[3] Grid Voltage (V_G) Correction

The following five different types of controls are provided for V_G correction. The Machine checks the T/C Ratio before the Controls (1), (2), (3) and (4). In case of the detected T/C Ratio is within the Level (*1) Controls (1), (2), (3) and (4) will not run.

*1: Min. (Setting Level on the Service Mode: 4.5% to 8%) – 2%
Max. 7%

(1) The grid voltage is adjusted at the initial setup or when the PC Drum has been replaced with a new one.

[Control]

- Master Board PWB-A outputs a pulse signal to obtain a grid voltage of 550 V when the first F5 or FF test operation is run after the Drum Counter has been cleared.
- With Exposure Lamp LA1 turned OFF, Image Erase Lamp LA2 is kept OFF for a given period of time to produce a solid-black pattern.
- The AIDC Sensor output voltage is applied to PWB-A.
- The grid voltage is varied so that the above voltage becomes 4.2 V or more, thereby setting the pulse signal for V_G.

(2) The correction is made to compensate for any drop in the surface potential of a deteriorating PC Drum.

[Control]

- Whenever the cumulative time over which the PC Drum has turned exceeds the level equivalent to 400 copies, PWB-A outputs a pulse signal for the voltage corrected last at the end of the last copy cycle for the above event.
- With LA1 turned OFF, LA2 is kept OFF for a given period of time to produce a solid-black pattern.
- The AIDC Sensor output voltage is applied to PWB-A.
- The grid voltage is varied so that the above voltage falls within the range between 4.2 V and 4.4 V, thereby setting the pulse signal for V_G.

(3) The correction is made to compensate for any drop in the surface potential of a cold PC Drum immediately after the copier is turned ON in the morning.

[Control]

- During predrive after the Power Switch has been turned ON, PWB-A outputs a pulse signal for the voltage corrected last.
- With LA1 turned OFF, LA2 is kept OFF for a given period of time to produce a solid-black pattern.
- The AIDC Sensor output voltage is applied to PWB-A.
- The grid voltage is varied so that the above voltage becomes 4.2 V or more, thereby setting the pulse signal for V_G.