Maintenance manual

PinMark

3/5 to 15/30



OSILING

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1 General advices for maintenance

Note

Unprofessional work on control or marking head voids the warranty.

General advices for maintenance:

- With all adjusting, maintenance and repair works the control must always be switched off and the marking unit must be separated from the power supply. For that purpose pull the power supply plug before opening the unit. Exceptions of it, with which the unit must remain switched on during appropriate work, are noted in the maintenance instructions in each case.
- With work on pneumatics:
 - Turn off and lock the compressed air supply.
 - Wait at least 5 s after turning off the compressed air supply, until the pressure diminished itself.
 - Examine whether the operating pressure dropped on 0 bars. Read off the current operating pressure from the appropriate manometer.

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1.1 Maintenance overview

Operating hours	Maintenance place	Maintenance work	Page
40	Slides of the axes (Coining unit)	Check the slides on smooth running	11
500	Slides of the axes (Engraving unit)	Lubricate the lubricating nipple	12
2000	Exhaust air silencer	Clean the silencer, change it if necessary	8
2000	Slides of the axes (Engraving unit)	Change the automatic grease cartridge (option)	12
If necessary	Toothed belts of the axes (Coining unit)	Check the toothed belts on wear Check the tension of the toothed belts	9
If necessary	Toothed belts of the axes (Coining unit)	Change the toothed belts	10
If necessary	Slides of the axes (Engraving unit)	Adjust the tightness	13
If necessary	Pneumatic maintenance unit	Adjust the oiler	16

Tab. 1

For single-shift operation:

Operating hours	Maintenance interval
40	Weekly
500	Every 3 month
2000	Annually

Tab. 2

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1.2 Lubricants

Note

You can use also another lubricant, if this has verifiable the same characteristics, like the lubricant recommended here.

Maintenance place	Lubricant	ÖSTLING Art. number	Viscosity	Classification according to DIN 51825
Slides of the axes (Coining unit)	SF06	-	Class 0	KOG-20
Slides of the axes (Engraving unit)	SF06	-	Class 0	KOG-20
Pneumatic mainte- nance unit with oiler	Drawlub 28	45100111	k. A.	k. A.

Tab. 3

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2 Mechanical parts

2.1 Maintenance overview

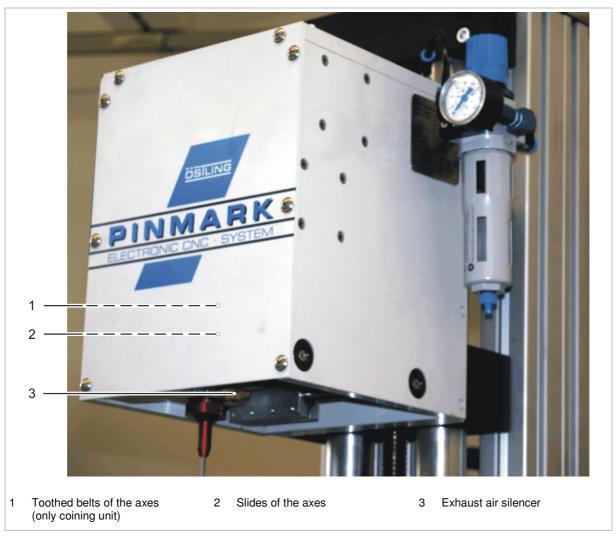


Fig. 10196

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2.2 Maintenance instructions

Exhaust air silencer

(see page 7)

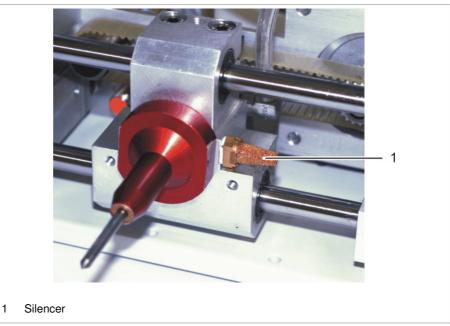
silencer

Clean the Every 2000 operating hours.

1. With table or built-in unit: move the marking head completely upward.

or

- With hand-held units: turn the marking head upside down.
- 2. Switch off the control and pull the power supply plug.



Marking head from the bottom

Fig. 10192

- 3. Unscrew the silencer, wash it with warm water (max. 40 °C) and reassem-
- 4. If the silencer is very dirty: assemble a new silencer.

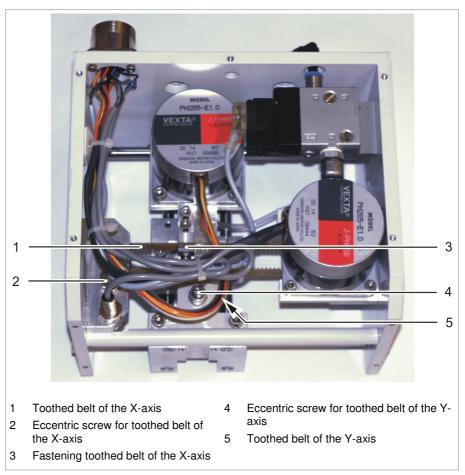
Toothed belts of the axes (Coining unit)

(see page 7)

toothed belts the marking.

Check the If necessary, i. e. if the slides (see page 11) are tight or with loss of quality of

- 1. Switch off the control and pull the power supply plug.
- 2. Unscrew the covering cap of the marking head.



Marking head without covering cap

Fig. 10195

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3. Check the tension of the toothed belt. Toothed belt must sit tensely.

Note

Sometimes the toothed belt of the Y-axis is better accessible from down than from above. For that purpose turn the marking head upside down.

- 4. Check the toothed belt of the X- and Y-axis on wear. If the tension of the toothed belt is too low or a toothed belt is worn out, this toothed belt must be changed (see page 10).
- 5. Reassemble the covering cap of the marking head.

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Change a If necessary, i. e. if the tension of the toothed belt is too low or a toothed belt is toothed belt worn out.

- 1. Switch off the control and pull the power supply plug.
- 2. Unscrew the covering cap of the marking head.
- 3. Loosen the eccentric screw for toothed belt (2 or 4).
- 4. Loosen the fastening toothed belt (for X-axis: 3).
- 5. Remove old toothed belt.
- 6. Mount new toothed belt.
- 7. Fix the toothed belt with fastening toothed belt (for X-axis: 3).
- 8. Tighten the eccentric screw (2 or 4). Toothed belt must sit tensely.
- 9. Reassemble the covering cap of the marking head.

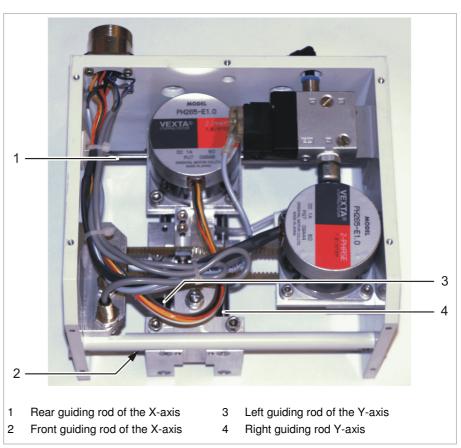
Slides of the axes (Coining unit)

(see page 7)

Check on smooth running

Check on Every 40 operating hours.

- 1. Switch off the control.
- 2. Move the slides manually in X- and Y-direction. Slides must be movable easily by hand.
- 3. If the slides can be moved only with difficult: lubricate the guiding rods of the axes:



Marking head without covering cap

Fig. 10191

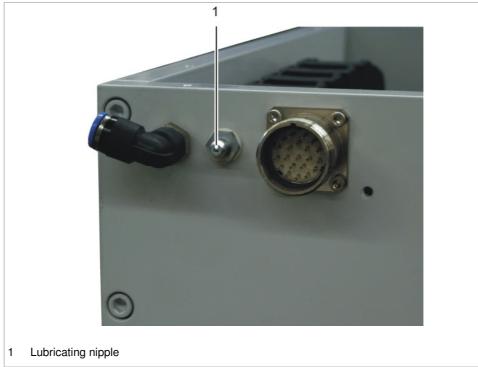


Slides of the axes (Engraving unit)

(see page 7)

bricating nipple

Lubricate the lu- Every 500 operating hours, more frequent if the surroundings are very soiled.



Housing of the marking head PinMark

Fig. 10189

- 1. Switch off the control and pull the power supply plug.
- Lubricate the lubricating nipple using a grease gun.

cartridge (option)

Change the grease Every 2000 operating hours.

For the grease lubrication (see above) optionally an automatic grease cartridge can be attached to the lubricating nipple. This fat cartridge contains 120 cm³ grease and delivers it over the lubrication nipple to the unit during the adjusted dispensing time.

- 1. Switch off the control and pull the power supply plug.
- 2. Screw off the automatic lubricator.
- 3. Remove the old grease cartridge.
- 4. Remove the automatic lubricator from the transparent plastic cover.
- 5. Remove the old batteries from the lubricator.

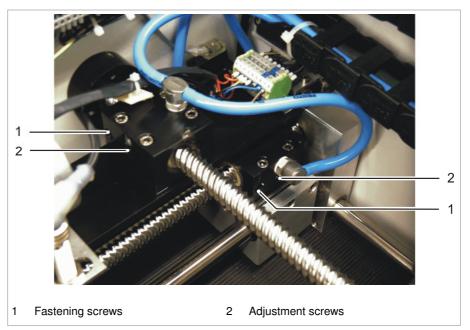
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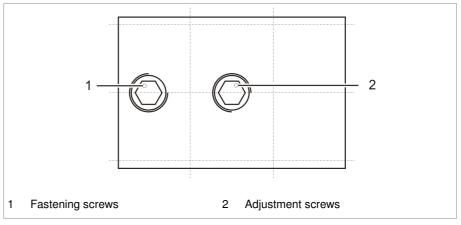
- 6. Insert new batteries.
- 7. Set the desired dispensing time, vide label on lubricator.
- 8. Reinsert the lubricator into the transparent plastic cover.
- 9. Screw the new grease cartridge in the lubricator.
- 10. Screw the lubricator with grease cartridge on the engraving unit.
- 11. Turn the switch on the plastic cover to ON.

Adjust the nuts If necessary, i. e. if the lines produced by the marking head are no longer straight. One or both slides do not sit correctly and/or have too much clearance.

- 1. Switch off the control and pull the power supply plug.
- 2. Unscrew the covering cap of the marking head.
- 3. Push the slides of the axes completely to the left and/or to the rear:



Slides of the axes Fig. 10190



Detail: slide of one axis Fig. 10199



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- 4. Tighten the fastening screw (1) of the relevant slide.
- 5. Move the slide manually.
 - The slide mustn't be moved with more difficulty than before.
- 6. If the clearance of the bearing is too big although the fastening screw was tightened: screw in the adjustment screw (2) of the relevant slide.
- 7. Move the slide manually.
 - The slide mustn't be moved with more difficulty than before.
- 8. Reassemble the covering cap of the marking head.

3 Pneumatic parts

3.1 Maintenance overview



1 Pneumatic maintenance unit

Fig. 10197





3.2 Maintenance instruction

Pneumatic maintenance unit

Note

2 different maintenance units are used at the PinMark marking units.

Use	Type of maintenance unit	FESTO type
All marking tools	Filter control valve with pressure reducer	Festo LFR 1/8 D-Mini
Marking tools WE 1 and/or WE 4 with hardened steel piston housing	Filter control valve with pressure reducer and oiler	Festo FRC 1/8 D-Mini, consisting of: • LFR 1/8 D-Mini. • LOE 1/8 D-Mini.

Tab. 4

For maintenance of the pneumatic parts please observe the operation manual of FESTO.

Set the oiler If necessary.

- 1. Do not switch off the control!
- 2. To switch on the needle in manual operation: select *System Menu*.
- 3. Press <Tab> until page 3 of the system menu appears:

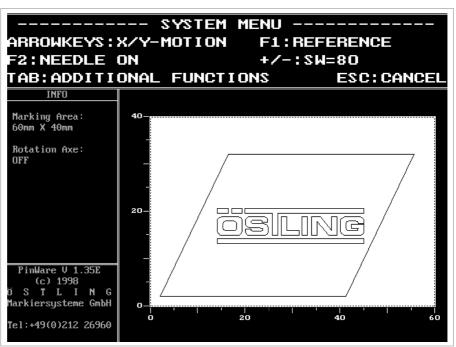


Fig. 10198en

- 4. Press <F2> to switch on or off the needle.
- 5. Adjust the oiler to approx. 1 drop per minute, see operation manual of FESTO.



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