

STANDARD OPERATING PROCEDURES
DIVISION OF COMPARATIVE MEDICINE
UNIVERSITY OF SOUTH FLORIDA

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TITLE:	BioTouch Mosaic Tattoo Machine
SCOPE:	Animal Care Personnel
RESPONSIBILITY:	Facility Manager Professional and Administrative Staff
PURPOSE:	To Outline the Proper Procedures for Use and Maintenance of a AIMS Veterinary Tattoo Machine

I. PURPOSE

1. This procedure outlines the use and maintenance of the BioTouch Mosaic Tattoo Machine used to mark and identify various animal species.

II. RESPONSIBILITY

1. It is the responsibility of the Facility Manager to ensure that equipment is appropriately cleaned, maintained in good working order and available for research personnel as requested.
2. It is the responsibility of the veterinary professional, administrative, and managerial staff to ensure that all research and technical staff using this equipment are adequately trained and experienced to perform veterinary tattoo marking and identification.

III. EQUIPMENT USE

1. This machine can be utilized with or without the foot pedal attachment. To utilize the foot pedal, remove tattoo pen, foot pedal, and power cord from case. Plug power supply into foot pedal, then foot pedal into pen. To utilize the pen without the foot pedal plug the pen directly into the wall outlet.
2. With the tattoo gun off and unplugged, unscrew the front casing and place a new transmission shaft onto the motor assembly. Place a very small drop of transmission oil onto connection prior to replacing front casing. Turn on tattoo pen by pressing button on end of pen and run for 5-10 minutes to allow machine to warm up for a smoother tattoo. Note: transmission shafts may not need to be replaced with each use of the equipment.
3. Once warmed up, turn off tattoo gun then remove the needle sleeve and place appropriate sized needle onto the transmission shaft. Needles align easily and only fit on one way. Align plastic posts on needle fork with two holes on end of transmission shaft. When properly aligned it will snap into place securely. Tattoo needle types and recommended uses are listed below:
 - 1 prong round = neonate mice
 - 3 prong round = small mice

5 prong round = mice and small rats

7 prong round = rats

Flat needles are also available from 2-6 prongs. These would be used for small to large wider tattoos such as on NHPs.

4. Place appropriate plastic needle cap into needle sleeve, and expose approximately 1-2mm of visible needle. Tattoo gun is ready for tattoo procedure.
5. Dip tip of assembled gun into ink without touching tip of needle to the ink well. Touching needle to ink well could potentially bend or break prongs of needles. Turn on tattoo gun either using foot pedal or button on top of pen and begin your procedure, re-inking as needed. Speed can be adjusted by rotating distal tip of pen where the on/off button is located. You may also need to adjust the needle cap for appropriate penetration depth.
6. To check quality of tattoo, you can swab tattooed area with tattoo oil immediately after tattoo is complete. If quality needs to be touched up, that can be done at this time.
7. Clean up:
 - a. Remove and dispose of needle cap.
 - b. Remove needle sleeve, take off needle and dispose of needle in sharps container. Wipe down needle sleeve with Sporicidin followed by 70% isopropyl alcohol and replace onto pen.
 - c. Replace transmission shaft as it becomes worn (i.e., when needle will not "snap" into place easily and will feel loose).
 - d. Wipe assembled pen with Sporicidin followed by isopropyl alcohol, and place into BioTouch case.
 - e. Clean up work area.

MAINTENANCE

1. Inspect condition of unit and electrical cord/plug to ensure safe operation. Equipment determined to be unsafe will be removed from service immediately
2. Periodically inspect all parts for wear or any damage and report to Facility Manager.
3. Any additional service/maintenance on this equipment must be performed by qualified personnel.

V. TROUBLESHOOTING

1. Tattoo gun feels sluggish:
 - a. Make sure appropriate needle was chosen for job.
 - b. Tattooist may be trying to complete characters too quickly.
 - c. Tattooist may be trying to tattoo too deeply. Check needle cap for appropriate depth of needle.
 - d. Tattoo gun may not be warmed up. Remove needle and turn gun on to run 10 minutes.
 - e. Tattooist may not be holding tattoo gun perpendicular to surface being tattooed.

2. Tattoo gun needs to re-ink too often (e.g., after every character) or tattoo gun “spits” ink all over work area being tattooed.
 - a. Ensure appropriate size needle cap is in use. Too small of a needle cap will not allow ink to flow appropriately and frequent re-inking becomes necessary.
 - b. For ink that “spits” all over work surface, ensure an appropriate sized needle cap is in use. Too large of needle cap will allow ink to flow too readily.
3. Part Identification, see diagram.
4. Refer to the manufacturer's operation and maintenance manual

VI. REFERENCES

1. Refer to the manufacturer's manual for additional information.



Approved:

Date: