User's Guide

Replacing Ceilometer Laser Transmitter CLT321

Refer to number 5 in Figure 22 on page 110.



WARNING!

Ceilometer Transmitter CLT321 emits invisible laser radiation, which is harmful to the eye if viewed at a short distance. Never remove the Ceilometer Transmitter from its normal position without first switching off both the line and the battery power and detaching the transmitter ribbon cable from the Ceilometer Engine Board CLE321.



CAUTION!

Servicing the equipment must only be performed by qualified maintenance personnel.



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Figure 24 Laser Transmitter CLT321

The transmitter should be replaced if the ceilometer unit has been generating warnings and alarms, and a malfunction with the operation of the transmitter has been detected.

To replace Ceilometer Laser Transmitter CLT321, you need a 2.5 mm Allen-key.

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To replace CLT321:

1. Open the measurement unit door and confirm that there is an active transmitter failure. In case of a transmitter failure, the **CLT ok** LED turns off. Refer to Figure 27 on page 119.

2. Switch off the power with all three switches (F1, F2, and Battery). For the location of the switches, see Figure 15 on page 40 and Figure 16 on page 41.



WARNING!

Disconnect the power cable from connector J2 before continuing.

- 3. Detach the transmitter ribbon cable (refer to number 10 in Figure 22 on page 110) from Ceilometer Engine Board CLE321.
- 4. To detach the transmitter, loosen the transmitter ring by turning it to the right. If necessary, you can use a 2.5-mm Allen key as a lever. Remove the transmitter from the unit.
- 5. Place the new transmitter to its place and tighten the transmitter ring in such a way that the labels of the transmitter face the measurement unit door.
- 6. Connect the transmitter ribbon cable to the CLE321 board.
- 7. Connect the power cable to connector J2.
- 8. Switch on the power with all three switches. Wait until the **Laser on** LED starts blinking at 2-second intervals. Ensure that all six diagnostic LEDs are lit. Refer to Figure 27.

The ceilometer unit should now return to normal operation. Verify that the unit is working properly and that there are no other failures with the system. If other failures exist, separate troubleshooting may be necessary.

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To avoid interference, make sure that you keep the RX flat cable and the TX flat cable apart.



Figure 25 Routing RX and TX Flat Cables

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