2.   Firmly press each button except [CLEAR]. The name of the key will be shown in the display window. Press [CLEAR] to end the test.

The Serial Port Test

This test verifies that the RS 232 port used for linking to commercial entertainment systems is working. You must have the loop-back cable assembly, pn 040051-001 to perform this test.

1.   Insert the loop-back cable assembly into the RS 232 port on the back of the console.

2.   Press [LEVEL: ^], [6], [2], [ENTER], to start the test.

3.   The console will run a diagnostic test and then display either "PASS" or "FAIL". Replace the console if it fails this test.

The Alternator Test

Use this test to verify the alternator field routines of the console. You will need to briefly exercise on the machine for this test.

1.   Press [LEVEL: ^], [6], [3], [ENTER], to start the test.

2.   For "Field on" press [LEVEL: ^]. Step on the machine for approximately 10 to 15 seconds. If full resistance is achieved during this time, your console has correct current flow. If no resistance is achieved, either the console or the alternator is bad. See the electrical troubleshooting portion of this manual to isolate and test the alternator. Replace the console if the alternator is good.

3.   For 'Field off" press [LEVEL: V]. Step on the machine for approximately 10 to 15 seconds. You should not get resistance with the field turned off. Press [CLEAR] to end the test.

The Tach Test

If you do not have resistance, perform the tach test. The tach test will tell you the tach signal, in revolutions per minute (RPMs), picked up by the console.

1.   Press [LEVEL: ^], [6], [6], [ENTER]. The console will display "TAR TACH ACT". The target tach speed of 2000 RPMs will be shown in the upper left corner of the display window. The actual tach picked up by the console will be shown in the upper right corner of the display window.

2.   Start stepping on the steps. The number in the right hand corner of the console should increase to 2000 RPMs (+/- 200).   If the tach signal picked up by the console is less then 1900 RPMs then there is a problem in the AC tach circuit - either with the console software, alternator (check the AC tach wire, the field wire, the diode, and the terminal posts), or the main cable.

Error Reporting

The console will display various error messages in the display window. The total amount of errors will be displayed in the upper right numeric window. Note that only the highest priority reported error will be displayed. Errors are handled in two ways. One as a non-fatal "WARNING" which will display the text message but continue system operation until the user presses the [CLEAR] key. The second way is as a fatal "ERROR" which will stop the exercise and return the system to an idle intensity state. The console will display the error text and not let the user restart the programs unless power has been turned off and then back on.

        The following microprocessor errors require a console replacement; ALU ERROR, TIMER ERROR, and STATIC RAM ERROR.

        Resetting the power may clear the following microprocessor errors; EEPROM ERROR, and PROGRAM ERROR. If resetting the power doesn't work, the console may need to be replaced.