STANDARD OPERATING PROCEDURE

Pneumatic Solder & Placement Tool

DO NOT use this machine unless you have been trained and assessed to a competent level in its safe use and operation, and have been given permission to use this equipment.

Safety glasses must be worn when operating this equipment.
Covered footware must be worn when operating this equipment.

PRE-OPERATIONAL SAFETY CHECKS
1. Ensure that risk assessment has been read. UQ risk assessment task ID #31102.
2. Ensure that Compressed Shop Air UQ risk assessment task ID # 2128 has been read.
3. When using with Soldering Iron, ensure UQ risk assessment task ID #2297 has been read.
4. Check workspace and walkways to ensure no slip-hazards are present.
5. Check equipment is fitted with a current electrical safety test tag.
6. Examine the power cord for damage.
7. Locate large, black main regulator control on the front panel but do not adjust its setting.
8. Locate and ensure you are familiar with the operation of the ON/OFF switch.
9. Locate and ensure you are familiar with the operation of the syringe pump foot switch and regulator.
10. Replace used syringe needle with appropriate new needle for the application.
11. Locate and ensure you are familiar with the operation of the vacuum placement tool and regulator.
12. Ensure air dryer positioned under bench is switched on and the supply valve open.
13. Test airstream for moisture by removing syringe, pressing foot switch and aiming the pipe at a tissue
14. Refer to relevant MSDS for all chemicals intended for use during the soldering process.
15. Faulty equipment must not be used. Immediately report suspect equipment.

OPERATIONAL SAFETY CHECKS
1. Never carry a power tool by the power cord or disconnect the tool by yanking the power cord.
2. Ensure that the work piece is securely held or clamped whilst working.
3. Select correct size syringe needle to enable delivery of required measure of solder paste.
4. Only use correct dispenser needles. Hypodermic needles must not be used.
5. Adjust syringe pressure setting to deliver correct quantity of solder paste.
6. Select either single-pulse or continuous operation function for syringe pump foot switch control.
7. Between operations, ensure syringe is rested safely to prevent inadvertent contact with skin.
8. When using vacuum placement tool, select correct needle and suction cup for required component.
9. Adjust placement tool vacuum setting to deliver required suction for job.
10. Ensure finger used to seal vacuum operation port is clean and free from grease or contaminants.
11. Use a safe working posture.

HOUSEKEEPING
1. Switch off all tool operations when not in use.
2. Ensure tool is rested on an appropriate stand when not in use.
3. Return solder syringe to locked storage location when not in use.
4. Leave solder syringe needle on syringe to provide seal during storage.
5. Dispose of any other used or damaged syringe needles in a sharps bin.
6. Return all tooling, vacuum needles, suction cups and fixtures to the correct storage location.
7. Ensure the equipment and work area are in a safe, clean and tidy state after job is completed.
8. Return surplus material to stock & dispose of waste material in an appropriate recycling or waste bin.

POTENTIAL HAZARDS
- Needle stick injury
- Eye injuries
- Electric Shock
- Suspected carcinogenic (Solder Paste)

FORBIDDEN
- Distracting operator
- Injecting syringe contents on or in to body surfaces
- Using equipment with lapsed test tag
- Removal or modification of safety devices
- Applying vacuum to body surfaces

This SOP does not necessarily cover all possible hazards associated with the machine and should be used in conjunction with other references. It is designed to be used as an adjunct to teaching Safety Procedures and to act as a reminder to users prior to machine use.