

This procedure can be applied on each new tube, on reception, and after a long period of storage, before installation in a generator.

Safety warnings, see TED 807 : this test presents potential risks due to high voltages and X-Ray radiation.

1. Check electric continuity of the filament and no short circuit between electrodes, with ohmmeter.
2. Check HV insulation between anode and grid, grid and cathode.

For testing, we recommend to not use an AC voltage source.

The following devices are suitable for H.V. test : Spellman XLG30P60 or Baur PGK25.

2.1. Anode and grid

2.1.1 Grid and cathode are connected together to the positive pole of the HV instrument set. Anode is connected to the negative pole.

Apply progressively HV to peak value given in the tables.

Some flashes can be observed during the increasing of the voltage, but during the last 2 minutes of the 3 minutes test, no flash must occur.

2.1.2 Reverse the connections (anode to positive, others to negative), then do the same test.

2.2. Grid and cathode

2.2.1 Anode is connected to ground. Grid is connected to one pole. Cathode is connected to the other pole of the generator. Apply progressively peak value given in the tables.

No flash must occur during the last 2 minutes of the 3 minutes test.

2.2.2 Reverse the connections (anode still grounded), then repeat the test.



CAUTION :

- Do never proceed to the H.V. test when the tube is in its socket. Damage to other component may occur.
- When proceeding to the grid to cathode insulation test:
 - do never exceed maximum peak voltage specified for the tube.
 - do never exceed maximum leakage current specified for the tube for more than 5 seconds.
 Otherwise, the tube may get damaged.
- When disconnecting the tube from the H.V. source, do not forget to ground all electrodes before handling the tube. Internal capacitances may be charged.
- Be aware that high humidity conditions can make readings higher due to conductivity changes on the external surface of the ceramic insulators.

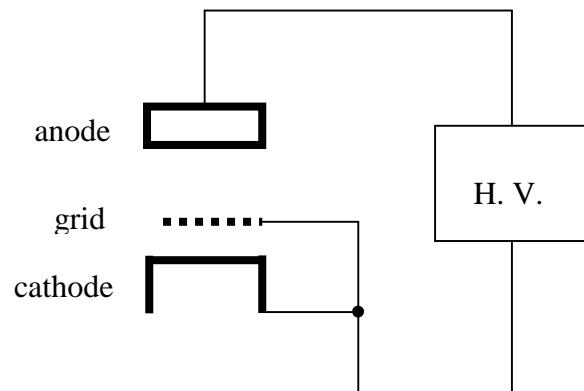
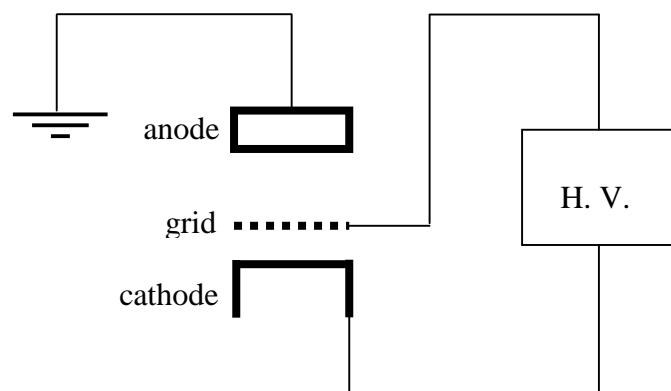
HV TEST ON GENERATOR TRIODE

- Take care to calibrate your dielectrometer regularly, at least every 2 years.

RS series	Cathode to Grid		Anode to Grid	
Tube reference	Max. Voltage	Max. Leakage	Max. Voltage	Max. Leakage
RS3005CJ/CL	3 kV	1 mA	15 kV	2 mA
RS3010CJ/CL	3 kV	1 mA	15 kV	2 mA
RS3012CL	5 kV	2 mA	20 kV	2 mA
RS3020CJ/CL	5 kV	2 mA	20 kV	2 mA
RS3026CJ/CL	5 kV	2 mA	20 kV	2 mA
RS3027CJ/CL	5 kV	2 mA	20 kV	2 mA
RS3040CJ/CL	5 kV	2 mA	25 kV	2 mA
RS3060CJ/CL/CJC	5 kV	2 mA	25 kV	2 mA
RS3080CJ/CL	5 kV	2 mA	25 kV	2 mA
RS3150CJ/RJ	5 kV	2 mA	25 kV	2 mA
RS2041J	5 kV	2 mA	25 kV	2 mA
RS3300CJ	5 kV	2 mA	25 kV	2 mA
RS3500CJ	5 kV	2 mA	25 kV	2 mA

IT series	Cathode to Grid		Anode to Grid	
Tube reference	Max. Voltage	Max. Leakage	Max. Voltage	Max. Leakage
ITK/L 2-1	3 kV	1 mA	15 kV	2 mA
ITK/L 3-1	3 kV	1 mA	15 kV	2 mA
ITK/L 5-2	3 kV	1 mA	15 kV	2 mA
ITK/L 9-1	5 kV	2 mA	15 kV	2 mA
ITK/L 12-1	5 kV	2 mA	20 kV	2 mA
ITK/L 15-2	5 kV	2 mA	20 kV	2 mA
ITK 25-1	5 kV	2 mA	25 kV	2 mA
ITL 25-3	5 kV	2 mA	25 kV	2 mA
ITK/L 30-2	5 kV	2 mA	25 kV	2 mA
ITK 60-2	5 kV	2 mA	25 kV	2 mA
ITK 70-2	5 kV	2 mA	25 kV	2 mA
ITK 90-1	5 kV	2 mA	25 kV	2 mA
ITK 120-2	5 kV	2 mA	25 kV	2 mA
ITK 200-1	5 kV	2 mA	25 kV	2 mA

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Section 2.1Section 2.2**HV TEST ON GENERATOR TRIODE**