



### SERVICE PROTOCOL FOR ATX VACUUM FIXTURES

Please note that this protocol is only an aid to fixture maintenance, which should only be carried out by specialised personnel with the appropriate knowledge. Any guarantee or warranty claims will be invalidated if maintenance work is carried out incorrectly or not by ATX employees.

We are happy to offer you customised training on fixture maintenance.

Customer: \_\_\_\_\_ Contact person: \_\_\_\_\_  
 Service employee: \_\_\_\_\_ Fixture identification: \_\_\_\_\_  
 Maintenance after: \_\_\_\_\_ strokes 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 dirt	<input type="checkbox"/>	<input type="checkbox"/>
1.2	Spring contact pins must be centred in relation to the hole in the moving plate	<input type="checkbox"/>	<input type="checkbox"/>
1.3	Check the diameter of the 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 circuit board 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) - Is a replacement seal available?	<input type="checkbox"/>	<input type="checkbox"/>
1.10	Check fixture frame seal for mechanical wear and tightness	<input type="checkbox"/>	<input type="checkbox"/>
1.11	Check the fixture interface on the contact side for cleanliness and wear	<input type="checkbox"/>	<input type="checkbox"/>
1.12	Check the fixture interface in the adapter for damage and foreign objects	<input type="checkbox"/>	<input type="checkbox"/>
1.13	Check the bearing of the interface on the tester for excessive play	<input type="checkbox"/>	<input type="checkbox"/>
1.14	Check needle head moulds and forces for correctness	<input type="checkbox"/>	<input type="checkbox"/>
1.15	Check the spacer plates in the vacuum chamber for „presence“	<input type="checkbox"/>	<input type="checkbox"/>
2. Additionally check fixtures with hold-down systems, vacuum bonnets and double-sided adaptations:		o.k	n.o.k
2.1	Check the sealing cord in the vacuum bonnet 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 holding force/locking 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 the transfer interface for contact reliability and damage	<input type="checkbox"/>	<input type="checkbox"/>
2.6	Check guide bolts and guide bushes of the top contact for freedom from play	<input type="checkbox"/>	<input type="checkbox"/>
3. Additionally check fixtures with open test:		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 the transfer interface for contact reliability and damage	<input type="checkbox"/>	<input type="checkbox"/>

# Maintenance protocol

## Vacuum fixture



<b>4. In the case of bi-level fixtures, check additionally:</b>		o.k	n.o.k
4.1	Check the ease of movement of the grille	<input type="checkbox"/>	<input type="checkbox"/>
4.2	Check that the spacers are present and firmly seated	<input type="checkbox"/>	<input type="checkbox"/>
4.3	Check that the eccentric and the drive pin are firmly seated	<input type="checkbox"/>	<input type="checkbox"/>
4.4	Observe the needle lengths when replacing the needles	<input type="checkbox"/>	<input type="checkbox"/>
4.5	Check the driver slot on the grid for wear	<input type="checkbox"/>	<input type="checkbox"/>

<b>5. Additionally check fixtures with pneumatic components:</b>		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 (start-up units)	<input type="checkbox"/>	<input type="checkbox"/>

### 6. Replacing the needles:

No general recommendation can be made for replacing the needles, as a wide variety of conditions (soldering quality, needle sizes, needle strokes, vacuum adapters, mechanical adapters, etc.) can have a serious impact.

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

		o.k	n.o.k
6.1	Fixed replacement 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 small quantities	<input type="checkbox"/>	<input type="checkbox"/>

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

<b>7. Cleaning:</b>		o.k	n.o.k
7.1	Cleaning the fixture. Do not clean Plexiglas with aggressive agents (never use spirit!)	<input type="checkbox"/>	<input type="checkbox"/>

<b>8. Final test:</b>		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 fixture is tested for contact on the tester with a test specimen from the series	<input type="checkbox"/>	<input type="checkbox"/>
8.4	Carry out hit pattern check with occlusion spray	<input type="checkbox"/>	<input type="checkbox"/>

The fixture has been serviced in accordance with the above points and is fully operational. The fixture requires the following reworking:

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