflect on the tattoo and what you are about to do. Relax and center yourself to prepare for the next challenge. Always take your time, never rush and you will be fine. I personally smoke a cigarette, some of my friends drink a cup of coffee, and some take a walk around the block. Calm down and relax before every tattoo.

## **Skin Preparation and Pattern Placement**

Skin preparation is the first step in tattooing that has interaction with the client. The first thing you will need to do is wash and dry your hands, then apply gloves. Always keep a small box of gloves other than latex because some clients will be allergic to latex. Your tattoo supplies should have already set up properly, going by the guide above, before the client ever enters the room. Before you ever sit the client down you should have already found out what they wanted and where. You need to figure out how the client will be sitting for the course of the tattoo. I use a combination of a regular barbers chair and a folding padded massage table so I'm going to go by that. You can spend more and get a chair made for the use of tattooing and just apply what I suggest to the tattoo chair. Different locations on the body require different sitting positions. Let's look at the body position versus the sitting position as well as some tips.

### **The Arm**

This area is by far one of the more simple places to tattoo. Your best bet is to set the client in an upright chair so they are comfortable. Depending on the location of the tattoo you will have to raise or lower the chair to get the area to be tattooed to the level you are most comfortable with. Your chair should have proper arm rest for client comfort and to keep the tattoo straight while performing. While working on the arm if the client should be wearing a t-shirt then you will need to roll up the sleeve. Rolling the sleeve under will stop it from rolling down while tattooing. Top of the arm and inside the lower are best if resting on the arm rest of the chair. A folded paper towel under the arm on the arm rest of the chair will prevent slipping. Another way to tattoo the arm is if you should have to do, say, old English down the arm from wrist to elbow. You want to have the client rest their elbow on the arm rest of the chair with their arm pointing upward.

### **Under the Arm**

One way to apply a tattoo under the arm is to have your client make a

fist and with the elbow bent, place there hand knuckles down on the center of the leg. It will kind of look like a child making a bird or duck gesture. Sticking the elbow in the air makes the arm in a kind of square shape. You will have to use this position and have the client place there hand on the opposite side of there head trying to cover there ear. This will allow you to reach under that arm for arm bands. This method is best used for tattoos where most of the pattern is on the facing of the arm.

If you are going to be tattooing on just the inside of the arm then you need to lay them down on a tattoo bed. Laying flat on their back have them reach out to you with a straight arm, then bend at the elbow moving the rest of the arm out of the way. Usually if you ask them to lay their arm flat on the table and then point to the top of their head it gets the best position. The arm will be flat on the table and you can tattoo without having to worry about the client's arm getting tired while holding it up. You can also apply the pattern in this same position. While working on the arm if the client should be wearing a t-shirt then you will need to roll up the sleeve. Rolling the sleeve under will stop it from rolling down while tattooing. You may want to put a drop cloth or a paper towel under their arm to absorb any excess fluids like water. They can take a shower when they get home, you don't need to provide one.

### **The Chest**

For men on one side or the other its best to lay them down on the tattoo bed and have them lay their arm along side their body. If they lift their arm then the pattern will stretch and possibly leave the tattoo looking strange after it's done. The best way to work on the chest of a female is to sit them up in a slightly reclined position. If you lay them flat on the tattoo bed then the breast will fall to the side pulling the skin to an odd shape. If you have to tattoo the center of the chest on a male or female then the suggested position is flat on their back. For a male or female you will have problems reaching them if they are sitting up. With a female lying on their back is ideal for the center of the chest because most of the time the weight of the breast will help pull the skin. Any work on a male or female's chest needs to have the shirt and bra removed. Clothing restrict the skins so a tattoo might look straight but if a female removes a bra then it will stretch as the breast drops. Always tattoo at the most natural position. Do not let a female hold one breast out of a bra, the tattoo will be not level and have a strange shape. They need to remove the bra and shirt. Try to keep modesty but you also need to work properly.

## **The Stomach and Pelvic Area**

Laying the client on their back is the better choice for the stomach and pelvic area. For the clients comfort and to have the arms out of your way have them put there hands behind their head instead of along there sides. The arms up causing skin stretch will not affect a tattoo this low. While working on the stomach or pelvis you will need to fold a paper towel over the edge of the client's pants to protect them from pigment stains. While tattooing on the pelvis you will have to keep a few things in mind. You need at least two inches of space in all directions to work. Don't be timid in asking the client to lower clothing. You have to be in a comfortable position to work well. While working on the pelvis you will be better off to have the client unbutton the pants and roll them under to prevent them from being in the way. If you just pull them aside you will fight them the whole time. Pants and underwear need to be out of the way. You're working on skin not dying clothes.

Another thing you will have to pay attention to is the stretch line of the pelvis. One the pelvis of a female you will notice a small line in the skin like a wrinkle. This is from the bending of the waist. Anything above this line will stretch when pregnant; any tattoo under this line has less chance the lower you go. Make sure to inform your client of this so they don't get a tattoo of tweedy bird and have it look like big bird on drugs after a pregnancy. This applies to the stomach as well; strongly advise against stomach tattoos to females that plan on having children. Do not tattoo around the navel of any female under eighteen for this reason.

## **The Upper back, Shoulders, Back of the Head. And back of the Neck**

The upper back and shoulders are also simple. You want the client low so don't sit them on a stool, they will be too high for you to reach. If your chair has a low back then you are fine to just have them sit up straight in the tattoo chair. If the back is to high or the pattern to low then have them sit backwards in the chair. You can also lay them on there stomach but it might be harder for you to reach what you need to. You must take t-shirts off; females can lower their low cut shirts as long as they are not in the way. If any bra straps are in the field of tattooing then have them drop the strap and remove their arm. If they lower it but they still have their arm in the strap they can pick their arm up and make the strap pull the machine causing extra lines. You don't want extra lines. For the back of the neck make sure to get all hair out of the way and shave properly.

## **Center and Lower Back**



For the center and lower back you may have the client sit on a metal stool not wood, there is no proper way to sterilize wood. If they sit on a stool have them lean on the back of the tattoo chair raising it to the level they need for their arms to be comfortable. They need to lean on something or they will run away. For females with less weight you can lay them on their stomach. Females with more weight will not be able to do this because you will have problems stretching the skin to tattoo. The lower back will curve inward making tattooing impossible. They will need the stool or to sit backwards in the tattoo chair raising it to the level you may need. Something to remember with the lower back is that it stretches as the client sits. If you apply the pattern while they are sitting then the pattern will be squished together when they stand. Always apply the pattern to the lower back while the client is standing. When they sit this will just help you stretch the skin for easier tattooing. If your client is standing in front of you and their lower back curves inward have them bend over a small amount bending at the hips to apply the pattern. Again, the pants and underwear need to be out of the way, so you almost always have to have them sit on the ledge of their pants. If you can't see crack then the tattoo is too high for the normal lower back position. Also make sure to fold a paper towel over the pants to avoid pigment stain.

### **Rib Cage or Side**

The side is one of the most painful places to tattoo for the client. For this reason it is also one of the hardest places to tattoo. Your client will want to move and squirm so you have to make sure they are in a secure position. From my experience the best position to work on the side is to lay a client on flat their back and roll them away from you until you can reach the tattoo field. You will have no choice but to have the client raise their arm to get to the side, this will stretch the tattoo pastern so be careful of what you do. Take your time and pay attention to what you are doing. When you apply the pattern to the side your client will have to be standing up. Leaving the arm to their side, raise it just enough to get your hands under their arm to apply the pattern. You can also have them raise there arm straight out in front of them and then bend at the elbow to point at their other shoulder. This will pull the skin a little but not to bad. Also make user to fold a paper towel over the pants to avoid pigment stain.

### **Side and Front of the Neck as well as on the Head**

For the side of the neck you want to lay the client on their side and put a full roll of paper towels under the other side of the neck. This helps hold their head in position. Some artist will set the client up in a tattoo chair and

use the paper towel roll in the same way. I personally find it hard to get where you need to and prefer laying them down. For the front of the neck you want to lay them on their back and put a paper towel roll under the other side. Make sure to place the roll between the shoulders and the head. If you just rest the head on the roll of paper towels then you will not have enough room to work. Both of these positions you need to apply while standing and relaxing the shoulders. If you don't they will not be straight. Remove the shirt or use a paper towel to keep pigment from staining the shirt. Make sure to throw away the roll of paper towels used for a pillow. This can get blood and pigment on it. Throw it away. Do the same for the face. For the top of the head, Lay them on their stomach or back and adjust the tattoo bed as high as it will go.

### **The Legs and Feet**

Some tattoo artists sit the client up in a chair and have the place there foot on a stool for the leg or foot. This does work, but I find it much easier to just have them sit on the tattoo bed and lay which ever leg you will be working on as flat as possible. Often you can get them to lay down which is better but they usually want to watch. The only thing you really need to pay attention to with the leg is to have the client remove their shoe. Shoes are dirty and by touching them and then the tattoo field you can spread infection.

For the tops of the feet just have them sit the same way and place the foot at the very edge of the tattoo bed with their knee in the air. Place a paper towel under the foot to avoid sliding.

### **Genital**

When it comes to tattooing the buttocks just lay the client on the stomach. You will have to remove the pants as low as you need so don't be shy. Make sure to pattern while standing. Use a paper towel for the pants as to not stain and also make sure to watch where you spray the soap and water. No one likes a wet ass. When it comes to tattooing the male and female genital just lay the client on their back and have them slide as far off the edge as you can leaving as little of the buttocks as possible. You may want to pick up a couple of stools for them to set their legs on. You will have very little call for this kind of tattoo but if you should here are a few things you need to know. The vagina naturally has more bacteria on and in it than any other part of the female body. Always leave a one inch area around the inner labials not tattooed. If you do tattoo up to the vagina the pigment will not

want to stay properly and you have a higher chance of infection. Larger females are not recommended for this kind of tattoo because they are hard to get to the tattoo field and they also have more bacteria because their bodies create more moisture due to the amount of body fat pushing everything closer together. It will heal slower and have a higher possibility of infection. The penis will also heal slow and take less pigment. It is also difficult to tattoo the penis due to it not being erect because of pain. The tattoo will never be right. When limp it will be smashed together and when erect it will be stretched to far out distorting the image. The testicals take pigment better but are hard to work on due to the nature and flexibility of the skin. It is my advice to not tattoo the vagina, penis, testicals, or anus due to the possible complications.

### **Under side of the Hands and Feet and inside of the Lip**

The under side of the hands and feet are not recommended for tattooing. The skin rejuvenates faster on the bottom of the hands and feet than anywhere else on the human body. This means that the pigment will not stay for long. Even the best tattoo artist will have to touch up a tattoo in these areas about every three months for them to look right. With the use of the hands and feet the healing process is a difficult one causing pain to your client for a tattoo that will just fade away. The inside of the lip has the same reaction only harder to tattoo. My advice to you again is to stay away. You should only tattoo what you can guarantee. These areas you cannot.

## Skin Preparation



Once your tattoo is set up and you bring the client into the tattoo room you want to wash your hands, dry them, and apply gloves. With a few exceptions you want to apply the pattern while the client is standing in a straight position with the arms and hands dropped to their sides. Never let your client put their hands in their pockets while you pattern. It can cause a tattoo to be out of shape. First you tear off a paper towel sheet. Then you remove the safety cover from the disposable razor. While holding the folded up paper towel under the tattoo field, generously spray the green soap solution on the entire area to be tattooed plus about two inches. From the bottom, shave upward. The easiest way to shave a client is to make quick and short movements up and down against the grain of the hair growth. After time you will get this technique down and be able to do so without ever nicking the client. Shave the area upward until the entire tattoo field has no hair on it. You should shave the area to be tattooed plus two inches all around the area to make sure you have plenty of room. Always shave every client. If they look like they don't have hair, I assure you they do. The reason we shave the area is because the tattoo machine is a stabbing device. If it pushes a single hair under the skin the hair will become infected thus infecting the entire tattoo.

Once you shave the area you need to dry it with a new paper towel, wiping in the same direction you shaved. If you drag the now loose hair over the smooth shaved area the hair will stick to the client and you will have to more time washing off the hair, this is not easy. The use of green soap during the shaving does two things. The green soap will lubricate the skins so you don't cause razor burn and green soap is anti bacterial. It kills germs. Every client must be shaved and prepped. If I'm tattooing on my fiancé and I just

saw her shave her legs this morning I will still do so before a leg tattoo. This is called common practice. Everything that you will do on every client is called common practices. This helps you make sure everything is done. After time it will become reflex. Right now I'm at the point of everything is a reflex until the machine is together and in my hand.

## **Pattern Application**

How you apply the tattoo pattern will directly affect the overall outcome of your finished tattoo. If it's not dark enough you will lose most of it during the tattoo process and have to free hand the rest. The main thing to remember about your tattoo pattern is that wherever you place the pattern will be the location of the tattoo for the entire life of your client. Take time and consideration while placing the pattern. You have a location and you have a pattern by this point. Now you have to look a little closer at the location. Some one points to an area of their body and says, "Put it here." There are a few things no one thinks about. Most just say ok, and stick it on. It's not that simple. You need to look at the area you are applying the pattern to and then look at the pattern itself. It's very rare for the pattern to be the same shape as the body part. You need to line up the tattoo to the body. This means that you have to make sure it's straight and also pay attention to muscle formations. If you have an exceptionally large pattern you may want to cut it in two pieces and apply each one. The number one thing that kills me is the arm bands that are too high on the arm. Every tattoo you need to think "What if they plan to add on this?" If an arm band is too high then you'll end up tattooing the arm pit. There will not be much room for additional tattooing. Line up the tattoo pattern so it looks best on the selected area. Sometimes a tattoo will look a thousand times better it's turned just a hair. Say you're doing flames on the left side of the chest. Going straight up and down will look a little out of place so you may want to angle the top of the flames toward to ball of the shoulder. This will give the flames the illusion of motion toward the shoulder.

The best way to see where you want to place a tattoo is to hold the pattern up to the skin and turn it slightly one way or another until you and the client are happy on the location. Do this with every pattern before you apply any transfer chemical. If you apply a transfer solution then lay the pattern on and spin it all around them you will have to make a new pattern while the clients get a huge purple blob. When you are content with the location you need to set the pattern aside and apply the transfer solution. If you have a spray or liquid chemical (which I recommend) then apply a small amount. This stuff goes a long way. If you're using "speed stick" deodorant then you need to use a new stick for every client and throw each one away when you are

done. If you go to your local everything store then you will find small sticks made for traveling. These are about fifty cents each. Get these so your not throwing away three fifty every tattoo. Remember that if you reuse the speed stick then each client will leave their bacteria on them so you will spread disease faster than you can imagine. Apply one thin layer to the skin covering all of the shaved area. This will make sure you didn't miss any spots. If you do miss a spot with the transfer solution then your pattern will not copy in that location. If you use liquid or stick transfer, either way you need to use your gloved hand and smear the solution on the skin, this will spread the chemical easily and ensure you didn't miss any spots. The transfer will dry, so once you spread it with your hand you need to apply the pattern right away.

Hold the pattern about a half an inch away from the skin using a hand on each side. If you use one hand only, then the pattern will slip causing it to smear. Line up the pattern to the decided location and gently touch the center of the pattern to the skin. The transfer solution will hold the pattern on the skin for you. Let go of the pattern. Now you need to use both hands and lay them flat on the pattern slowly at the same time. You want to work your way out from the center. If your pattern is long like an arm band then once you apply the center you can apply pressure to both of the sides using one hand for each side. The trick is to apply equal pressure to each side at the same time. Pressing on the center of the pattern will help the pattern from slipping or smearing. Hold the pattern on the skin applying medium pressure and count to ten. You have to give the carbon time to soak in the skin. After you count to ten then remove the pattern from one side to the other. Never just pull the pattern off because it will smear every time. Set your pattern aside and check your lines. Make sure that the pattern transferred well. If not the clean off the pattern with green soap and start again. Be a perfectionist, make it right. As long as you don't put six pounds of transfer solution on the skin then your pattern should hold up to four or five transfers. Because of this if I know I'm going to be tattooing say fifteen stars then I only make three patterns, using each a few times. If your adding to an already existing tattoo then use a razor knife, like the ones you buy at a hobby store, to cut as close to the patter as possible. This way you can better line up the new pattern with the old tattoo. If you're doing something with a circle in the center like a tribal then cut out the circle so you can better see. After a while you will get more efficient at applying a tattoo pattern. Its one of those things that gets easier with time. It's not uncommon for even veteran artist to have to apply a pattern three or four times to get it right. Always change gloves after you apply a pattern. The chemicals in the transfer and the speed stick include petroleum. This will eat your gloves as talked about in Chapter 4.

If you are doing custom work or free hand work then use a single use

pen, throw it away when you are done. A pen will soak up bacteria and disease just as much as anything, if it's felt tip then even faster. Be careful what kind of pen you use. Some artist like using felt markers or ball point pens. If the tattoo is lighter sometimes they can show through and many types of pens can be toxic and cause an allergic reaction. They make special kinds of pens for this called a skin scribe or surgical scrip. The ink they use is the same thing the carbon in the pattern will be made from. These scribes get expensive compared to the price of a ball point, but again you can only use them once. When doing custom work or adding to an existing tattoo you never want to use black. If you use black you will not be able to tell which is tattoo and which is pen. I recommend a light color like purple, red, or green. Free hand work does not mean take up the machine and go. When someone says "free hand tattoo" that means the artist drew the pattern on the skin without a stencil. Do not ever attempt to tattoo without a pattern of some kind. You cannot erase a tattoo.

# Chapter 9

## Starting a Tattoo

Lining a tattoo is one of the more difficult things to do properly. Most artists just assume you tattoo over the purple. This is true but it's like saying you just step on the gas and clutch to drive a standard transmission vehicle. To properly line a tattoo you have to choose your weapon of choice. Lining will most often be a five round or an eight round. Look at the original picture and see if the line work is a thick line or a thin one. Thinner lines need a five while thicker takes an eight. You do not want to use a three for lining a tattoo. A three is too small of a line. You will be able to see every little shake or bad spot. The only thing I use a three for is to tattoo single strands of hair in a portrait or small detail. If you insist on using a three to line with then your tattoos will take hours when they could have been done in much less time. Also using a three for the bulk of lining or shading will make you have to overwork the skin causing the client to scar. Unless a tattoo is very small I almost religiously use an eight. The lines are a nice and smooth, and they are so much easier to use. There are four types of lining. The first is just lining. The second is grey lining which is where you use water to dilute the pigment so your outline has a grey look instead of black. Bold lining is considered a new school trick. It's where you give just the outside lines of a tattoo a very thick black outline. Some artists also call this cartooning. Last you have blood lining. Blood lining is a more advanced technique used for making an outline without any pigment. The skin turns red, kind of like a scratch. The artist will shade from this line and once the tattoo heals it will be gone completely. We will get more into the application of each as the lesson progresses.

So you're staring at a pattern on the skin of your client with a full set up tattoo. Now what? The first thing you will need to know is how to put together your machine. It's not hard. The first step is opening the tube you plan to use first. If you look at the tip of the tube you will notice an open spot on the tube itself. This is called a washout. It was designed so that past artists can work beside a sink while they work and simply run water through the washout to remove all the pigment so they can change colors. Now with so many cross contamination issues we stopped doing this but the tubes stayed the same. This is what the cups of water are for and why you need one for every color pigment. If you use one or two cups of water then your white will



look pink if you wash out the red first. The side with the washout is the same side the needle comes out. The other end you need to put in your tube vice. Tighten it down just enough to hold it; you will have to move it around later. The tube should be placed in the vice so that the washout is pointing straight up. Now take the needle you plan to line with out of its package. Look at the tip where the needle head is. You will notice that if the eye loop in the back is flat then on one side the needle head is on top of the needle bar, and the other way the needle head is on the bottom. The needle head needs to be on the bottom of the bar. The reason for this is because when the needle rest in the tube it will be flat against the bottom of the tube. If you turn it so the needle head is on top then your needle will sit in the center of the tube and shake everywhere while the machine is running. I suggest setting up a machine before you ever try to tattoo so you can see what I'm talking about. Now take a grommet. Usually I get the nipple grommets. They look kind of like a small top hat. The grommet will go on the needle so much easier. The other grommets are called full grommets. These have rubber on both sides instead of just one. You have to pinch the grommet with your finger and thumb to make it flat. Then you push one side of the rubber into the needle loop and use your finger nails to pull it the rest of the way through. It's a pain in the ass. Instead just get the half or nipple grommet and they go right on. The grommet holds the needle on the machine and also acts like a shock absorber for smoother operation. You want the rim or flat part to be on the bottom of the needle. So if your needle head is down then the rim of the grommet needs to be on the same side.





Now you put the tattoo needle in the tube. You want to feed the entire needle bar into the back of the tube, the side closest to the armature bar. Don't force it to go, sometimes it wants to stick. If you force it to go down the tube then you can push the sharp part of the needle into the tube. Metal is sharpened by removing metal, the sharp point of the needle head are very thin and bendable. If you bend these, then you have to get a new needle. If you tattoo with a needle that tips are bent you will scar up the client and the tattoo will bleed like crazy. Basically instead of tattooing you will just turn their skin into ground beef. I find that holding the machine so the tube is pointing at the ground then flipping or tapping on the side of the tube will almost always make it fall right into place. You can also place the needle in the tube before putting it in the tube vice, which many find easier. Now grab the needle loop and grommet. Put the needle and grommet on the nipple for the armature bar. Make sure the needle is turned so the head is down and against the tube. The grommet rim or flat part needs to be against the armature bar or down as well. You can put the grommet on the armature bar first but unless you have a small armature nipple then you are going to have problems getting the needle on the grommet like that. Now you have a needle attached to the armature bar of your machine. Now you need to place a rubber band on the machine. The rubber band should sit in the middle of the armature bar and back of the tube. Under the machine the rubber band should be in the band holder if you have one or just put it between the spring saddle and the rear binding post. Only apply another rubber band if the needle is jumping around while the machine is running. The less rubber bands the better. If you use too many then they will bend you needle bar which will

cause your needle tip to not sit in the tube properly. Too many rubber bands can also slow your machine by applying too much force downward.



Take a look at the tip of the tube. Chances are the needle is sticking way out or not out far enough. You can run your machine one of two ways. These are called "running flush", or "hanging the needle". To run flush you need to loosen the tube. Then slide the tube forward until the tip of the needle is the same length of the tube. The tip of the needle and the tip of the tube should be flush, hence running flush. The advantage of running flush is that the tip of the tube stops the needle from going too deep. It acts like a safe guard. Many artists swear by this method. The disadvantage of running flush is that as soon as you touch the tube to the skin pigment will go everywhere. It makes it really hard to see your pattern. Another down side is that you have to push the tube along the skin of your client to get the right thickness of line. After a few minutes this will be really uncomfortable for the client. So you decide if you want to run flush but I recommend against it. The other way is hanging the needle. You line the needle up flush just like before. Then you move the tube back just a hair. It should be just enough to make the needle stick out about the width of the needle bar. You'll have to play with this too see where you like it to be. Just don't run the needle too far out or pigment will not get on the needle during tattooing. You'll have to dip the tube in pigment about every inch you tattoo. The up side of this method is that you can see what you're doing. There will only be a small amount of excess pigment while you tattoo. It will look kind of like writing with a sharpie marker. Another up side is that you aren't grinding the tube on the client, so the tattoo will hurt them less. The only down side to this is that you can go too deep. If you go too deep in the skin you will hit a dermal layer of spongy tissue that will absorb the pigment. This will give you what we call a "blow out". A blow out is a spot in the tattoo line that get really fat in one spot. I'm sure that you've seen them if you know anyone with home made tattoos. They make your tattoo look like crap, so you have to have a light hand and tattoo

just enough to get the line as dark as you want it. Personally I recommend this method for all artists, not just beginners. It allows you to do much more with the tattooing. Like less restricted movement, and the ability to see what you are tattooing compared to touching the needle to skin and only seeing a black blob twice the area you're trying to tattoo. Now your machine is set up, next lesson.

## Chapter 10



### Lining and Shading

Lining isn't as easy as you may think. You need to put a lot of time and consideration into lining. Lining is not a race. Usually the lining of a tattoo will take you longer than shading or coloring it. Now that your machine is set up you can attach the clip cord. It doesn't matter which way. Run the machine and check the tuning. You may have to do some last minute adjustments, but your machine should have been tuned before hand. While running the machine, check to see if the needle tip is jumping around. If it seems loose and not quite seated in the tip then stick another rubber band on the machine. They should be of equal distance apart between the back of the tube and your armature bar. If you put them too close then you will bend the needle bar. The rubber band might also cause the machine to run differently than expected. Once the needle, tube, and rubber band are in the machine;

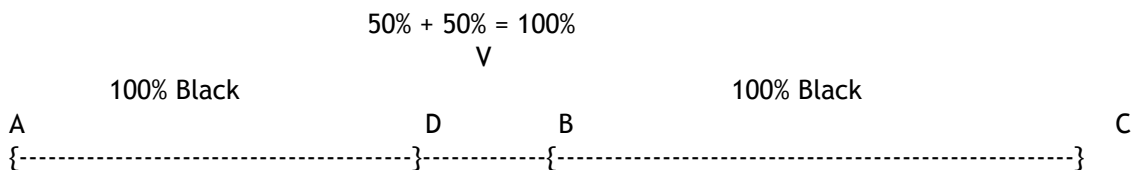
test the stroke by touching your thumbnail to the grommet while the machine is in motion. If the stroke feels weak then you may have to readjust your machine. With the machine together and tuned you need to use the extra plastic baggie to put over the machine; this will help guard your machine from biological matter that might contain a virus. You do this by tearing a small piece out of the baggie's corner. Then slide the machine needle first into the hole till the baggie gets past the grip of the machine, and simply cover the machine with the rest of the baggie. Watch the tip of the needle so you don't end up with plastic on it.

When you tattoo a line you will have extra pigment left on the skin, this is normal but a pain in the ass. While you tattoo you will constantly have to wipe the pigment away so you can see what has been put under the skin and what has not. The more the needle protrudes from the tube the less excess pigment will be expelled, but the shorter the line you can make before re-dipping. The black pigment is thinner than any other pigment. When you wipe it away you will smear black over everything you drag the paper towel across. If you think about it for a second then you will soon see that the pattern is a light purple line that can easily be wiped away. This leaves a difficult problem. When tattooing over a pattern you can't just start in the middle, because after two or three lines you will no longer be able to see the pattern or what you are doing. You have to start from the bottom and work up and away from your predominant hand. I'm left handed. This means that I would work up and to the right. The side of your hand will rest on the client's skin; you will get black on your hand. If you tattoo left to right, and your right handed, then you going to smear black over the pattern. So if I were tattooing a small square I would do the bottom line first. Then wipe with a dry paper towel down, in the direction away from the center of the pattern leaving any inside lines untouched. Then I would tattoo the far Left line (if your right handed it will be the opposite) wiping the extra pigment left. Then I would tattoo the right line, and then the top, wiping each as I go. Let's say I'm lining a bigger square with a small square inside of it. Then I would line the outside bottom line in two pieces. Then the outer left line while wiping away from the center as I go. Next I would line the inner left line wiping left. So next for me, would be the inner right line because I don't want to smear pigment over the lines left. After wiping I would line the outer right line, top inside line and finally the top outside line. This method will allow each line to be perfectly visible as you line the entire piece.

When you line a tattoo you need to view each line as an individual tattoo. Let the piece fall together by it's self. If you pay attention to one line at a time then the piece as a whole will be perfect. I would tattoo a larger line in sections because when you have to extend the reach of your hand then the contour of your mussels and bone will want to naturally curve inward

toward your arm. A larger circle, for example I would break into eight sections while a smaller one would only be four. No matter how big or small, never tattoo a circle as one line. A circle is the absolute hardest thing for an artist to draw, do not take a chance. When the Catholic Church asked Michelangelo to paint the Cistine Chapel to prove his artistic ability when asked he drew a perfect circle free hand in one stroke. He was no longer in question. Let's say you have a long straight line.

Look at every line with a starting point and a stopping point before you ever tattoo. When you stop a line and continue it there is a small section that will be lined twice. In tattooing this spot will be wider than any where else. Think of tattooing like a sponge. If you just touch the corner of a sponge to water it will be wet, but if you touch the same amount of sponge to the water and hold it there for a second the entire sponge will be wet. So the slower your line work is the thicker the line and the faster you go the thinner and lighter the line will be. That spot in the center of the line will be too dark so you need to start at the opposite end and meet the two together in the middle to avoid this. Remember that lining is all in the fingers. You should plant both hands on the client, then line only using the available motion your fingers allow, this will provide a very steady line. The arm and wrist should not move at all while lining. If you can't reach an area then stop, move your hand, and continue. Let's say the first line is A to B, and the second line is C to D. It would go as follows.



As you line B, you want to draw the needle out of the skin past the point you want the lines to meet. This will lighten the line at the end of it. Then do the same going from C to D in the opposite direction lightening the line at the end. Both sections that are lighter will combine to make a solid, single, darkened line. So if the A to D point is 100% black and the D to B section in the first stroke is 50% Black. Then the same from C to B and so on then the section between D and B will be  $50\% + 50\% = 100\%$ , the perfect width and darkness all the way across. Because the skin will absorb the pigment similar to a sponge you want to pace yourself. If you line too slow then your lines will be thick and you will eat up the skin causing scarring. If you go too fast then your lines will be thin and most of them will disappear when healing. You will need to find a happy medium speed. Once you find your speed of movement you want to use that speed with every tattoo. This way if you ever have to touch up a tattoo you don't need to fish for the right speed

to match up the line work. I tell my students to practice on a spaghetti squash and a banana. The banana will feel just like human skin down to the damage over working causes, this way you can get use to the cutting sensation. As you tattoo human skin you will feel a very slight vibration from the resistance of the needle touching the skin. After time you will get to know what feels right and what doesn't. The best way I can explain this is that when done properly, lining feels smooth. It just feels right. When too light, lining feels squirrely and unstable, and when lining too hard, you feel like your machine is choppy or running roughly. The banana will help you find this, and the skin on a banana is about as thick as human skin so you can better prepare for the proper depth of the needle work. The spaghetti squash feels nothing like tattooing human skin, but it does take pigment the same. You can use spaghetti squash to practice shading, grey wash, and even mag work. It blends almost perfectly like skin. So the combination of the two will get you on your way. Don't bother buying fake skin from the magazines. They may progress with time but for now they are just light pieces of rubber. They look like human skin but you have to dig the hell out of them to look right, so if you practice with these then when you tattoo a person you will cut their leg off.

If you, at some point happen to get pigment smeared over the pattern then use a clean and new paper towel sheet. Put a little bit of water on the paper towel, just enough to dampen the towel on a corner. Never use green soap until the entire pattern is tattooed or it will remove the pattern. Take the damp towel and lightly wipe over the pattern that's blackened. If you push too hard you will remove the pattern, you're just trying to wipe off the black. Then use a dry part of the paper towel to dab, not wipe, the pattern dry before continuing. After the entire outline is complete then you can clean all the extra pigment off of the tattoo. Spray the paper towel with your green soap and your water; you don't want to send any viruses up to infect you. Check your line work and make sure it's all smooth; if you need to darken some then this would be the time. Other than that you are done with the outline. The key points to lining are study and practice before you tattoo human skin. Pace yourself and work from the bottom up of the pattern while wiping away from the stencil. Every time you dip for pigment, black or color, you should barely touch the tip of the needle to the paper towel at an angle. This will remove most of the extra pigment and allow you to better see what you are doing. Other than that, the more fine tuned your machine is the smoother the lines. Heavy machines like cast iron will provide smoother lines, but lighter machines will not hurt your hand or back while tattooing. Good luck mutilating fruits and vegetables.





# Chapter 11



## Solid Color and Black

The first tattoos you will be doing when you are ready will be tribal and solid color work. For the most part, you're going to be lining with an eight or a five. The idea of solid color is like the sponge I explained earlier. The longer you hold the sponge in the water the more it will get wet. The only problem is a tattoo needle can damage the skin to the point of scarring if you're in the same spot too long. Scar tissue gets its characteristics from having a lack of elasticity like normal skin. If you scar a tattoo then the pigment will come out as the tattoo heals and touch ups will be more difficult because the scar tissue will cause you problems. If you are tattooing something about the size of a card deck then you will be able to shade and

color with the needle you lined with. Any tattoo bigger than a deck of cards should be finished with a mag unless there is a lot of detail. Let's look at coloring a small tribal solid black. You should line the tribal with an eight. The advantage of tribal is that you shouldn't be as concerned about the outline; it's all going to be black anyway. A lot of tribal tattoos you see will have a darker outline than the fill work in the center. You can avoid this by lining the tribal lightly then sharpening the edges with an eight once it's filled in. Let's say the tribal tattoo is the size of a playing card. The best way to look at solid work is in sections, sort of like filling in a very small checker board. Work from the bottom up. When applying the pigment you want to go in small circles like the test in school with a number two pencil. If you fill in with slashes or by going back and forth you will be able to see the needle marks. The best way to practice the circle motion is to take a sheet of paper and try to fill the entire page with pencil. Practice trying to get the coloring on paper smooth so you can't see the pencil marks. You will be able to see that the best coverage will be circles about a sixteenth of an inch wide. It takes forever but the tattoo will be high quality.

You must have a light hand, if you push too hard or go too slow then you will just turn your client into a piece of ground chuck. You can also practice your fill work on a banana since the banana will look the same as skin. If you are digging then the skin will look chewed up. You should be able to see the tattooed area about the same quality as a non tattooed area. The finished product should be smooth to the touch. If you can see holes, ruff spots, or ditches in the skin where you lined them you are just playing butcher. Start out light, you can always add to a tattoo but you can't take away. It won't take long for you to find the speed and pressure you need to have a nice smooth fill. As you tattoo it will seem faster to just go back and forth like your coloring with a marker, but after the tattoo heals the needle marks will show though, I promise. The human skin can only absorb so much pigment, like the sponge it will simply stop taking its fill. If you don't cover the area well enough then the areas you did get will seem darker leaving the tattoo looking splotchy. Take your time and feel it out. With a mag you can go much faster but you have a higher risk of damaging the skin. Once you get efficient with a mag, a tattoo that takes an hour to fill with an eight will take about fifteen minutes, it will also heal twice as fast and dark. After you fill in the largest portions of the tattoo then you should do the darkening close to the line work. Take your time and smooth the outside edge as you fill in. With the circles you should get as close to the lining as possible then fill in and smooth out the edge like you were doing the outline. A good trick to ensure you have a good solid coverage is to apply water to the skin. The water will reflect the light and let you see areas where the fill is too light. Make sure to wipe the water off before continuing to tattoo.

Solid color will be the exact same process. You should have one cup of water per color. When you change colors dip and run the machine in the cup of water up to the washout. Hold it running under the water until most of the pigment comes out. You may have to wipe the tube and needle off with your paper towel to clean it off all of the way. Tattoo pigments mix, so if you don't wash out all of the blue and dip in the yellow, you will tattoo green. This is also why the pigments should be set up in the order of darkest to lightest. If your tattooing a gnome with a blue hat and a yellow vest then you will want to fill in the bulk of the blue using small circles, then do the blue edge work to smooth it out. Next you would rinse out the machine and apply the yellow in the same way. Blue is darker and thicker pigment than Yellow. If you tattoo yellow first, then the blue will soak in the opened skin and dye the yellow to green permanently. Red will turn yellow to orange, and red will also turn white to pink. So you would apply the pigment starting with red, then blue, yellow and finally white if you are using these pigments. Because of the pigments being so thick and having the ability to dye the other colors you should be very careful of the order you tattoo. There are always exceptions to the rules; Some times you can use this to your advantage which I will get more into with the advanced lessons.

While you are tattooing the skin will turn a reddish color due to the irritation the needle causes. This will later come to be an advantage but with color it can throw you off. If you are applying white then a minute or so after the application, the white will turn pink for a couple of hours. Yellow is the worst about this because the addition of the red tint will make it look like orange. So you should apply the orange first so you can see where it is going, then use the yellow. Orange is thicker; you should use it first anyway so you don't stain the yellow a different color. Anytime you use a large amount of white or yellow you should explain to your client that it will look off color for a few hours so they don't lose faith in your ability. It will take some time but you'll see which pigment is thicker and needs to be applied first.

# Chapter 12



## Mag Use

A mag is a tattoo needle with two rows, one on top of the other. They're stacked as you would stack soda cans laying on there side, four on the bottom and three on top for a seven mag. The two rows are spread apart more than a round so the pigment dispersal is a little smoother. It would be like comparing a fine point pen to a magic marker. The little detailed stuff is for the pen while the magic marker is for larger jobs. The mags are made by soldering your needles in a row and laid out flat. Solder at the back, next use a single edge razor blade to weave the needles. One on top, one on bottom, then one on top, ect. Then with the razor in place another layer of solder is applied to hold this configuration. A stacked mag is where they lay four down and solder them, then lay three down and solder those. Then they solder the two layers together. This would be to make a seven mag stacked. Because they are closer together they are smaller, so a nine mag stacked will fit in a seven mag tube tip. Proper use of a mag is at an angle. You want the mag to lay flat on the skin, but lay it down so it penetrates at a slight angle. If you try to use a mag straight on the skin like holding it will pinch the client and stick in the skin causing the needle to jump. If the needle is flat on the skin then you need to elevate the eye loop till you have about a forty degree angle. You should drag a mag, not push it. What this means is that you should pull the machine away from the tip of the tube, similar to driving a car in reverse. If you push the mag forward it will have a tendency to go under the skin making it difficult for the needle to retract and move forward again. Solid coloring with a mag is very similar to coloring with a lining needle. You want to color in the circular motion but due to the mag being wider like a paint brush you cover more area faster. Think of using a mag like using three lining needle side by side to color. If you go slower then you will cause more damage to the skin. Pay attention to the texture of the skin by wiping away all the extra pigment while you tattoo. It takes practice but you can turn a mag on its side to use the edge needles like a liner. This will make filling in close to the line work a lot quicker. One way to practice using a mag needle is

to buy one of those large black markers that have the tapered tip. Practice using the marker at a flat angle to make a bold line, and then turn the marker to get a finer line. Just remember to go backward to simulate needle use.

## Chapter 13



### Grey Wash and Color Shading Basics

There are two sides to shading a tattoo, the technical side and the artistic side. The artistic side takes many years of practice, which I suggest you study art books that cover pencil shading, color blending, color matching, and light reflection. The best way you can practice art is by repetition. Look at every thing, and then try to draw it. Pay attention to lighting. One rule of shadowing is that in light reflection the shadowed part of the image will be in the direct opposite position of the lighted section. The human eye can distinguish fourteen shades of grey. White is the absence of grey where black is the saturation of grey. White (skin tone) would be the shade one and the black will be the fourteenth shade. While shading you should do the best you can to use all fourteen shades. When shading you the dark line and the light

line. The dark line is the darkest part of the area that will be shaded and the light line will be the lightest part. The dark line doesn't always have to be black, just like the light line won't always be white. You have to determine how dark the beginning area will be and how light the end is before you start and area. This is the measure of hues. A hue is the value of a color. If you take a line that fades from solid black to solid white then the black would be 100%, the white of the line would be 0% and the middle would be 50%. So if I said that your dark line need to be 35% and your light line needed to be 15% you would know that the line or area that needed to be shaded would be rather light. A good way to practice this theory on paper is to draw a number of lines each at a different length. At one side write a 100% and the other write 0%. At the 100% line make a solid black square as dark as you can get it. Then try to shade out the side of the box that goes toward the 0% until you can no longer see where the box started and the shading began. Use a pencil and don't smudge the graphite, this will not help you in tattooing. You should shade by going over the area many times instead of just pushing harder.

To understand the technical side of shading, you must understand that shading with a tattoo machine is a combination of times gone over, dilution of pigment, the speed you follow through with, and depth. Think of the skin depth the same way you would a light and dark line, in percentages. Unlike with a pencil where you get a darker line by pushing hard, tattoo pigment is as dark as it's going to get. If you push harder you will dig and scar the skin. Instead, we get lighter by diluting the pigment with water, witch hazel, or distilled water. The act of diluting the pigment to get a lighter affect is called washing. When you hear someone say I got a grey wash tattoo that means that the artist used only black and washed out the pigment to shade the image. There are two main methods of washing pigment, this would be pre mixing wash, and on the spot washing. To have an affective wash you need at least four main pigment densities. This includes solid black, dark wash, medium wash and light wash. To pre mix, you need three empty pigment bottles. The darkness of your wash is a personal thing that varies depending on the artist, so you will have to see what works for you. Line the bottles up in a row. I prefer 1oz bottles to keep it simple. Drip solid black pigment in each bottle according to how dark you want them to be. My pre mix (I use pre mix very little) is ten drops for dark wash, seven drops for medium wash, and three drops for light wash. Then you fill the bottles the rest of the way with distilled water. Make sure they are close tightly, and then shake them up well to mix the pigment. Make sure to mark each bottle because on the outside they will all look black.

The other form of grey wash is "freehand" or "on the spot" mixing. I prefer freehand but it takes time to learn is well, and you need to use the same black on a regular basis to get the feel for how it will dilute. If I were

setting up for a grey wash tattoo I would have a large cap of black and four empty large caps. Sometime before I would begin tattooing I will fill the empty caps with water from the water spray bottle. If you dip your needle in black, then it's black, though you will use solid black very little during grey wash. If you dip your needle in black and then the first empty cap, you have dark wash. Dip in black, first empty cap, then the second you have a lighter wash. Dip in both and then the third you have medium, and so on until you get light. After a time of tattooing you will no longer need to use the black, each cap will take on a color of its own. You may have to periodically add water as the caps empty. It takes a while to get use to this method, but it allows you much more control over the hue value placed in each shaded area. Using speed of your movement is very important during shading. If you go slowly, then you will have a darker area filled in, just like the sponge. When I shade or color blend, my hand moves so fast that it's hard to not see my hand as a blur. Since you will have to move fast to get a light hue you will have to drag the needle or shade in the direction of your dominant hand. If you try to push the needle you will get stuck under the skin leaving a very dark spot and hurting your client. Your needle is only so wide. Because of this you will have to work your way up the dark line. Moving fast up the line will help you better blend the hue in so it looks like a solid area instead of a bunch of lines coming from the line. Practice this on paper with a pencil.

If one hundred percent of the needle depth is 2mm then fifty percent is 1mm. you should pull the machine out of the skin as you come to the lighter side of the area. This is called whip shading, due to the appearance of you whipping the machine. When shading or coloring a tattoo you need to keep in your mind that you can always add to a tattoo never take away, so you would shade light then get darker until you are satisfied with your out come. The starting point of the needle braking skin will always be darker due to the inability for measurement. You can not tell how dark your line will be until you see it in the skin. Your starting point will need to be your dark line. Let's say you are using a light washed grey to shade a line. You would shade out from the dark line very lightly but quick to about the 50% mark pulling the needle out of the skin by the 75% mark in a straight direction, not circles. Repeat this all the way up the dark line till it looks like a light, but solid hue. Always go in one direction, using whip shading start from dark line to light. If you use circles during wash, the hue will be too dark. Then starting back at the beginning of the dark line, do the same thing but reduce the length by ten percent every time. So the second pass will be from the dark line to 40%, pulling out by 65%. Repeat this until you get all the way to back to the dark line. Getting shorter strokes as you progress will give the area the shaded look. Even though you are using one hue of wash, every time you go over an area it will get a little darker. This is how you get the hue value form 100%



black to 0% white, or which ever value that you may choose. Going over each area several times is very hard on the skin; this is why we use different values of wash. If you know an area will be light then you will use a light wash, and a dark wash for a darker area. This way you don't have to go over something fifty times to get it dark enough. As you progress with this technique you will see how to shade a larger line with each wash hue to make a more dramatic change form white to solid black.

Color washing and blending is the same technique but less stuff. Black pigment is more watery and so dark; we have to use the mixes to get the desired hues. Color pigment is thicker and easier to work with. Lets say that I'm going to shade with only red. The dark and light line would still apply but you don't need a bunch of empty caps for each color. I would make sure my black or other pigment is full washed out of the tube, and then I would dip in the water designated for the red pigment. If I dip in the water quickly while the machine is running, then I have an 80% hue of red. I count two seconds then I have about a 50% hue, or a medium wash. Three seconds washed out the red for a 20% (light) wash. You simply shade with the light, then work your way to the solid red, blending it till smooth. You can wash any color just like you can with black and grey. The use of at least a seven mag during wash fading will make your tattoos look so much better. If you try to wash with a round it will work, but not nearly as smooth. All of the needles in a mag are right in a row, so as long as you run the mag flat on the skin they will all puncture at the same depth. A lining needle is round, by the time you get to the level of the needle that gives you the widest coverage, you're at half depth. The needles on the bottom are much deeper in the skin then the center needles. Since they are deeper they leave a darker mark giving your blending distinguishable lines. The smoother the shading transition form dark to light, the more realistic your tattoo will look, which leads me to another technique.

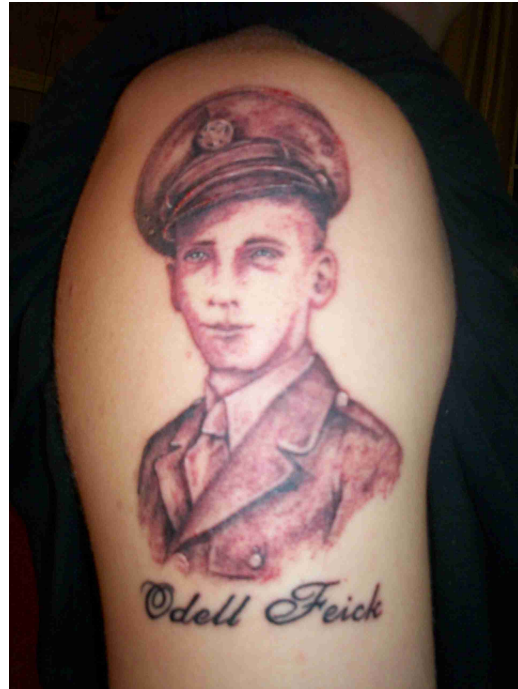


## **Glycerin**

Glycerin is the grey wash artist's best friend. You can purchase 100% pure glycerin from any pharmacy. It's used in many, many, many things so it should be easy to find. Pure glycerin is way too harsh to use, so you will need a separate spray bottle for this. You want to mix the glycerin 50% with water. It's very thick so you will need to shake it very well to get the proper mix. Once mixed use this mixture instead of water to do your grey washing with. It's much thicker than water so you have the grey dilution but the thickness of regular pigment. Glycerin will also allow the more realistic smoother shade than any other chemical. Another cool thing your glycerin mix will be good for is to customize your pigments. Say you are using a blue that is just too watery, then add some glycerin mix and shake. It will thicken it right up without losing color quality. If your pigment is too thick or perhaps the bottle has dried out a little, then apply witch hazel to thin it out. You can bring older bottles of pigment back to life with these two chemicals, worth twice their weight in gold.

# Chapter 14

## Advanced Lining



### Blood and Grey Lining

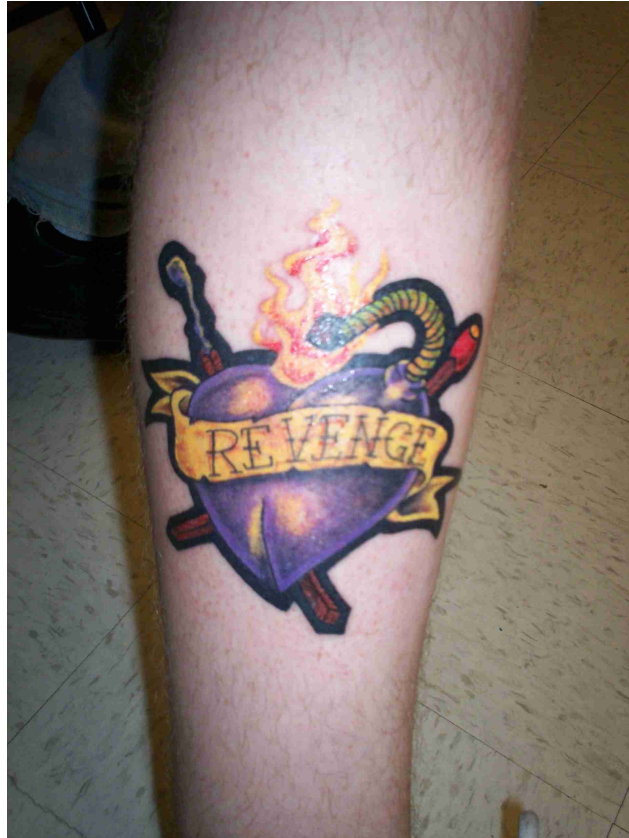
Blood Lining changed the way I think about tattooing for the rest of my life. Once you figure out the method behind it blood lining will open the doors of tattooing by kicking them down. The idea is this. When you blood line a tattoo the line you go over is without pigment at all. This means you are basically just making a scratch on the skin of your client. After a minute or so this scratch that used to be a part of your pattern becomes red and irritated. This line you made becomes red giving this method its name. The idea is to make an outline that you can see easily but no black. Ok, that's cool but what's it for? Simple, say you're tattooing some realistic flames. You blood line everything instead of hard lining it then you use the blood line as your outline for the shading and color. The entire tattoo has no black outline. Once it heals the blood line disappears leaving the shading and color only. This is the key for realism. Years ago when I first heard about blood lining I thought, man that seems like an advanced method, but now I bet I use it twice a day. It really is a basic but little known method of tattoo.

When blood lining, you want to make a note on your pattern. Something that lets you know this is suppose to be blood line instead of hard lined. I personally write a little "BL" right beside each line. Some artists draw

the line in the pattern and make little slashes through it so it looks like a train track but with one rail. Use whatever works for you, but make sure it's clear and only use one method so you don't confuse yourself during a tattoo. Just in case you do confuse your self you want a picture of the tattoo with your set up so you can use it as a reference for all the points that are blood lined. Grey lining is the same method but you dip your machine in black and wash out almost all of the pigment leaving just a light grey line. The disadvantage of grey lining is when the shading of the tattoo is light you can still see the grey line after the tattoo heals. The only time I recommend grey line is if you are working on a client that just will not turn red. Just make sure it's as light grey as you can get.

When you blood line you want to do this first, before any black ever hits the needle. If you use black and then wash it out the line will still be a little grey, so blood line first. Blood lining is more painful then normal lining because the pigment acts as lubrication to the needle puncture. This is one reason why you see tattoo artist using five pounds of vasoline during a tattoo, but if you remember Chapter 4, then you remember this is not safe for you. Your best bet with blood lining is to fill a large cap with water or Witch Hazel (an astringent sold beside the rubbing alcohol) to use for the lubrication just like you would tattoo with pigment. Water works fine but you have to clean the small pieces of skin out of the needle tip every few lines to keep your needle working right. Witch hazel is an astringent so it cleans the needle out a little better by its self but you still need to keep an eye on the needle tip for skin build up.

The skin build up will spread apart the needle making you lines when you use black very thick and choppy. You want to blood line a little slower than your normal speed to ensure the skin turns a nice red color. If you use water or witch hazel then be careful not to wash away your pattern so still use your bottom to top method while dabbing the area dry as you go. Don't wipe with a blood line, you will just smear the pattern due to the use of a liquid, just dab. If you are blood lining a larger piece and the bulk of it, like a portrait, then after you blood line, give the skin a minute to turn fully red. This will make tattooing form a blood line much more comfortable. Remember not to use green soap until the entire tattoo is lined, most of the time you will be using blood lining there will still be some black line work. You defiantly don't want to wash away your pattern before you get a chance to tattoo it. Anything that's realistic enough to blood line like a portrait is just to complex to worry about free handing and part of it. Take your time, but don't go too slow. Its blood lining, not scar lining.



## **Bold Lining**

Bold lining is fairly new among the tattoo studios. Some artists call this cartooning. It's where you outline the entire tattoo and then when you are done, you apply another outline about a sixteenth or a quarter of an inch away from the initial outline leaving all other lines in the pattern alone. Then the artist will fill in between the two outlines making the tattoo to appear like it has a thick outer line while every other line in the tattoo has a normal width. This gives the tattoo a cartoonish look which is why some artists call it cartooning. This is something you want to practice on paper before you ever tattoo in this method. Once you get it down, you should also pattern the outside line so it's on the stencil. You don't want to be tattooing on skin without a pattern. This method is usually applied on tattoos with bright color or tattoos that are cartoonish by nature. When used with grey wash it holds a certain uniqueness which I personally enjoy although it's not often used. Another cool thing about bold lining is that once the tattoo is applied to skin it has a habit of making the tattoo look like a sticker on the skin. Other than the basic idea I don't really have any instruction for you on the subject because there isn't much to give. Just outline both lines and fill in the black using the solid black method.

# Chapter 15

## Advanced Tattoo Technique



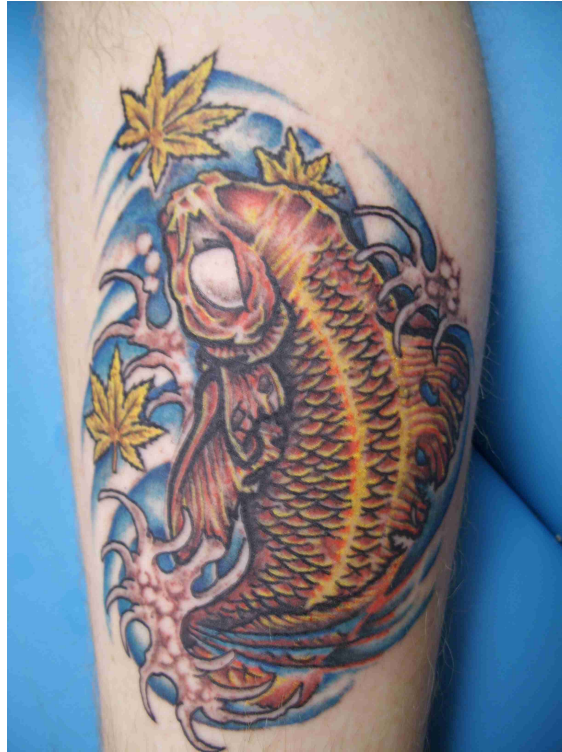
### Advanced Color

There is nothing better than taking a talent and honing it into something better than you ever thought you could. In this section I want to cover a few advanced techniques to better help you become a true artist. The problem is never seeing it inside your head, just putting it on skin. One of the best ways to improve your skill is to set up in your color work. Custom colors will defiantly make your mark in the tattoo field. Tattoo pigments mix very well together. Play with different color combinations to get some unique colors. Color blending is another technique that will bring your art to life. Currently there are about sixteen million color hues that the human eye can see, use them all. Take a plain old kanji (Japanese calligraphy) for example. Not every thing you do has to be solid black. One of my more popular color combinations is magenta and dark purple. You fill the kanji in with the magenta then wash the purple starting with the bottom as the dark line and

work up. This gives an otherwise flat looking image a little more definition. I know I said before not to tattoo the lighter pigment first, but this is another color technique. Once the magenta is filled in, the skin is now open. While you wash shade the purple it will dye the magenta darker. If you wipe upwards into the magenta it will smooth out the color blending. Sort of like rubbing a pencil drawing with your finger to blend the graphite. A few other good colors to do this with is light blue and dark blue, light green and dark green, yellow and red, light aqua blue and dark purple, white and light blue, and magenta with dark green. They can make for some strange color combinations, but they look great. Yellow and orange make a gold metallic affect. Some other things to think about with color is to add more. If you are tattooing simple vine work, why just use green? Try light neon green and shade the leaves and vines with a washed dark green for definition. The more colors you can apply the more depth and realism the image will have.

## Decaling

Decaling is another advanced color trick. It works best with bright colors and small tattoos. Do the entire tattoo and when you are done, line the outside line with white. Just like with bold lining only not as thick, just the width of another out line. Don't do any outside lines either. This trick is called decaling because it makes the entire tattoo look like a sticker of a fake tattoo. The image will jump off of the skin. Unfortunately it doesn't work well with black and grey or light color work. It looks cool, but it won't look like a sticker unless the entire inside of the tattoo is bright color.



## Grey Washed Color

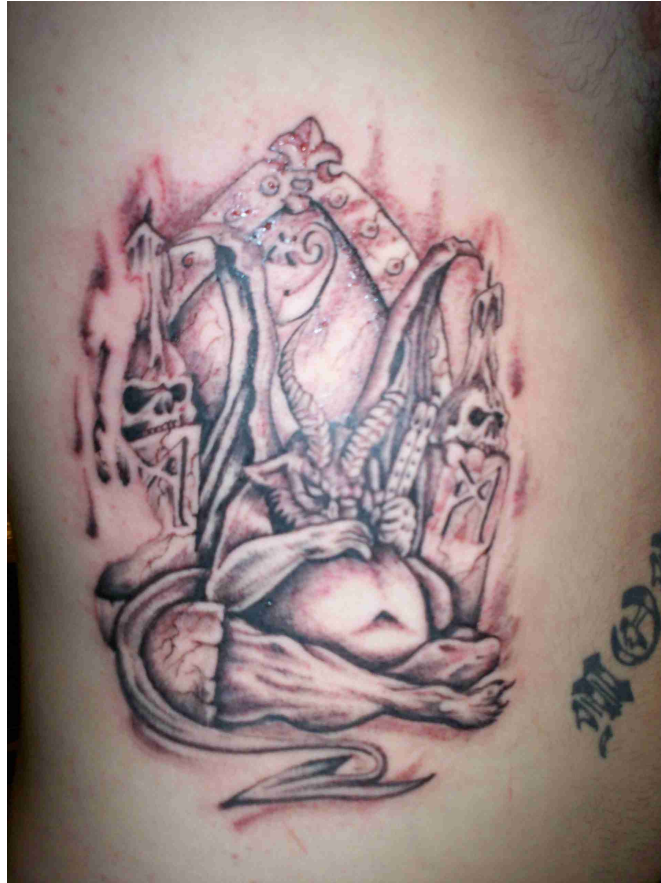
Grey washed color is where you tattoo an entire image in grey wash and then do high detailed color blending. This adds more definition to a tattoo than you can imagine. If it's a larger tattoo then you will have to grey wash it, and have them return once healed for the color. Grey wash and color wash both are hard on the skin; if you spent too much time on it in one shot you will scar them really bad. Only do this in one sitting if the tattoo is small. Use high detailed grey wash and high blended, bright colors. The tattoo will look like it was done by a computer when done right. One of the best artists I have seen in this style is David Bolt. I don't want to display any of his images here out of respect, but I highly recommend picking up some of his flash to see what I'm talking about. He is a pioneer in this style; you can't appreciate it till you see what I'm talking about.

## Heal 'n Hit

Heal n' hit is really only a color technique; it won't do too much good with black and grey. You do a nice definition color piece; animal portraits are great for this. You do the entire tattoo with bright and vibrant colors and let the client heal. Once they heal for about a month, have them come back and go over the entire tattoo again. Don't do this more than three times or you



will scar them. The layers of color will show through making it brighter each time. After the second or third time, the tattoo will look like an oil painting on the skin. White on the skin will look like a sheet of paper. The down side to this is that in the end it will cost you more because you have to use the supplies each time. It's not very practical but it's amazing how well the colors turn out.



## Negative Image

Negative is a technique that has really gained popularity over the last ten years. It's where you use the skin it's self for the image tattooed. One example is the tattoo above. The smoke along the sides was blood lined. As the tattoo progressed, I filled in and shaded the area as normal leaving the smoke alone. You can do this with any image. It also works well with grey wash. Another piece that comes to mind is the top of a foot I did a while back. The tattoo image was flames going from the toes up to the ankle. In the flames were negative dollar signs. Negative image tattoos don't have to be

high detail either. I have seen a handful of negative tribal tattoos lately. Basically, you would line the entire sleeve with tribal work and fill the elbow up to the shoulder black, leaving the tribal its self skin tone. One way to play with is to trace your pattern on tracing paper, then take the image you choose to use for the negative. Lay the tracing paper with the pattern on it over top of the negative image and trace them into the image randomly. Then shade the traced image leaving the negative the color of the paper. Negative image can be outlined, but it looks a lot cooler if you blood line.



## Portrait and Realism Tattoos

The term portrait work does not always apply to people. Any tattoo that is photo realistic is considered as being portrait work. If you tattoo a soda can as realistic as possible then you have done a portrait tattoo. As time progresses, more and more clients are wanting photo realism tattoos. It use to be only the best could pull it off but know it's a necessity of the industry. The problem with portrait work is that even the best artist in the world can only work with what they have. If you use a bad picture then you will have a bad tattoo. The picture needs to be clear and close enough to see the detail in the face or of the object. You can only tattoo what you see. If someone brings

you a instant Polaroid, then they will have a tattoo of a Polaroid. Old and torn up pictures just will not work. The best to use is any picture taken from a professional photographer. Family portraits only work if you are tattooing the entire family. If you have to enlarge the picture to see the face then it's no good. Several artist do portraits in color, they look nice when they are done but after a few years the color pigments blend together making the portrait blurry. I strongly recommend only doing portraits in black and grey. If you have ever seen the old black and white movies that they add color to later, then you know they don't look natural. Most color portraits come out the same way.

Photo realism is different than just high detailed tattooing. With realism you need to have a picture to go by. High detail is simply adding some shading here and there to make a tattoo look more detailed where in realism you need to pay attention to the true lighting of the subject. Realism tattoos need to be at least three inches high for the main object so you will have plenty of room to apply the detail. The rule of thumb with a persons portrait is that the three inches should be measured from the chin to the beginning of the hair line. To achieve realism you are all but required to use mag for smooth shading and a five or a three for the finer details. You cannot black outline any realism tattoo. Nothing in life has a black outline around it. Only tattoo solid black where you see it in the picture. I strongly suggest blood lining the entire piece. You can grey line if you wish , but most of the time you will be able to see the gray line after the tattoo is healed. If your subject is lighter, or say has grey hair, then you might want to consider applying some kind of back round that's slightly darker then the image it's self. A shadowing around certain sections of the object will do the trick. Make sure to practice the back round on paper before you tattoo it, you have to see what works and what doesn't for each individual tattoo.

To making the pattern you can use a copy machine, but I prefer using a computer scanner, you loose less detail this way. Scan the image in and crop out around the main image only getting what you plan to tattoo in the picture. While you are editing the image in the computer is the time to add any names or dates that the client may want along with it. Size it accordingly and print the image on the highest resolution you can. Print several copies incase you make a mistake, and so you have at least one extra to have for comparison while you are tattooing. Never take an original picture back with you while you tattoo, you will get blood and pigment on the image every time and some pictures your client can't replace. Lay the printed picture down on the stencil paper and trace every line you can leaving only the shading not on the pattern. With a portrait you might want to stencil any solid black areas filled in solid as a reference. If you have a stencil machine, I suggest doing the pattern by hand anyway so you have already drawn in before hand to get a

better feel for the image. The biggest trick to tattooing portraits is the making of the pattern. When you are done it should look like a topographical map of the image. You will need to mark the separations or the various hues to function as reference points. Many artists work top to bottom and do the tattoo in a whole going that direction. This means that you would fully shade the tattoo as you move up, instead of blood lining the entire piece and doing the eyes, then mouth or whatever the case may be.

When you have any realism tattoo with solid black words such as dates or names then you need to tattoo them first. Do the blood line work on the main image, then rinse and dry your needle to outline the words. With any tattoo, the outline is first, but in a portrait that may be the only outline. When you do a realism piece, you need to think of yourself like a human copy machine, everything you see needs to be in the tattoo. You may want to set an appointment for these tattoos so you have time to work and play with the image before the tattooing. Portrait work is revered as the most difficult act of tattooing, just take your time and don't do them if you are not ready.

## Using White

The use of white high light can add definition to any tattoo but in a portrait it will bring the subject to life. White is one of the fourteen shades of grey the human eye can distinguish, and should be used, but only if used properly. Too many artists are using white highlighting during black and grey like it's going out of style. Too much white will take away from the tattoo and make it look not nearly as real. White should only go where you see it in the picture. One of the best examples I can tell you is to go for a drive at night. While traveling in traffic, you can see the lights reflecting on the nearby car. Look for a white car, you can see the white paint of the car, then you can see the bright white where the light is reflecting on the paint. This is the same idea. There is white area in a tattoo which should be considered skin tone, but then there are areas that need to be the color white. If you are tattooing a metal object then only apply white where you see it in the picture. If your tattoo is the white car in traffic, then you only want to shade the paint job, and use white where the light reflection is. With use in a portrait, you only want to put white on what would naturally be wet or metal such as body jewelry and the frame of eye glasses. This is how white does its job. In a face you should only have white in the eyes where you see the glare and on the teeth if they are smiling. Anywhere else will just make it look like it's glowing in the dark. Realism is based on what is real, not where you think you want the real to be.

You hear everyone say “My skin won’t take white”. That is wrong. When an artist tells the client that their skin didn’t take the white then they are using a crappy white or they don’t know how to apply it properly. The down side of white is that being white it has a tendency to take the color of the skin above it after it heals. On an African American you will not be able to see white pigment as well as say a pale Irish completion. I have some American Indian in me so when I put white in myself it looks sort of cream due to the darker tone of my skin. This is the only problem with white. There is no excuse for it to just not show up at all. Artist think that white pigment is a color and should be applied like a color, but it is a shade of grey, or the absence of. To properly apply white when using as a color you need to go a little slower than you would with regular color pigment. If you are highlighting with white then you need to use it as if you were lining with black. Slow and steady. You cannot apply white quickly and expect it to stay. Because white will take on the form of any other color it comes into contact with, it should be the last color you use no matter what colors you’re using. Before you dip into the white you should also rinse the machine out more cautiously than any other time. If you have just a small bit of red, then the entire ink cap will be pink the first time you touch the needle in there. Take your time, and watch for color change, I have seen artist use white but tattoo pink without knowing more times then I can count.

# Chapter 16

## Tattoo Aftercare and the Healing process

After the tattoo is complete you may want to bandage the tattoo. Basic First Aid teaches us that denying a wound of oxygen will dramatically slow the healing time. Since the invention of the plastic wrap, people have been putting it on there tattoos. Don't do this. What is a green house? A green house is a building with a frame and glass so the sun can get in and make things grow. Your giving people a bacteria farm by putting plastic wrap on a tattoo. Light can get in and heat up the tattoo causing bacteria to grow, the plastic seals away all oxygen so your body cannot fight the infection or allow the natural healing process. You must view a tattoo as a wound, it's an abrasion comparable to skinning your knee. The first two hours of a tattoo healing is the most important. The tattoo will seep blood and plasma (the clear stuff) for about fifteen minutes. You can bandage the tattoo to help guard against bacteria on the clients ride home, but after about thirty minutes it needs to come off. If you bandage tattoos then you need to pick up some non stick gauze and medical tape. Clean the tattoo very well with green soap and rinse all the soap off with water. If you leave the soap on then you will dry out the tattoo. This is the only time that I will recommend using a small amount of vasoline on the tattoo. This will help the bandage not to stick to the skin. Cut a section of the non stick gauze to fit over the tattooed area and another two inches. Only tape the top and bottom so the wound can breath. If oxygen can't get to it then it can't heal. Tell your client that it must be taken off within thirty minutes and not to bandage it again. If they work in an area that will get the tattoo dirty, have them ware clothes that will cover and protect it. If you leave a bandage on longer than thirty minutes, then the blood and plasma will dry causing the bandage to stick to the wound. If they pull it off then they will pull out your work. Have them wash the tattoo as soon as they take off the bandage in warm water and antibacterial soap. This removes any blood, plasma, and extra pigment left in the skin. If the bandage does want to stick then you can have them run warm water over the bandage to loosen it from the skin.

For larger tattoos you want you client to take a hot shower. Not so it burns them, but as hot as they can stand. The hot water will open up the

pours and then wash it with antibacterial soap. When they rinse off the tattoo they should use cold water. The hot water opens everything up, and the cold seals it after they wash out all the crap that needs to be gone. The next day they won't be half as sore, and the tattoo will heal twice as fast. The ancient Japanese use to jump in a natural hot spring to soak there tattoos clean, then after a few minutes they would get in the cold water to achieve the same goal. If a healing technique is 2,000 years old then it must be right. Smaller tattoos don't need to worry about this, but the larger piece will thank you later, after they forget about how bad the hot water burned. Make sure to have your client wash there tattoo with there hand, in circular motions. A cloth will cause more damage to already irritated skin.

The first thing I want you to put on your tattoo is pure acetone and used engine oil. What, you don't like the sound of that? That's what everyone has been doing for years. Maybe not those chemicals but they have been putting crap that pulls out the pigment causing fading, and seals bacteria in the skin, and you as an artist tell people to do this every day. Lets use our heads here a little. Tattoo pigments are a chemical housed in a carrier solution. For the exact nature look back at the pigment section, but the most used carrier solution is water, and glycerin. Tattoo artist are telling people to put chemicals like "A+D Ointment", "Neosporin" Bacitracin, "Vaseline", Petroleum Jelly, "Triple Anti-Biotic Ointment", and Other chemicals like brand name "Tattoo Goo". Every one of these chemicals are oil based. Have you ever mixed oil and water? They don't mix. The oil base in these chemicals pull out the pigment of your tattoo. You say "I've used that for years and mine are fine.", then good for you. Do you remember when you plastered that crap on your tattoo? Ever seen the pigment running down your skin two or three days after it was done? What about waking up in the morning to find the outline of your tattoo on your sheet? It's not suppose to do that. That would be the pigment leaving your skin. I know that there will be a handful of artist that will stick to old faithful, but for the rest of us with a brain, lets look a little further. The products that are made for tattoo healing are all oil based. The only reason they are a product is because you buy it for five bucks and sell it to your clients for fifteen. When I use to recommend those products I was doing five or six touch ups a week. After I stopped, I bet I have only done ten in the entire year of 2008. One out of every five clients are allergic to them also. Symptoms include swelling, infection, red rash around the tattoo, almost all of the pigment coming out, a healing time of more that six weeks, and massive scarring. I refuse to carry any of these products in my shop. If

that's not good enough for you then how about some more medical facts.

Oil based products like "A+D ointment" are zero oxygen barriers. What this means is that lack of oxygen will stop the healing process. Hepatitis can live for a few days on a dirty surface, and once exposed to the air, HIV can only live for seven seconds. In a zero oxygen environment HIV can live in "A+D" for more than six weeks, and Hep can live indefinitely. So if you get Hep in a jar of vasoline it can still infect you ten years later. Here is some food for thought, "A+D" is a chemical designed for diaper rash. For diaper rash it's the number one product out there, but for a tattoo it causes more than a thousand cases of staff infection per year, and one in every ten will have an allergic reaction from use on a tattoo. As a matter of fact it says right on the tube to not use this product on open wounds. "A+D" is made from lanolin, which is boiled sheep wool and "non-sterile, non-medical grade petroleum." I don't want that in my open wound.

Ok, so now that I have completely destroyed what every one was ever taught about tattoo after care, what the hell do we use? Its much easier and much less expensive. Soap and lotion. A tattoo takes on average about ten days to heal all the way. For the entire course of the tattoo healing you want to wash the tattoo with antibacterial soap. The soap you want is the non scented soap. You can get "Dial" or the cheap equivalent. Any soap with perfumes in it will cause more irritation. Most of the perfumes in soaps and lotions contain rubbing alcohol to dilute the chemical. Rubbing alcohol will burn, and dry out the tattoo. It will cause you body to work three and four times harder to heal as well as braking up the pigment under your skin. Why antibacterial soap? A tattoo is still a wound. Infection does not come from a tattoo shop. You get infection from hitting your exposed wound on something else that's infected. You wash it two or three times a day to prevent infection. After two days "48 hours" you can apply a small amount of non scented lotion. You need to wait two days because the tattoo is still setting up, or getting the protective layer over it. If you apply lotion too soon you will coat the tattoo in a layer that will hold in bacteria. If you apply the lotion too soon, there is a chance your tattoo will get red and irritated as well as up the chances for you to get an infection. Non scented lotion is for the same reason, perfumes and alcohol. If you use a lotion that burns when you apply it, then you are using the wrong lotion. The best part is that you can go to your local everything store and get the small bottles in the travel section of about fifty cents. One small tube will last the entire tattoo. So you have a dollar in the soap and fifty cents in the lotion, you can't beat that.

Just a few of the advantages to the soap and lotion method will more than impress compared to oil based products. You save money, your colors will be brighter than you have ever seen and they will stay like that. I did a large set of grey wash flowers on my fiancé, and no one believes they are



more than three weeks old. The fact is I did them more than a year and a half ago. They still look brand new, and will be as black as the day I did them when she is ninety. Your tattoo will not seep after thirty minutes. This means that you will not stain your clothes or your sheets, and you don't have to fight that oil out of your clothes when you wash them and because there is no blood present to scab, the tattoo just lightly peels like a sunburn. I'm sorry but as an artist I want my work to look the best it can. I'm not going to sell my clients crap that destroys my work and there tattoo. I cut my expenses in half not having to do as many touch ups. If you have to sell something in the display case, sell a few different types of lotion and antibacterial soap. Sometimes you will see heavy scabbing using this method. This means that the client is not using the lotion often enough. My challenge to you, is do one tattoo on your self and heal it with soap and lotion like I said, If you don't think it's a hundred percent difference after three months, to see how bright the tattoo stays, then throw my book away and tell everyone I'm a quack.

Other than that, the basic rules still apply. Don't scratch a tattoo. If you scratch a tattoo then the pigment may come out with a section of scab or peeling skin, this I know as a holiday. Don't soak in the tub or go swimming. Over exposure to water softens the skin and can cause it to peel prematurely. Also do not try to shave a tattooed are till it peels, no matter how bad you may want to. A razor will open it right back up. Tanning beds are a no, Period. Covering a towel will not stop UV light from damaging the tattoo. The harmful rays that damage a tattoo are evenly dispersed by your body. If you want your tattoo to look good for the rest of your life then don't tan, it will fade your tattoo like the sun fades paint. You shouldn't tan anyway. Someone that tans everyday for ten years has a better chance of getting cancer than a smoker on two packs a day for twenty years. If you don't believe me, look it up. If you have to tan or you work out in the sun, then please take care of your tattoo. Use a high SPF sun block to keep your tattoo from fading. Also some pigments may look a little redder in color than they should. This is due to the irritation of the needle and it will go away. In a few hour the white that looks pink will be really bright. That's pretty much it for aftercare, just use your best judgment and don't go by what someone else tells you, research the products and chemicals yourself and study First Aid.

# Chapter 17

## Tattoo Healing Problems

There are only a few possible healing problems associated with tattooing. The first obvious one is infection. In the thirteen years in have been tattooing I have only seen two real infections. Tattoos can be red or irritated, but infection is a green or brown discharge. Infections don't come out of shops; usually the client has gotten into something they shouldn't have or just not taken care of the tattoo. If you see a tattoo that's infected you should ask what the client is using for the care. Rubbing alcohol and peroxide will only make the infection worse. Rubbing alcohol will dry the skin out causing it to heal harder, and peroxide will eat away the infection and the new skin growing back. The worse thing you can but on an infected tattoo is any kind of salve. The salve or ointment will seal in the infection and cause it to get much worse. You instead, need to dry out the infection. The best thing you can tell your client is to only wash the tattoo two or three times a day for two days. If the infection gets better, then keep it up till the tattoo heals completely. If the infection stays the same or gets worse, then you need to tell them to go to the hospital where they will flush the wound and put them on antibiotics. Never diagnose an infection over the phone. Tell your client that they must come in for you to see the tattoo first hand. If it is already progressed then you need to tell them to visit there doctor. Most of the time it will just be red or sore to the touch and people just assume it's infected. Everyone loves to panic.

Allergic reactions are common amount the tattoo field. If someone has an allergic reaction to a tattoo then best bet is that it will not be the pigment. Again, find out what they are using for aftercare. Most of the time, the culprit will be lotion with perfume in it or made for tattoo aftercare. Symptoms of allergic reaction are small red bumps around the tattoo, the surrounding area of the tattoo can be red in color, the tattoo will be more painful than usual, and sometimes you will see a clear or white discharge. The best thing you can do is tell them to discontinue the aftercare they are using and wash the tattoo in antibacterial soap to kill the bacteria so it doesn't turn to infection. If it progresses into infection then follow the instructions above. I personally don't tattoo on diabetics unless I know them personally. Diabetics are more open to infection due to the lack of circulation associated with the

condition. This means the tattoo will heal much slower on top of being higher risk for infection. Remember that the over all health of your client is infinitely more important than the outcome of the work. You can always touch up a tattoo after it heals. Don't take any risks.

