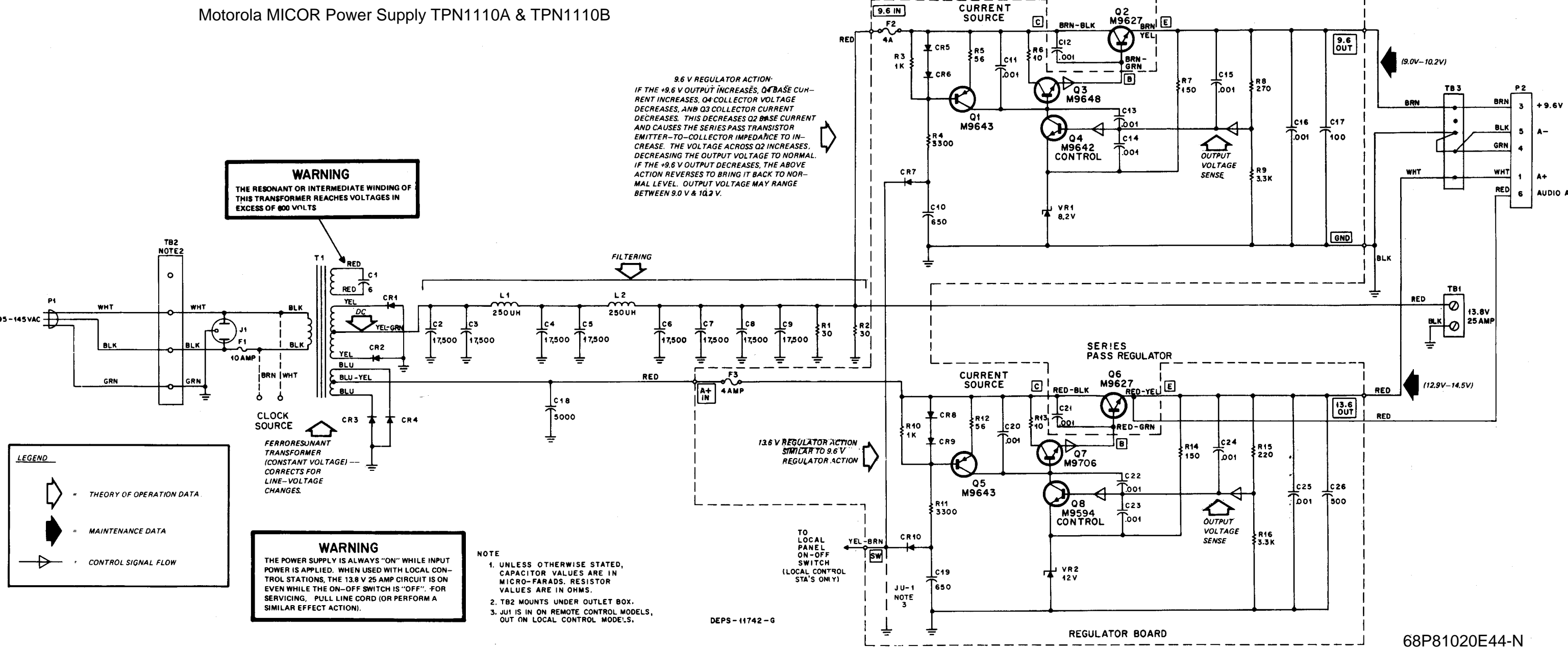


Motorola MICOR Power Supply TPN1110A & TPN1110B



WARNING
THE RESONANT OR INTERMEDIATE WINDING OF THIS TRANSFORMER REACHES VOLTAGES IN EXCESS OF 800 VOLTS

9.6 V REGULATOR ACTION:
IF THE +9.6 V OUTPUT INCREASES, Q4 BASE CURRENT INCREASES, Q4 COLLECTOR VOLTAGE DECREASES, AND Q3 COLLECTOR CURRENT DECREASES. THIS DECREASES Q2 BASE CURRENT AND CAUSES THE SERIES PASS TRANSISTOR EMITTER-TO-COLLECTOR IMPEDANCE TO INCREASE. THE VOLTAGE ACROSS Q2 INCREASES, DECREASING THE OUTPUT VOLTAGE TO NORMAL. IF THE +9.6 V OUTPUT DECREASES, THE ABOVE ACTION REVERSES TO BRING IT BACK TO NORMAL LEVEL. OUTPUT VOLTAGE MAY RANGE BETWEEN 9.0 V & 10.2 V.

CLOCK SOURCE
FERRORESONANT TRANSFORMER (CONSTANT VOLTAGE) — CORRECTS FOR LINE-VOLTAGE CHANGES.

WARNING
THE POWER SUPPLY IS ALWAYS "ON" WHILE INPUT POWER IS APPLIED. WHEN USED WITH LOCAL CONTROL STATIONS, THE 13.8 V 25 AMP CIRCUIT IS ON EVEN WHILE THE ON-OFF SWITCH IS "OFF". FOR SERVICING, PULL LINE CORD (OR PERFORM A SIMILAR EFFECT ACTION).

- NOTE**
1. UNLESS OTHERWISE STATED, CAPACITOR VALUES ARE IN MICRO-FARADS. RESISTOR VALUES ARE IN OHMS.
 2. TB2 MOUNTS UNDER OUTLET BOX.
 3. JU1 IS IN ON REMOTE CONTROL MODELS, OUT ON LOCAL CONTROL MODELS.

DEPS-11742-G

68P81020E44-N

LEGEND

- = THEORY OF OPERATION DATA
- = MAINTENANCE DATA
- = CONTROL SIGNAL FLOW