4014/14-1, 4015/15-1 LVPS R483, R485, & R487 BURNING (cont.)

of the problems; however, in a few cases the resistors continued to open. To fix this the vendor of this particular part was changed. An electrically compatible carbon film resistor (100K ohm, 2 W, 5%) by Corning has replaced the Allen-Bradley carbon composition resistor.

The Corning resistor has the same Tektronix part number as the Allen-Bradley, 305-0104-00, and is replacing all Allen-Bradley resistors of this part number. The Corning resistors are easily identified by their blue ceramic coating. They also have their name, "Corning", and their values printed on them.

These resistors are readily available. When replacing these resistors care should be taken to place them off of the board. They should be mounted halfway between the ECB and the protective plastic "high voltage" shield.

W^2 Issue 11-24

4052/4054 R09 REAL TIME CLOCK

The 4052/54 Real Time Clock has been exhibiting errors in keeping the correct time. The symptom is that after the clock has been running for approximately 2 hours or more without being read, the clock stops keeping time or runs at a very slow rate. But if the time is read within 2 hours the clock will continue to keep good time for approximately another 2 hours. Therefore, the Real Time Clock ROMpack needs to be read every 2 hours to operate correctly if run over 2 hours.

At this time there is no solution, but one is being worked on and will be published when available.

W^2 Issue 12-1

4054 RANDOM FAILURES

There have been instances with some 4054s having random failures. These failures occur more frequently with Option 30 installed. Some of the symptoms are as follows:

1. The 4054 may not recognize a ROM pack installed in the backpack.
2. The 4054 may lock-up while coming out of the Option 1 mode and back into BASIC.
3. The 4054 may lock-up while in the middle of a program routine.

Each time one of the above failures occur the 4054's power will have to be cycled in order to operate correctly again. In the case where the 4054 doesn't recognize a ROMpack installed in the backpack, the 4054's power may have to be cycled more than once to get a proper power-up. The source of these failures has been identified as being errors in the power-up sequence of the firmware. At this time there is no solution, but one will be published as soon as it is available.

W^2 Issue 12-1

4112/4114 VERIFYING THE AMOUNT OF MEMORY INSTALLED

In the 411X terminals the memory is used by the standard operating system and many of the options. As options are added such as Tablet, 3PPI, and Disk the amount of usable memory is reduced. By adding memory options user memory is increased. The final value is the amount of user memory. With the many combinations of options which affect the user memory, it would not be feasible to include a chart containing all possible values. It would probably be much too confusing, so another method will be used that will allow the operator to calculate the final value.

Determining the amount of user memory can be useful as an additional check to verify options are installed correctly. For example, a memory board residing in the cardcage, but not making edge connector contact, would appear to the ter-

(ARTICLE CONTINUED ON THE NEXT PAGE)