



Please beware that this protocol is only a guide for the maintenance of your adapter. Only trained specialists may take care of such works. Any claims for damages caused by maintenance works by unauthorized personnel or employees which do not work for ATX shall be void.

We are pleased to offer you an individual training for the maintenance of your adapter.

Customer: _____

Contact person: _____

Service employee: _____

Adapter know-how: _____

Maintenance after: _____ Hubs Date: _____

1. The following components must be checked and repaired/exchanged, if required.

| | | o.k | n.o.k |
|------|--|--------------------------|--------------------------|
| 1.1 | Check spring contact probes for damages or dirt | <input type="checkbox"/> | <input type="checkbox"/> |
| 1.2 | Spring contact probes must be placed centered to the hole in the moving plate | <input type="checkbox"/> | <input type="checkbox"/> |
| 1.3 | Check the strength and correctness of the pinhead forms | <input type="checkbox"/> | <input type="checkbox"/> |
| 1.4 | For transfers: Check the interface for its cleanliness and eventual wear | <input type="checkbox"/> | <input type="checkbox"/> |
| 1.5 | For exchange devices: Check the interface for any damages and foreign substances | <input type="checkbox"/> | <input type="checkbox"/> |
| 1.6 | Check the needle stroke with hub measurement needles | <input type="checkbox"/> | <input type="checkbox"/> |
| 1.7 | Check for too much play in the interface bearing on the tester | <input type="checkbox"/> | <input type="checkbox"/> |
| 1.8 | Check the diameter of the guide pin and check for bending, specifically check any play (wear) in spring-loaded tooling pins. | <input type="checkbox"/> | <input type="checkbox"/> |
| 1.9 | Check that the guide pins are tightly seated | <input type="checkbox"/> | <input type="checkbox"/> |
| 1.10 | Ensure that there is no play in the moving plate guides | <input type="checkbox"/> | <input type="checkbox"/> |
| 1.11 | Check the wire breakage of the spring under the moving plate | <input type="checkbox"/> | <input type="checkbox"/> |
| 1.12 | Check the tolerance for the top contacting of the guide pins and guide bushes | <input type="checkbox"/> | <input type="checkbox"/> |
| 1.13 | Check that hinges / joints / screw connection are well seated | <input type="checkbox"/> | <input type="checkbox"/> |
| 1.14 | Check printed circuit boards bearings and hold-down devices for availability, height and damages. | <input type="checkbox"/> | <input type="checkbox"/> |

In the case this is not ok, it is required that this is stated



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|------|---|--------------------------|--------------------------|
| 1.15 | Check the current layout of bearings and hold-down devices (component size) | <input type="checkbox"/> | <input type="checkbox"/> |
| 1.16 | Check the tight seating of all screws (specifically for moving parts) | <input type="checkbox"/> | <input type="checkbox"/> |
| 1.17 | Check the sets of the guides for wear | <input type="checkbox"/> | <input type="checkbox"/> |
| 1.18 | Check the smooth running of the ball bearings as well as damages | <input type="checkbox"/> | <input type="checkbox"/> |
| 1.19 | Examine the position and lateral play of the clamping head (eventually with the ATX set-up template) | <input type="checkbox"/> | <input type="checkbox"/> |
| 1.20 | For adapters with hood lock s: Check the functions of the hub magnet and cylinder | <input type="checkbox"/> | <input type="checkbox"/> |
| 1.21 | Check gas spring for density and bearing strength / spherical head protection available | <input type="checkbox"/> | <input type="checkbox"/> |
| 1.22 | Check the smooth functioning of the Rast and spring fitter | <input type="checkbox"/> | <input type="checkbox"/> |
| 1.23 | Check the function of the hub counter (switch pin) | <input type="checkbox"/> | <input type="checkbox"/> |
| 1.24 | If available, check the plug mask. for wear. | <input type="checkbox"/> | <input type="checkbox"/> |
| 1.25 | If a needle guide is available, check for wear and the passage of all needles. | <input type="checkbox"/> | <input type="checkbox"/> |
| 1.26 | For free fixture kits check whether the cassette locking is free of play and the cassette is fully pressed on | <input type="checkbox"/> | <input type="checkbox"/> |

2. For the adapter with safety package:

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|-----|--|--------------------------|--------------------------|
| 2.1 | Check the functions of the limit switch | <input type="checkbox"/> | <input type="checkbox"/> |
| 2.2 | For limit switches with guard locking check the locking function and ensure that the emergency unlocking system is not activated | <input type="checkbox"/> | <input type="checkbox"/> |
| 2.3 | Check the earth wiring | <input type="checkbox"/> | <input type="checkbox"/> |

3. For the inline adapter also the following is checked per type:

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|-----|---|--------------------------|--------------------------|
| 3.1 | check the stop function or the stop plate for wear. | <input type="checkbox"/> | <input type="checkbox"/> |
| 3.2 | simultaneously. Check the sensors (do they still stand, check the buffer function, is the GFC isolating tape available) | <input type="checkbox"/> | <input type="checkbox"/> |
| 3.3 | Eventually, check the function of the crash switches | <input type="checkbox"/> | <input type="checkbox"/> |
| 3.4 | Eventually, check the spring-mounted hold-down clamps (are the springs still ok) | <input type="checkbox"/> | <input type="checkbox"/> |

4. Exchange of needles

No general recommendation can be pronounced for the needle exchange, due to the severe impact that may caused by the most distinct circumstances (batch quality, needle hubs, vacuum adapters, mechanical adapters etc).

Fundamentally, two versions for solving this issue have been developed:

If it is not ok, it is required that this is stated on the reverse side



- 4.1 Regular exchange intervals with individual hub numbers - is only used in the manufacturing of high quantities
- 4.2 Exchange of single needles with contact issues - only implemented for small quantities

Please enter the used needle material in a separate material list

5. Cleaning

- 5.1 Clean the adapter. Do not clean the plexiglas with aggressive products (never ethyl alcohol)

6. Final test

- 6.1 Contact test with short-circuit plate (if available)
- 6.2 Short-circuit test with LP-dummy (if available)
- 6.3 The adapter contact is tested on the tester with a sample from the series
- 6.4 Perform a hit pattern with an occlusive spray

The adapter is maintained according to the above-mentioned items and can be fully implemented.
The adapter requires rework:
