6) Adjust the voltage of the pulse power supply for correct -5.2V and -2V required. The -5.2 voltage is adjusted with the control on the pulser. The -2 voltage is adjusted by changing the switch pattern on the pulser; changing resistance values.

The pulse power supply provides a power pulse to the module aprox. 200 usec in duration, every 16 msec. Within each power pulse, several test sequences occur. The photogragh in Figure II-b shows a power pulse adjusted to -5.2V. Superimposed on this power pulse are ten dots, each representing a test sequence of the dynamic tester. The left most nine dots happen when the tester is looping (L command). Times for each tester cycle are: 68.0, 74.1, 80.1, 86.1, 92.0, 98.0, 103.9, 110.0, and 115.5 usec. The right most dot or tester cycle occurs when the tester is cycled from a A, U, G or J command. As you can see, the MUT is cycled later in the power pulse (147.0 usec) during commands where error detection is normally performed. To achieve the most accurate error diagnosis, the voltage should be adjusted near this point. This can be done by setting the delaying Time Base (A) to a value of from 110 to 115 usec before adjusting the voltage to the module. This delay setting allows the voltage to be set in the "flat" or maximum portion of the power pulse.

* The power pulse will not be seen on the scope when using Horizontal Mode B, but this delay allows the voltage to be checked at the proper time.

The voltage can then be adjusted at this point to the proper voltage margin; normal, high, or low.

7) Before running the tests, verify that the clock select switch is in the position wanted. Manual Mode selects one specific clock speed (indicated by LED's on the tester), while Auto Mode cycles through slow, normal, and fast clock speeds on each test step.

8) The module tests can now be run by using an "An" command (where n is the number of times each test step is performed). If failures occur, the test will stop, the Tester Recieve Buffer will be displayed, and the failing outputs will flash. These failing outputs can be cross-referenced to the output terms of the module by use of the Input/Output buffer sheet. Each module type has its own buffer sheet, contained in the modules' documentation package.
When troubleshooting these failures, a scope sync can be set by using a "P4n" command (where n is the clock period that the scope sync is wanted). The use of an "L" command then puts the tester in a Scope Loop Mode, which repeats the test step continuously, with the scope sync set to look at a specific time period of the test step.