

☰ Troubleshooting Reduced CRT Display Size ▾



• The 10pF Miller capacitors on TR1 and TR2

- The 12k resistor and line amplitude pot
- Check TR410, D413, D421, TR401

4. Common Circuit Elements:

- The ST3 IC (16-pin Sinclair-designed chip) controls both deflection circuits
- The manual mentions this IC directly in power board faults for "no raster"
- This IC generates the stabilized rail needed for proper deflection

5. Power Supply Components:

- Check C430, C432 (related to EHT)
- TR409, TR406, TR407, D19 (mentioned in "no raster" faults)
- The circuit needs proper EHT regulation for correct scan sizes

Recommended Troubleshooting Steps:

1. First verify the -45V rail is exactly -45V and stable
2. Check if adjusting both the line and frame amplitude controls has any effect
3. Look for any failed electrolytic capacitors - the manual notes these become suspect with age, particularly the 1μF caps
4. Test the voltages around the deflection transistors (TR401-TR403)
5. Verify the EHT voltage is present and correct

The manual notes that failed electrolytic capacitors are a common issue due to age, so this might be a good starting point for investigation, particularly checking C436 and other power supply electrolytics first.

Would you like me to focus on any particular aspect of this diagnosis or provide more detail about specific component testing procedures?

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