## 4054 VECTOR GENERATOR AND DISPLAY CONTROLLER MODIFICATIONS, #M41262 & M41404

Some 4054's with Option 30 installed have demonstrated an undesirable problem when operating in a refresh mode. The symptom of this problem occurs as follows: The 4054 may draw some unwanted vectors and hang busy. In addition, when the product hangs busy, the Z axis may remain on causing the CRT to be damaged. This problem is caused by interaction between the Vector Generator (670-5667-02) and Display Controller (670-5672-03), and is only apparent with Option 30 installed. There are two modifications addressing this problem. Both modifications have to be implemented together.

The first mod is #M41626 and addresses the Display Controller (670-5672-03). The procedure is as follows:

- 1. Clip pin 1 of U20.
- 2. Run an insulated wire from pin 1 of U20 to pin 11 of U630.
- 3. Roll 670-5672-03 to a -04 level board.

The second mod is #M41404 and addresses the Vector Generator (670-5667-02). The procedure is as follows:

- 1. Remove U155 (156-0382-01, 74LS00)
- 2. Replace U155 with a 156-0030-00 (7400).
- 3. Roll board level from 670-5667-02 to a -03.

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