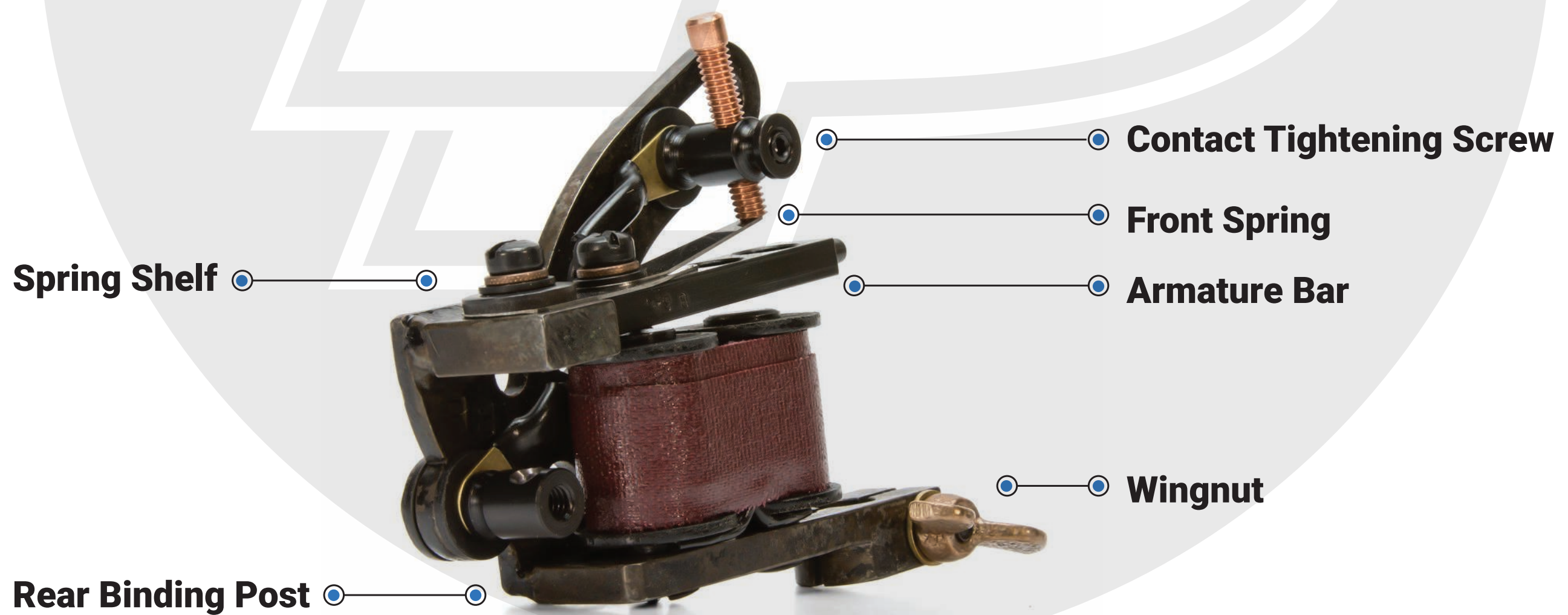
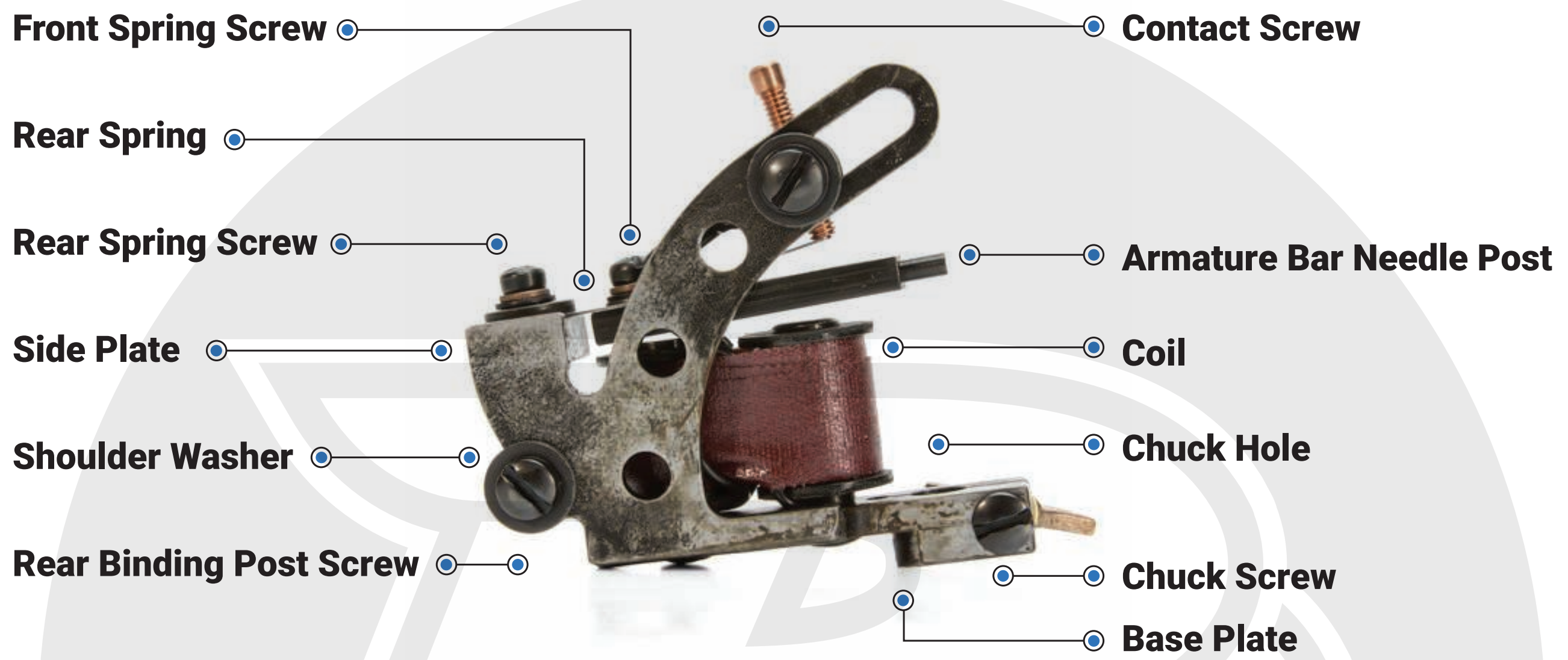


Tattoo Machine Diagram

Top

Rear

Front



Bottom



PainfulPleasures

Coil Tattoo Machine Parts Definitions & Uses

Armature Bar

The armature bar is the major moving component on a coil tattoo machine. The armature bar is a metal bar that is connected by the back spring of the machine to the machine frame. The armature bar and springs translate electromagnetism generated in the coils of the machine into kinetic energy that is used to tattoo.

Armature Bar Needle Post

The post that protrudes from the armature bar providing the needle bar something to attach to (typically with a grommet, nipple, or paper towel).

Base Plate

The base plate is the part of the tattoo machine that the coils bolt onto. The base plate is the foundation of a tattoo machine and normally produces the ground for the coils to produce a balanced electromagnetic force (EMF). **Please Note:** If the frame is not made of a ferrous metal, a yoke will be needed.

Chuck Hole

The chuck hole is a hole (typically 8mm ~5/16") in which the tube inserts, acting as the needle guide and ink well.

Chuck Screw

The chuck screw and wing nut assembly are used to tighten the chuck hole to hold the tube in place.

Coil

A tattoo machine coil is typically made with two metal washers and a cylindrical core comprised of a highly-conductive material like steel or iron in between them. You can learn more about Tattoo Machine Coils in our Information Center under Tattoo Machine Coil Basics.

Contact Screw

The contact screw is found in the cross drilled and tapped hole of the front binding post. This screw makes contact with the front spring and closes the circuit, thus turning the coils.

Contact Tightening Screw

The contact tightening screw holds down the contact screw in the front binding post.

Front Spring

The front spring of the machine is connected to the armature bar. The front spring moves with the armature bar, opening the contact points when the bar is attracted to the magnets. The opening of the contact points breaks the electrical circuit of the machine, turning off the electromagnets.

Front Spring Screw

The front spring screw keeps the front spring in place.

Rear Binding Post

The rear binding post is the positive lead, where the clip cord attaches.

Rear Binding Post Screw

The rear binding post screw bolts the binding post to the tattoo machine frame.

Rear Spring

The rear spring, or back spring, connects the armature bar to the machine frame.

Rear Spring Screw

The rear spring screw holds the rear spring onto the tattoo machine frame.

Shoulder Washer

The shoulder washer is an insulating washer typically made of fiber, phenolic, or plastic.

Side Plate

The side plate is the plate on the side of the tattoo machine to which the spring shelf is attached.

Spring Shelf

The spring shelf is attached to the side plate, and the rear spring is attached to the spring shelf.

Wing nut

The wing nut is used to tighten the tube/grip setup.

