TEST INSTRUMENT MODULE DIAGNOSTICS

If all checks and tests from the previous section are satisfied, diagnostics can be performed on the test system's TIMs. The test system's primary instrument diagnostics can be accessed from the Configuration Window by selecting **Tester > Diagnose** from the menu options as shown in Figure 5.2 of the User Interface section. This launches the <u>Diagnostic Executive</u> and loads the factory-installed diagnostic test plans for the test system (see Figure 5.14). The diagnostic tests are listed in order of ascending instrument number and grouped by TIM.

NOTE: This diagnostic list may vary between Cassini ATE systems with different TIM configurations. Diagnostic test plans for TIMs not currently installed in the test system can be viewed in the diagnostic list, but attempting to execute them can cause system errors.

Execute Self Test

The Self Test is a low-level diagnostic check for TIMs that contain reference oscillators. The self test measures and checks the reference drive levels and corresponding frequency values of these instruments.

- 1. From the Diagnostic Exec's menu options select **Run > Self Test**
- 2. Diagnostic results and measured data will be displayed in the <u>Messages Window</u>.

Execute All Diagnostics (Complete System Diagnostics)

This is the recommended method for performing diagnostics prior to an annual calibration of the test system or when releasing a test system to production.

This option automatically compiles and executes every TIM diagnostic test sequentially, in the order they are listed in the executive window.

- From the Diagnostic Exec's menu options select **Run > All**. Reference <u>Figure 5.14</u>.
- 2. Diagnostic tests will be individually compiled and executed sequentially until all diagnostic tests are completed.
- 3. During compile of a diagnostic test, a pop-up status bar window will display progress and then close when the test program executes.
- 4. Diagnostic results will be displayed in the 'Results' pane of the Diagnostic Executive. See the <u>Viewing Diagnostic Results</u> for more information.

NOTE: In this execution mode, all diagnostic tests in the list will be executed uninterrupted until completion. To abort the system diagnostics hold down the CTRL key and press the Pause/Break key to force an abort. An 'Error:Control Break' window will pop-up. Select 'Abort' to stop the diagnostics.