Maintenance protocol Mechanical fixtures
ATX Hardware

SERVICE PROTOCOL FOR MECHANICAL ATX FIXTURES

Please note that this protocol is only an aid for adapter maintenance, which should only be carried out by qualified personnel with appropriate knowledge. Possible warranty or guarantee claims are void in case of improper maintenance or maintenance work not performed by ATX employees.

We are happy to offer you individual training on adapter maintenance.

Customer: _____

Contact: _____

Service contact: _____

Adapter ID: _____

Maintenance after: _____ Heavens Date: _____

1. the following components must be checked and repaired/replaced if necessary.

	o.k	n.o.k
1.1 Check spring contact probes for damage and dirt.	☐	☐
1.2 Spring contact probes must be centered on the hole in the moving plate	☐	☐
1.3 Check needle head shapes and forces for correctness	☐	☐
1.4 During transfers: Check interface for cleanliness and wear	☐	☐
1.5 For exchange units: Check the interface for damage and foreign bodies	☐	☐
1.6 Check needle stroke with stroke measuring needles	☐	☐
1.7 Check interface bearing on tester for excessive play	☐	☐
1.8 Check diameter of guide pins and check if they are bent, especially	☐	☐
check the play (wear) of spring-loaded catch pins.	☐	☐
1.9 The guide pins must be firmly seated	☐	☐
1.10 The moving plate must not have any play in the guides	☐	☐
1.11 Check springs under the moving plate for wire breakage	☐	☐
1.12 Check guide pins and guide bushes of the top contact for freedom from play	☐	☐
1.13 Check hinges/ joints/ screw connections for tight fit	☐	☐
1.14 Check PCB supports and hold-downs for presence, height and damage	☐	☐
1.15 Check if supports and hold-downs fit to the current assembly (layout status, component size)	☐	☐
1.16 Check all screws for tightness (especially on moving parts)	☐	☐
1.17 Check the baffles on the guides for wear	☐	☐
1.18 Check ball bearings for smooth running or damage	☐	☐
1.19 Inspect the pressure hood (possibly with ATX setup template) for position or lateral play.	☐	☐
1.20 For fixtures with hood locking: check solenoid or cylinder for function	☐	☐
1.21 Check gas spring for tightness and retaining force/ safety catch on ball head present	☐	☐
1.22 Check detent adjuster or spring adjuster for proper function	☐	☐
1.23 Check stroke counter (switch pin) for function	☐	☐
1.24 Check plug masks for wear, if present	☐	☐
1.25 If a needle guide is present, check it for wear or test whether all needles get through	☐	☐
1.26 In the case of exchangeable sets, check whether the cassette lock is free of play and the cassette	☐	☐
is fully inserted.	☐	☐

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2. for fixtures with safety package:

		o.k	n.o.k
2.1	Check the function of the safety switch	☐	☐
2.2	In the case of safety switches with guard locking, check the guard locking function and make sure that it is not in the emergency unlocking position	☐	☐
2.3	Check ground wiring	☐	☐

3. in the case of inline fixtures, an additional check must be carried out depending on the type:

		o.k	n.o.k
3.1	If necessary, check the stopper function or stopper plate for shortcuts.	☐	☐
3.2	if necessary, check probes (are they still straight, do they spring, is the GRP insulation tape still in place present	☐	☐
3.3	if necessary check the function of crash switches	☐	☐
3.4	if necessary, check the spring-loaded belt hold-downs (are the springs still OK)	☐	☐

4 Replacing the needles

No general recommendation can be made for the exchange of needles, since a wide variety of conditions (solder quality, needle sizes, needle strokes, vacuum fixtures, mechanical fixtures, etc.) can have serious effects.

Basically, two versions of dealing with this problem have developed:

		o.k	n.o.k
4.1	Fixed exchange intervals with individual stroke numbers - only for high-volume production.	☐	☐
4.2	Replacement of individual needles which cause contact problems - only for low volume production	☐	☐

Please enter the needle material used in the separate material list.

5 Cleaning

		o.k	n.o.k
5.1	Cleaning the adapter. Do not clean Plexiglas with aggressive agents (Never use methylated spirits!)	☐	☐

6. final test

		o.k	n.o.k
6.1	Contact test with short-circuit plate (if available)	☐	☐
6.2	Short circuit test with LP dummy (if available).	☐	☐
6.3	The adapter is tested for contact on the tester with a test specimen from the series	☐	☐
6.4	Perform hit pattern check with occlusion spray	☐	☐

The adapter has been serviced according to the above points and is fully operational. The adapter requires the following rework: