

 Global Standard	LESER Global Standard Standardisation of Worldwide Warehouse Lapping by Hand	LGS 4437
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1 Purpose

This LESER Global (LGS) provides instructions on re-lapping LESER safety valves. The work steps and materials are given.

2 Scope

This LGS applies to all members of the LESER quality cluster as defined in the global quality management manual.

3 References

LGS 4456

4 Introduction

4.1 Tools and materials

Tools/material	Order number	LWN
Monocrystalline diamond powder	599.0102.0000	LGS 4456-D Tool-Kit Standard
Oleic acid	Still in progress	
Lapping stamp	See Standard Tool-Kit	LGS 4456-D Tool-Kit Standard
Lapping paste	See Standard Tool-Kit	LGS 4456-D Tool-Kit Standard
Glass plate	828.0000.0016	LGS 4456-D Tool-Kit Standard

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5 Re-lapping seat and disc sealing surfaces

a) Lapping with the lapping stamp.



- The lapping stamp is for larger damage on the seat sealing surface.
- Lapping paste and oleic acid must be applied to the lapping stamp. Select the lapping paste yourself depending on the degree of damage.
- The greater the damage, the coarser the lapping paste that is to be used.

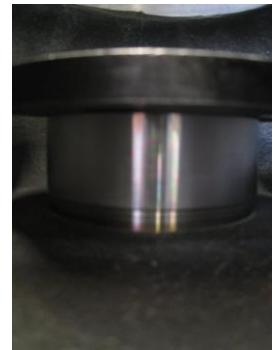


Fig. 1 Lapping with the lapping stamp.

b) Wet the disc with the monocrystalline diamond powder and the oleic acid.



- Four small points on the sealing surface of the disc must be used. Monocrystalline diamond powder is applied to 2 points and oleic acid to the other 2 points.



Fig. 2 Wetting the disc

c) The seat and disc are re-lapped together.



- The seat and disc are lapped together so that better surface evenness of the disc is achieved.
- Lapping is performed by slight circular hand movements.



Fig. 3 Lapping the seat and disc

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d) Re-lapping with a glass plate



- Re-lapping the seat with a glass plate results in greater surface evenness.



Fig. 3 Re-lapping with a glass plate

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6 Re-lapping the nozzle and the disc

a) Re-lapping of the nozzle and the disc is performed separately on a glass plate.



- Mix the monocrystalline diamond powder together with the oleic acid on the glass plate and then lap the nozzle and the disc.
- Lapping is performed by slight circular hand movements.



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Fig. 5 Re-lapping the nozzle and the disc

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