

SERVICE PROTOCOL FOR MECHANICAL ATX 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 that the needle head moulds and forces are correct	<input type="checkbox"/>	<input type="checkbox"/>
1.4 For transfers: Check the interface for cleanliness and wear	<input type="checkbox"/>	<input type="checkbox"/>
1.5 For exchangeable devices: Check the interface for damage and foreign objects	<input type="checkbox"/>	<input type="checkbox"/>
1.6 Check needle stroke with stroke measuring needles	<input type="checkbox"/>	<input type="checkbox"/>
1.7 Check the bearing of the interface on the tester for excessive play	<input type="checkbox"/>	<input type="checkbox"/>
1.8 Check the diameter of the guide pins and check whether they are bent, especially check the play (wear) of spring-loaded catch pins	<input type="checkbox"/>	<input type="checkbox"/>
1.9 The guide pins must be firmly seated	<input type="checkbox"/>	<input type="checkbox"/>
1.10 The moving plate must not have any play in the guides	<input type="checkbox"/>	<input type="checkbox"/>
1.11 Check the springs under the moving plate for wire breakage	<input type="checkbox"/>	<input type="checkbox"/>
1.12 Check that the guide bolts and guide bushes of the top contact are free of play	<input type="checkbox"/>	<input type="checkbox"/>
1.13 Check hinges/ joints/ screw connections for tight fit	<input type="checkbox"/>	<input type="checkbox"/>
1.14 Check PCB supports and hold-down devices for presence, height and damage	<input type="checkbox"/>	<input type="checkbox"/>
1.15 Check whether supports and hold-down devices match the current assembly (layout status, component size)	<input type="checkbox"/>	<input type="checkbox"/>
1.16 Check that all screws are tight (especially on moving parts)	<input type="checkbox"/>	<input type="checkbox"/>
1.17 Check the baffles on the guides for wear	<input type="checkbox"/>	<input type="checkbox"/>
1.18 Check ball bearings for smooth running or damage	<input type="checkbox"/>	<input type="checkbox"/>
1.19 Check the position and lateral play of the pressure bonnet (possibly with ATX set-up template)	<input type="checkbox"/>	<input type="checkbox"/>
1.20 For fixtures with bonnet locking: Check the function of the lifting magnet or cylinder	<input type="checkbox"/>	<input type="checkbox"/>
1.21 Check gas spring for tightness and holding force/locking device on ball head present	<input type="checkbox"/>	<input type="checkbox"/>
1.22 Test the latching stop or spring stop for proper function	<input type="checkbox"/>	<input type="checkbox"/>
1.23 Check the function of the stroke counter (switching pin)	<input type="checkbox"/>	<input type="checkbox"/>
1.24 Check any existing plug masks for wear	<input type="checkbox"/>	<input type="checkbox"/>
1.25 If a needle guide is present, check it for wear or test whether all needles get through	<input type="checkbox"/>	<input type="checkbox"/>
1.26 For replacement sets, check that the cassette locking mechanism is free of play and that the cassette is pressed on fully	<input type="checkbox"/>	<input type="checkbox"/>

Maintenance protocol

Mechanical fixture



2. For fixtures with safety package:		o.k	n.o.k
2.1	Check the function of the safety switch	<input type="checkbox"/>	<input type="checkbox"/>
2.2	For safety switches with guard locking, check the guard locking function and check that it is not set to emergency release	<input type="checkbox"/>	<input type="checkbox"/>
2.3	Check the earthing wiring	<input type="checkbox"/>	<input type="checkbox"/>

3. For In-Line fixtures, also check depending on the type:		o.k	n.o.k
3.1	If necessary, check the stopper function or stopper plate for shortening	<input type="checkbox"/>	<input type="checkbox"/>
3.2	If necessary, check the probes (are they still straight, do they spring, is the GRP insulating tape still present?)	<input type="checkbox"/>	<input type="checkbox"/>
3.3	If necessary, check the function of crash switches	<input type="checkbox"/>	<input type="checkbox"/>
3.4	If necessary, check the spring-loaded belt hold-down devices (are the springs still OK)	<input type="checkbox"/>	<input type="checkbox"/>

4. 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 fixtures, mechanical adapters, etc.) can have a serious impact.

Basically, two versions of dealing with this problem have developed:		o.k	n.o.k
4.1	Fixed replacement intervals with individual stroke numbers - only for high-volume production	<input type="checkbox"/>	<input type="checkbox"/>
4.2	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

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

6. Final test:		o.k	n.o.k
6.1	Contact test with short-circuit plate (if available)	<input type="checkbox"/>	<input type="checkbox"/>
6.2	Short-circuit test with LP dummy (if available)	<input type="checkbox"/>	<input type="checkbox"/>
6.3	The fixture is tested for contact on the tester with a test specimen from the series	<input type="checkbox"/>	<input type="checkbox"/>
6.4	Checking the hit pattern 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:
