



High Voltage Transformer Replacement Kit

Accessory G6600-60000 and G6600-60001

Purpose

The purpose of this procedure is to explain how to replace the high voltage transformer in SCD/NCD assemblies.

Scope

The scope of this procedure is all SCDs and NCDs.

Materials

- Short Phillips Head Screwdriver
- Wire Cutters
- Cable Tie Gun
- Channel Locks
- Wrench or Pliers

Procedure

1. Prepare detector for corona discharge transformer replacement.
2. Detach all gas and power connections. Move the detector to a location where the side panels can be easily removed.

WARNING

High voltage is present in the detector when the power cord is connected. To avoid potentially dangerous shock, disconnect the power cord before removing the side panels.

3. Remove both side panels.
4. Remove the High Voltage Enclosure Panel. The reaction cell and housing sit on the High Voltage Enclosure (HVE). When facing the front of the detector the HVE Panel is on the left.
5. Remove old corona discharge transformer.



6. Disconnect both electrical wires from the power supply board. When facing the front of the detector, the power supply board is located on the right side of the detector. Clip the wire tie (if any) and pull the wires into the high voltage enclosure.
7. Cut both wire ties that hold the white Molex[®] connectors in place. The Molex[®] connectors connect the ozone generator to the high voltage transformer.
8. Disconnect both Molex[®] connectors.
9. Remove the retaining clip from the ozone generator by pushing it to the rear of the ozone generator with a wrench or pliers until it springs free of the rear mounting clip and then lift it off of the ozone generator.

Caution

Be careful not to damage the ozone generator with tools.

10. Slide the old cable ties from under the ozone generator.
11. The transformer assembly is held to the base of the detector with six screws. Use a Phillips Head Screwdriver to remove all six screws. The detector will have to be tilted or set on its side to access the bottom. Lift the corona discharge transformer to be replaced out of the detector.
12. Install new corona discharge transformer.
13. Attach the replacement corona discharge transformer assembly to the base of the detector with the hardware provided. The four threaded studs on the mounting bracket go through the four holes that had secured the old transformer assembly. Orient the new transformer with the wire connections toward the rear of the instrument.
14. Attach both Molex[®] connectors that lead to the ozone generator.
15. Slide a tie wrap under either end of the ozone generator.
16. Slide the retaining clip over the rear mounting clip, squeeze the mounting clip with the channel locks and snap the retaining clip in place. Center the retaining clip over the mounting clip with the channel locks.
17. Bundle the wires connecting the leads from the ozone generator to the corona discharge transformer and lightly secure them with the large cable ties provided. Tighten the cable ties so that the wires to the Molex[®] connectors are as far away from any grounded conductors as possible. Both large clamps holding the generator are grounded conductors.

Caution

Failure to distance the high voltage connections from the chassis, clamps, or other grounded conductors may lead to electrical arcing which will shorten the life of the transformer and may destroy it immediately.

18. Run the two wires ending in spade connectors through the high voltage enclosure and attach them to the power supply board. Use the smaller wire tie provided to secure all the wires to the white plastic wire tie square located between the power supply board and the rubber grommet.
19. Prepare detector for operation.
20. Install the High Voltage Enclosure (HVE) Panel.

21. Install both side panels.
22. Move the detector back to its original location. Re-attach all gas and power connections.
23. Verify that the ozone generator fuse (inside door on front of instrument) is intact and is of correct amperage per label. Replace as necessary.
24. Test new high voltage transformer.
25. Cap the transfer line.
26. Take the detector out of stand-by mode. Adjust the front panel so it is on high sensitivity signal display.
27. Turn on the vacuum pump.
28. Set the ozone generator air/oxygen supply to approximately 6 psi.
29. Turn on the ozone. The baseline signal on the front panel display should increase. If the signal does not increase, then the transformer may not be properly installed. Consult the service manual and/or contact Agilent at www.agilent.com/chem for further assistance.

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