



Service News

Date: 2013-09-20
Source: TW512mi, 2013-07-26
Contact person: SCC Laser 2D

Measures required

Inform customers of this.

Spare parts

Laminated illustration instructions for lens cleaning kit: material no. 0367433

Appendix

- Excerpt from the Operator's manual for the TruLaser Prime Edition (L55)
- Illustration instructions for lens cleaning kit.

Modified lens cleaning system

Machines Machines with CO₂ lasers

Problem After cleaning, there is a residue of the cleaning agent on the lens. Especially with the final cleaning with acetone or with 1-propanol, residues of the cleaning agents remain on the lens.

Consequences The residues of the cleaning agent absorb laser power. This causes the cut quality to go down. If the cut quality is only slightly reduced, the lens is often not recognized to be the cause. Starting at a laser power of 5 kW, an imperfectly cleaned lens has a significant effect on the cut quality.

- Series**
- The lens cleaning procedure has been modified. The most important modification: **The final cleaning with acetone or 1-propanol is omitted.**
 - Operator's manual: The "Optics" section in the "Maintenance" chapter will be updated in the next edition of the respective operator's manual.
 - In the TDM (TRUMPF Document Manager), the work instruction document, AA 40.048 "The cleaning of laser optics" has been updated.
 - The content of the lens cleaning kit has been updated.

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12. Blow off the lens with air (bellows or N₂-pistol with low flow).
 13. Cover the lens with lens cleaning paper.

**Pre-clean the lens with
acetone or 1-propanol**

Note

Use original acetone or 1-propanol from the lens cleaning kit.

14. Moisten the lens cleaning paper with a drop.
15. Move the cleaning paper slowly over the surface of the lens; do not exert pressure while doing so. Use each lens cleaning paper only once.

Using acetone or 1-propanol is for pre-cleaning purposes only and is intended to remove dirt particles which are loose or not burnt-on. **Following this step, the lens is not ready for operation. The actual cleaning process with Topol 2 must always be done afterwards.**

Cleaning the lens with Topol 2

Notes

- Shake Topol 2 well before each application.
- Topol 2 must be fluid.
- Replace Topol 2 if it is viscous or has begun to dry.
- When cleaning with Topol 2, change the cotton wool pads frequently since the removed dirt particles can scratch the mirror surface. Also ensure that cotton wool pads are always saturated; do not rub the lens surface with dry pads.

16. Clean the lenses with Topol 2 and cotton pads using a circular motion and strong pressure.

Removing Topol residue

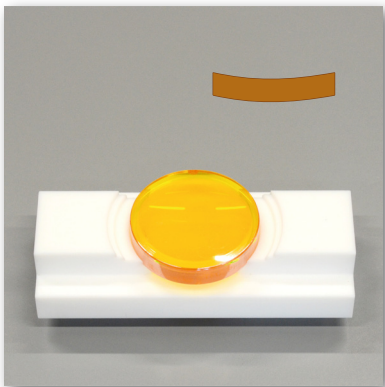
17. Clean the perimeter of the lens.
 - Allow Topol residue to dry on the lens surface and the perimeter of the lens without rubbing it further.
 - Completely remove any remaining Topol residue from the perimeter of the lens with cotton pads.
18. Clean the lens surface.
 - Carefully wipe off Topol residue with new cotton pads and light pressure. Do this until almost all the Topol residue has been removed from the lens surface. Use as many new pads as needed.
19. Polish the lens surface with new cotton pads with strong, circular, rubbing motion.
 - Use as many new pads as necessary until no Topol residue can be seen on the lens surface.

Tip

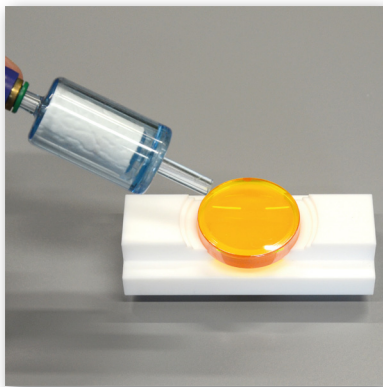
Check that the lens is clean by tilting it towards daylight or holding it under a lamp.

Notes

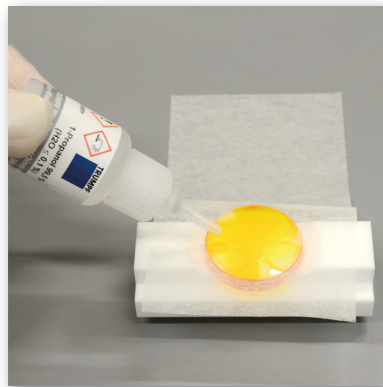
- After cleaning with Topol 2, moistening and cleaning it again with acetone or 1-propanol is **not** permitted!
 - Any remaining dust particles can only be blown away with air (bellows or N₂-pistol with low flow).
20. Rotate the lens and place it on the cleaning fixture with the convex side upwards.
 21. Clean as described above.



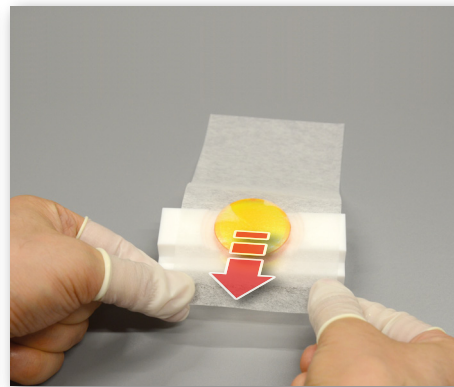
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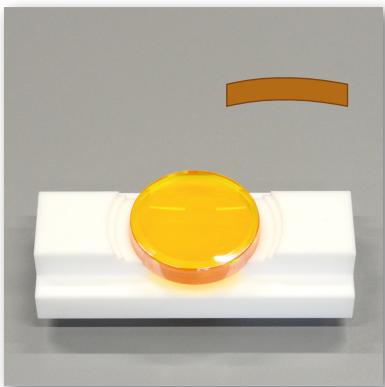
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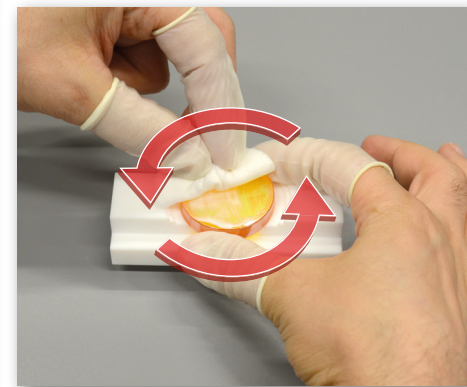
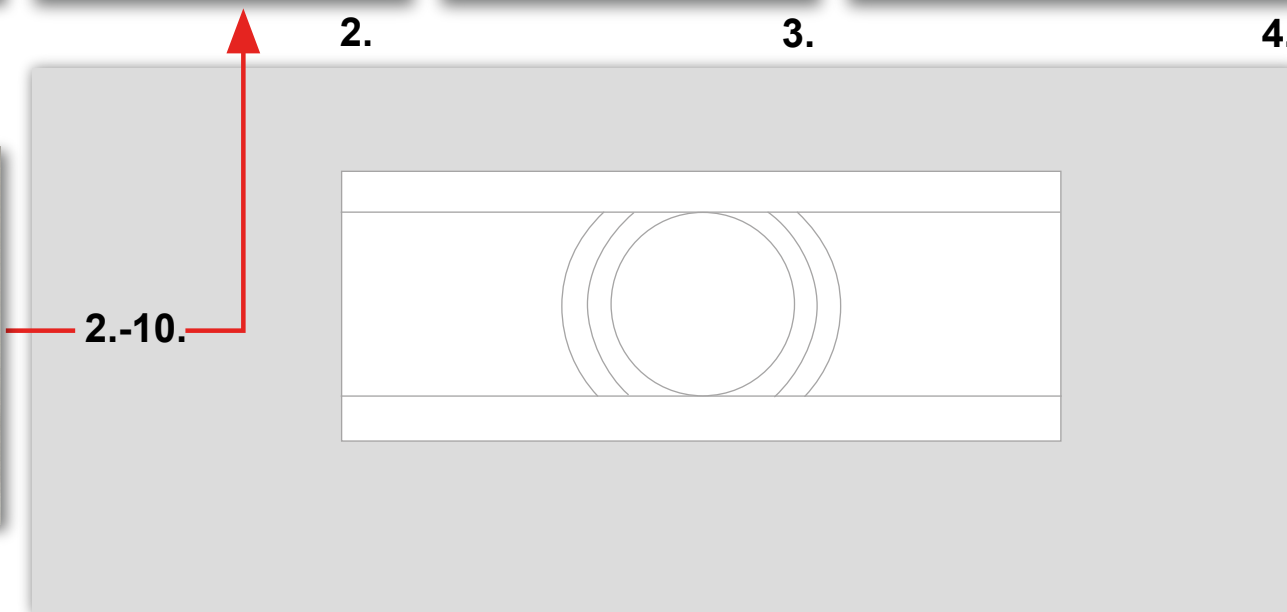
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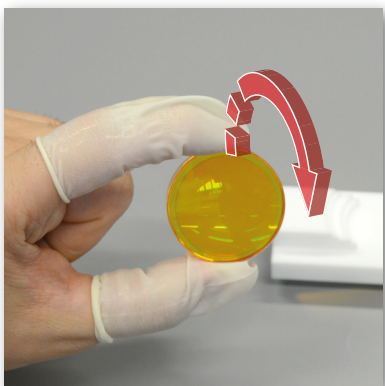
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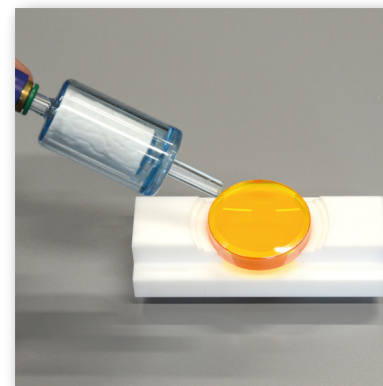
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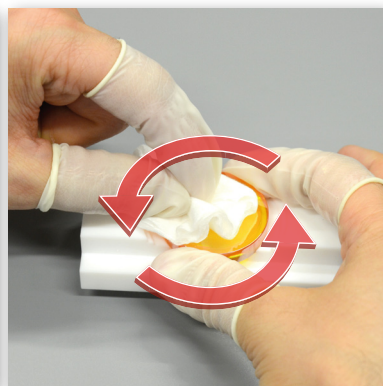
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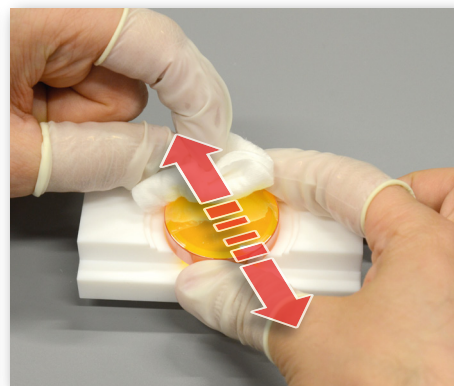
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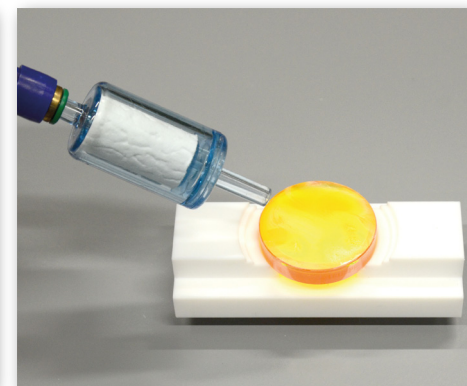
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Mat.-Nr.: 1687226



Mat.-Nr.: 0367430



Mat.-Nr.: 0074643

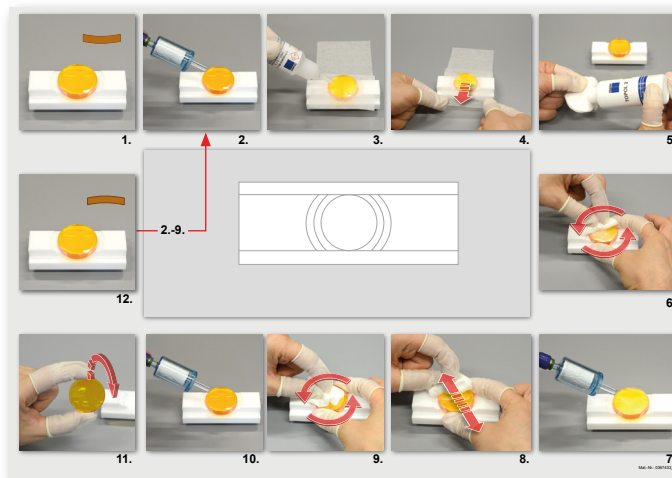


Mat.-Nr.: 1851244



Mat.-Nr.: 0367429 (Aceton)

Mat.-Nr.: 0378463 (1-Propanol)



Mat.-Nr.: 0367433



Mat.-Nr.: 0367431 Mat.-Nr.: 0378178



Mat.-Nr.: 0367432



Mat.-Nr.: 0247451