

RASTER CORRECTED VERTICAL DEFLECTION CIRCUIT
ABSTRACT

Two windings (W2a,W2b) of a flyback transformer (T1) in a horizontal deflection circuit are inductively coupled with opposite polarity to a source of horizontal rate retrace pulses (12). The windings have a common junction coupled to ground. A circuit (L1,C1,L2,C2) energized by the retrace pulses generates modulated currents of opposite polarity. Conduction of each current is controlled by a switch circuit (18,20) including a semiconductor switch (Q1,Q2) and two diodes (D1-D4). The switch circuits are coupled to one another at a junction, and the junction is coupled to an energy storage capacitance (C3). One of the diodes conducts positively valued portions of the respective current through the energy storage capacitance and the other of the diodes conducts negatively valued portions of the respective current through the semiconductor switch. Each semiconductor switch is a current discharge path. The energy storage capacitance is responsive to the currents for developing a vertical deflection voltage in phase with the currents at the horizontal rate for driving a vertical deflection current in a vertical deflection yoke (LV). The vertical deflection current is related to the difference in amplitude between positively valued portions of the currents. A North-South pincushion correction current in phase with the horizontal deflection is generated by integration of the vertical deflection voltage (V1) in the vertical deflection yoke. A North-South pincushion transformer (T2) has a first winding capacitively coupled to the energy storage capacitance (C3) and a second winding (W4) forming part of a horizontal rate resonant circuit coupled in series with the vertical deflection yoke (LV).

FIG.1

This Sheet Has Been Replaced

