Maintenance on LC50-Digilog



1. Maintenance

Λ

CAUTION!

Pressure air can cause severe injuries.

▶ Before servicing laser unit, turn-off the air supply with ball valve (see #4 in exploded view page 2). The display of the manometer at the pneumatic unit must be 0 bar / 0 MPa.

Λ

CAUTION!

Physical injuries and material damages of the components caused by voltage

▶ Make sure that the components are volt-free during installation work.

NOTICE

Damages caused by improper installation/dismounting

- ▶ Please only use original replacement parts as well as the provided special tools.
- Consider the maximum tightening torque.

The following must be considered in order to ensure the functionality of the measuring system:

- Check the condition of the measuring system at regular maintenance intervals. Replace pollution protector once a year and clean lense as necessary. See instructions below.
- If the measuring system is operated in a defective condition, the manufacturer's warranty will be voided.
- Use only original replacement parts when carrying out maintenance work.
- Assure the specified compressed air quality.

1.1 Cleaning pollution protector

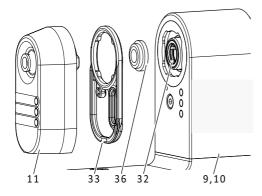


Fig. 1-1 Maintenance of transmitter and receiver pollution protector

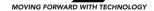
(9) Transmitter
(32) Light window
(10) Receiver
(33) Gasket
(11) Pollution protector
(36) Sinter sleeve

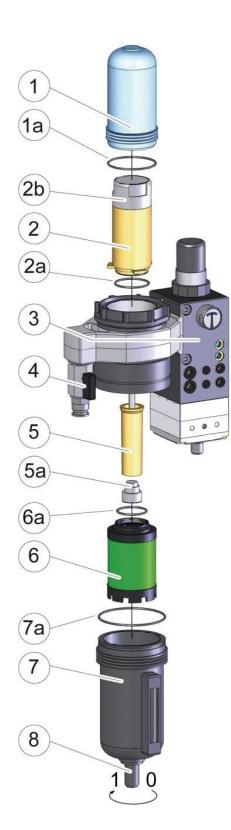
✓ The measuring system is depressurised and free of tension.

 $\mbox{\ensuremath{\ensuremath{\mbox{\ensuremath{\mbox{\ensuremath{\mbox{\ensuremath{\mbox{\ensuremath{\mbox{\ensuremath{\mbox{\ensuremath}\ensuremat$

- 1. Removing the pollution protector (bayonet lock):
 - a) Rotate the pollution protector on the transmitter or receiver as appropriate by +45%-45°.
 - b) Remove the pollution protector.
- 2. Replace the pollution protector once anually
- 3. Replace the seal and the sintered-metal sleeve as necessary.
- 4. Clean the light window of the transmitter/receiver with a non-fluffing cloth.
- 5. Fitting the pollution protector (bayonet lock):
 - a) Place the pollution protector on the transmitter or receiver as appropriate.
 - b) Rotate the pollution protector by +45°/-45° until you feel it lock in place.







CAUTION!

May cause injuries.

- ► The adjustments of the pressure reducer and the throttle should not be modified.
- Pressure air can cause severe injuries. Before carrying out any mounting or service at the laser system and the pneumatic unit, the air supply has to be turned off. (Display of the manometer: 0 bar / 0 MPa)
- 1. Close stop valve (4) (Display of the manometer: 0 bar / 0Mpa)
- 2. Check activated carbon filter for contamination. If the color of the indication ring (2b) has turned to blue, all filters have to be exchanged. In case of internal contamination of the system, the entire unit has to be exchanged or completely dismounted and carefully cleaned by an expert. The indication for an internal contamination is heavy pollution on the inside of the filter cover (1). In this case, all the air pipes to the laser system have to be exchanged or cleaned as well.
- 3. Unscrew the filter cover and exchange the activated carbon filter (2).
- 4. Screw the filter cover, pay attention to the correct position of the Oring (1a)
- 5. For the exchange of the pre-filter (5) or the superfine filter (6), unscrew and clean the box (7).
- 6. Exchange pre-filter (5) and superfine-filter (6).
- 7. When re-assembling, pay attention to the correct location of the float valve (8) as well as to the correct position of all sealing rings.
- 8. Screw the container (7) tight again, then adjust the position of the glass sight gauge by turning the container backwards for 0.5 1 turn.
- 9. Open the stop valve (4) again and check for correct function of the laser system.
- 10. Replace the filter once anually

Filter Part: P87.0634-051.110