

### 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 pins for damage and contamination.	<input type="checkbox"/>	<input type="checkbox"/>
1.2 Spring contact pins must be centered in relation to the hole in the moving plate.	<input type="checkbox"/>	<input type="checkbox"/>
1.3 Check diameter of guide pins and check whether they are bent	<input type="checkbox"/>	<input type="checkbox"/>
1.4 The guide pins must be firmly seated	<input type="checkbox"/>	<input type="checkbox"/>
1.5 The moving plate must not have any play in the guides	<input type="checkbox"/>	<input type="checkbox"/>
1.6 Check hinges/ joints/ screw connections for tight fit	<input type="checkbox"/>	<input type="checkbox"/>
1.7 Check PCB supports for presence, height and damage	<input type="checkbox"/>	<input type="checkbox"/>
1.8 Check counterpressure springs in the vacuum chamber for tight fit and breakage	<input type="checkbox"/>	<input type="checkbox"/>
1.9 Check seal for mechanical wear and tightness - clean if necessary (not with alcohol) - Spare gasket available?	<input type="checkbox"/>	<input type="checkbox"/>
1.10 Check adapter frame seal for mechanical wear and tightness	<input type="checkbox"/>	<input type="checkbox"/>
1.11 Check adapter interface on contact side for cleanliness and wear	<input type="checkbox"/>	<input type="checkbox"/>
1.12 Check adapter interface in adapter for damage and foreign bodies	<input type="checkbox"/>	<input type="checkbox"/>
1.13 Check interface bearing on tester for excessive play	<input type="checkbox"/>	<input type="checkbox"/>
1.14 Check needle head shapes and forces for correctness	<input type="checkbox"/>	<input type="checkbox"/>
1.15 Check spacer plates in the vacuum chamber for „presence	<input type="checkbox"/>	<input type="checkbox"/>

#### 2. For fixtures with hold-down systems, vacuum hoods and adaptations on both sides, perform an additional check:

	o.k	n.o.k
2.1 Check sealing cord in vacuum hood for mechanical wear and tightness.	<input type="checkbox"/>	<input type="checkbox"/>
2.2 Check hold-down finger for tight fit, deformation and height	<input type="checkbox"/>	<input type="checkbox"/>
2.3 Check gas spring for tightness and retaining force/ securing device on ball head present	<input type="checkbox"/>	<input type="checkbox"/>
2.4 Check hinge for tight fit and function	<input type="checkbox"/>	<input type="checkbox"/>
2.5 Check transfer interface for contact reliability and damage	<input type="checkbox"/>	<input type="checkbox"/>
2.6 Check guide pins and guide bushes of top contact for freedom from play	<input type="checkbox"/>	<input type="checkbox"/>



### 3. For fixtures with open test, check additionally:

	o.k	n.o.k
3.1 Check probes for mobility, position and damage (insulating layer present?)	<input type="checkbox"/>	<input type="checkbox"/>
3.2 Check transfer interface for contact reliability and damage	<input type="checkbox"/>	<input type="checkbox"/>

### 4. For bi-level fixtures, check additionally:

	o.k	n.o.k
4.1 Check smooth running of the grating	<input type="checkbox"/>	<input type="checkbox"/>
4.2 Check spacers for presence and tight fit	<input type="checkbox"/>	<input type="checkbox"/>
4.3 Check tight fit of eccentric and driving pin	<input type="checkbox"/>	<input type="checkbox"/>
4.4 Observe needle lengths when replacing needles	<input type="checkbox"/>	<input type="checkbox"/>
4.5 Check driver slot on the grating for wear	<input type="checkbox"/>	<input type="checkbox"/>

### 5. In the case of fixtures with pneumatic components, perform an additional check:

	o.k	n.o.k
5.1 Function/ tightness of the system	<input type="checkbox"/>	<input type="checkbox"/>
5.2 Check wear of the drives	<input type="checkbox"/>	<input type="checkbox"/>
5.3 Check positioning (starting units)	<input type="checkbox"/>	<input type="checkbox"/>

### 6. 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
6.1 Fixed exchange intervals with individual stroke numbers - only for high-volume production.	<input type="checkbox"/>	<input type="checkbox"/>
6.2 Replacement of individual needles that cause contact problems - only for low volume production	<input type="checkbox"/>	<input type="checkbox"/>

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

### 7. Cleaning

	o.k	n.o.k
7.1 Cleaning the adapter. Do not clean the Plexiglas with aggressive agents (Never use methylated spirits!)	<input type="checkbox"/>	<input type="checkbox"/>

### 8. final test

	o.k	n.o.k
8.1 Contact test with short-circuit plate (if available)	<input type="checkbox"/>	<input type="checkbox"/>
8.2 Short circuit test with LP dummy (if available).	<input type="checkbox"/>	<input type="checkbox"/>
8.3 The adapter is tested for contact on the tester with a test specimen from the series	<input type="checkbox"/>	<input type="checkbox"/>
8.4 Perform hit pattern check with occlusion spray	<input type="checkbox"/>	<input type="checkbox"/>

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

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