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U.S. DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Schematic Drawing of a U.S. Geological Survey
High Voltage D.C. Resistivity Transmitter

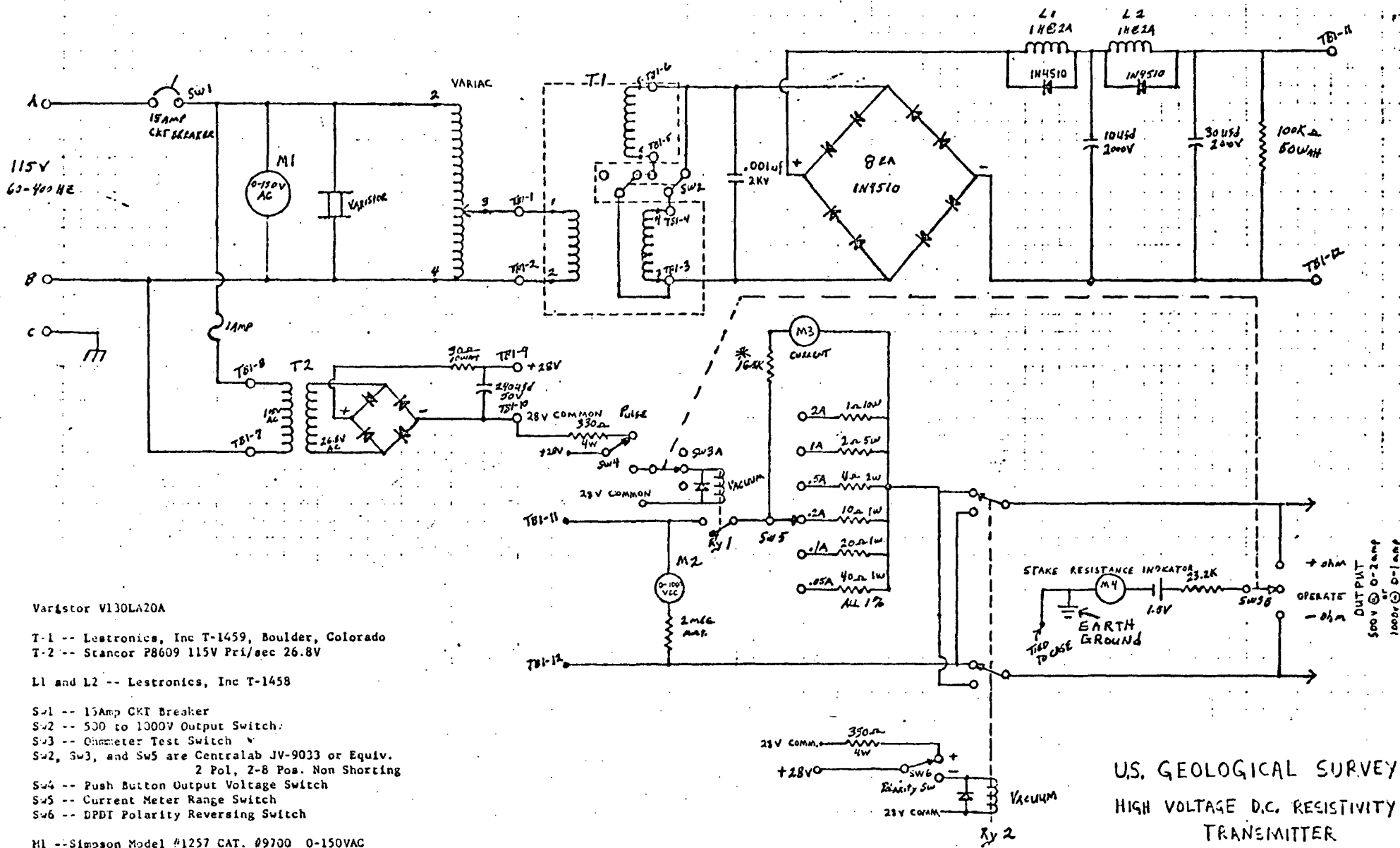
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This report is preliminary and has not been reviewed for conformity with U.S. Geological Survey editorial standards. Any use of trade names is for descriptive purposes only and does not imply endorsement by the USGS.



Varistor V130LA20A

T-1 -- Lestronics, Inc T-1459, Boulder, Colorado
 T-2 -- Stancor P8609 115V Pri/sec 26.8V

L1 and L2 -- Lestronics, Inc T-1458

SW1 -- 15Amp CKT Breaker
 SW2 -- 500 to 1000V Output Switch
 SW3 -- Ohmmeter Test Switch
 SW2, SW3, and SW5 are Centralab JV-9033 or Equiv.
 2 Pol, 2-8 Pos. Non Shorting
 SW4 -- Push Button Output Voltage Switch
 SW5 -- Current Meter Range Switch
 SW6 -- DPDT Polarity Reversing Switch

M1 -- Simpson Model #1257 CAT. #9700 0-150VAC
 M2 -- Simpson Model #1227 CAT. #9660 Multiplier Model #183 0-1000VDC
 M3 -- Simpson Model #2524 CAT. #17981 Q-100UA
 M4 -- Simpson Model #1227 CAT. #4320 0-100UA

VARIAC -- General Radio W10BB
 Ry1 -- Kilovac 7807 Vacuum Relay
 Ry2 -- Kilovac 7809 Vacuum Relay

* Padded for F.S. Calibration

CAUTION: THIS EQUIPMENT MUST BE CONSTRUCTED AND OPERATED OBSERVING STRICT SAFETY PRACTICES SINCE LETHAL HIGH VOLTAGE IS USED. THIS CIRCUIT DOES NOT SHUT OFF OUTPUT VOLTAGE WHEN THE OUTPUT IS OPEN CIRCUITED.

U.S. GEOLOGICAL SURVEY
 HIGH VOLTAGE D.C. RESISTIVITY
 TRANSMITTER
 500V @ 2A / 1000V @ 1A
 PULSER

6/21/78 CLK